

2D Design

Dan Collins, Coordinator
Studio Core Program
School of Art
Arizona State University

ART 112 (2D Design)

A Guide for Teaching Assistants and Faculty

Dan Collins, Studio Core Coordinator

COURSE DESCRIPTION

Catalog description: Fundamentals of pictorial design. Six hours a week. Prerequisites: none.

Expanded description (suggested): This course will provide a foundation in the fundamentals of pictorial design. In a sequence of hands-on exercises and projects, students are introduced to the concept of the picture plane, figure/ground relationships, scale and proportional transformation, patterning, composition, value, color, methods for conveying time, and spatial illusion. Using a wide variety of traditional and non-traditional materials and methods, students are encouraged to develop their own design vocabulary and repertoire of practical techniques. In addition to introducing formal design strategies, the course emphasizes content issues and the historical and cultural context in which works of art are produced. Regular slide lectures and critiques are structured informally to encourage dialog and to provide the student with an opportunity to translate visual evidence into words. Beyond the concepts and skills essential to good design practice, it is hoped that the course will open a window towards self-expression and awareness.

References:

Required: artCORE website: <http://www.asu.edu/cfa/wwwcourses/art/SOACore>

Required: *Launching the Imagination*, Mary Stewart, 2003

Recommended: *DesignBasics*, David A. Lauer, 1990

Recommended: *Design Dimensions*, Cynthia Dantzie

GENERAL INTRODUCTION FOR THE INSTRUCTOR

The idea of innocence faces two ways. By refusing to enter a conspiracy, one remains innocent of that conspiracy. But to remain innocent may also be to remain ignorant.

--John Berger

The artist is a "medium."

--Marcel Duchamp

ART 112--2-D Design--is one of a quartet of courses comprising the Studio Core Curriculum in the School of Art at Arizona State University. The Studio Core as a whole is designed to both provide a practical understanding of Drawing, 2-D Design, 3-D Design, and Color and to whet

the appetite for more advanced courses. A thought-provoking, well-ordered problem-solving structure in each sixteen week course, within the context of an integrated "first year" curriculum, provides an essential foundation for the variety of specialized courses found in the School of Art.

While the broader territory of "design" is introduced--the elements and principles, a range of materials and methods, different professional career paths, etc.--the class emphasizes the "mind-set" of the studio artist as opposed to the more pragmatic concerns of the "design professions." As an entry-level course, instructors are encouraged to foster both a sense of discipline about the art process as well as instill an excitement and love for art that will carry over into more advanced courses. Open dialog and critique are an integral part of the 2-D curriculum. The practice of art is shown to have rich cultural and historical dimensions. Examples are drawn both from the history of western art as well as from a broad range of non-western cultures.

THE COURSE OUTLINE

Instructors are provided with a detailed Course Outline that includes a collection of Units, arranged in a developmental sequence. Instructors are encouraged to follow this outline to ensure consistency in the information that beginning students take with them to the 200 level courses and beyond. (Personally designed assignments / problems are always welcome--in fact, innovative and successful assignments will be added routinely to the Course Outline.) All deviations by T.A.s from the written syllabus must be approved the Studio Core Coordinator.

Each Unit includes an *Objective*, a *Discussion*, a *Vocabulary* list, suggested *Reading*, a list of *Artists / Cultural References*, and a number of proven *Assignments*. Each of these components is discussed briefly below:

Objective: An *Objective* is a goal or destination that an instructor would like his or her class to attain. Pedagogically speaking, an "objective" is distinct from an "assignment."

Assignments are the "means"; objectives are the "ends." Assignments are specific tasks instructors give to students in order to explore objectives. These objectives can be explored using whatever means that best fit an instructor's teaching style and expertise. As will be clear from the range of assignments listed under each Unit, there are a great variety of ways in which to explore a given objective. These may be projects, tests, oral reports, etc.

Discussion: The Discussion is a synopsis of the ideas and references that inform the larger unit objective(s). The information found here may be gleaned from the textbook, drawn from external sources, or be of an anecdotal nature. The intention is to paint a more complete picture of the range of issues that could be dealt with in a given Unit.

Vocabulary: In general, the Vocabulary in each unit is derived from the textbook. In those cases where other textbooks have been referenced, the source will be listed immediately following the word in question. Instructors are encouraged to introduce new vocabulary as needed for particular assignments or Unit Objectives.

Reading: Suggested Reading is usually derived from the textbook. However, instructor packets targeting particular concerns may be assembled and distributed using local photo-copying services.

Artists/Cultural References: Numbered Artist / Cultural References (#) following specific examples for the Unit correspond to illustrations in the textbook. Individual assignment sheets handed out by the instructor may also include other references made in lectures, on field trips, or in other research.

Possible Assignments: There is a menu of Assignments listed under each Unit. Instructors are free to choose one of the assignments--or to design a new assignment that targets the Unit objective (new assignments developed by T.A.s must be approved by the approval of the Coordinator). As indicated above, innovative and successful assignments will be added to the roster of "possible assignments" on a regular basis.

OTHER CONSIDERATIONS

Supplemental Materials and Activities: Supplements to the Course Outline (e.g., notebooks, sketchbooks, outside readings, pop quizzes, visits to local art exhibits, student reports, field trips, etc.) are strongly encouraged. These will be assigned at the discretion of the Instructor.

Contact Hours vs. Outside Class Time: Students are expected to spend six contact hours per week with the instructor, plus a minimum of six hours of time outside of class in the pursuit of class projects.

Pacing: The speed with which individual classes move through the material may vary dramatically. The "pacing" of the class is more important than "finishing the list." Some sections may complete all of the Units listed below. Some instructors may feel that fewer assignments done at a more moderate pace would better serve their particular students. Consider the rhythm of your assignments and activities: a short assignment followed by a long assignment followed by a field trip may sustain interest and avoid burn-out. Each class is unique. Do what works. Be sensitive to the various learning styles of the students.

Learning Styles: Customize your course materials to respond to the various learning styles of your students. Some students respond well to visual cues, others to text-based materials, still others to the spoken word. A few respond best to tactile, kinesthetic experiences.

Active vs. Passive Teaching: Consider ways in which your materials can be presented using "active" strategies for teaching (as opposed to "passive" presentational modes). With active learning, students are doing things and thinking about the materials presented-- not just passively recording. Research shows that active learners retain far more information than passive recipients. In one study, for example, the same materials presented as a traditional lecture yielded only 5% retention of the information by the students. Conversely, when a student was asked to demonstrate knowledge actively, retention jumped to 30%. When students were asked to actually teach what they had learned (as with peer tutoring or interactive discussions) or immediately use

the information received, retention rose to 90%.

For further information concerning course design, grading procedures, active vs. passive teaching strategies, sexual harassment issues, etc. see the Teaching Assistant Handbook.

SAMPLE SYLLABUS

2D

ARIZONA STATE UNIVERSITY

School of Art Studio Core Program

ART 112 (2-D Design). Schedule Line Number.

Semester/Year Day/Day. Time. Place

Instructor: _____. Office hours for 2D: Day/Time/Place.

Phone number

e-mail: your name@email

Course Description

This course provides a foundation in the fundamentals of pictorial design. In a sequence of hands-on exercises and projects, you'll be introduced to the concept of the picture plane, figure/ground relationships, scale and proportional transformation, patterning, composition, value, color, methods for conveying time, and spatial illusion. Using a wide variety of materials and methods--including the computer--you're encouraged to develop your own design vocabulary and repertoire of practical techniques. In addition to introducing formal design strategies, the course emphasizes content issues and the historical and cultural context in which works of art are produced. Regular slide lectures and critiques are structured informally to encourage dialogue and to provide you and your colleagues with an opportunity to translate visual evidence into words. Beyond the concepts and skills "ssential to good design practice, it is hoped that the course will open a flindow towards self-expression and awareness.

References

(Required) The **ArtCore** Website: <http://www.asu.edu/cfa/wwwcourses/SOACore>

(Required) *Launching the Imagination*, Mary Stewart, McGraw Hill, 2003

(Optional) *Design Basics*, David A. Lauer, Holt, Rinehart, and Winston, Publisher, 5th Edition, 2000. (note: the textbooks are available in the book stores for about sixty bucks. They are also on Reserve at the Main Library. Other readings to be assigned.)

Course Requirements

During the whole of the semester, each student will be expected to participate fully in the life of the Design Studio. In addition to the completion of assigned projects on time, this means regular attendance, a sense of studio etiquette, and participation in class discussion and critiques. A three-ring notebook is to be kept of all handouts, sketches, ideas, notes etc. It should be filled with "Biology Paper" (available in the Bookstore) for drawing and notes. Your notebook will be a running record of 'our involvement in the class.

Grading

Completing all of the assigned projects on time with a reasonable degree of craftsmanship and care, and regular attendance is the minimum expectation. I allow you to "re-do" any project without penalty for a higher grade--as long as you turn the work in on time and show your best effort. Your final grade for the course will be heavily influenced by the quality of documentation you provide in your notebook. This documentation, to be organized around the sequence of assignments, may take the form of drawings, photographs, computer print-outs, or other media. Top grades will be awarded for a combination of design excellence, conceptual depth, intelligent participation in discussion, and, most importantly, individual improvement. Any unexcused absence will seriously affect your grade.

Calendar (schedule approximate. Dates indicated) .

See also the ASU Academic Calendar at: <http://www.asu.edu/calendar/academic.html>

Week 1: **The Frame**

Weeks 1-2: **Mark and Lines**

First Monday in September: **Labor Day** (classes excused)

Weeks 2-3: **Unity**

Week 3-4: **Figure / Ground**

Week 5-6: **Mapping flatland: grids. scale. proportion**

Week 7-8: **Modules and Patterning**

End of October: **Restricted Course withdrawal deadline**

Week 9-10: **Value/Color**

Second week of November: **Veteran's Day** (classes excused)

Week 11-13: **Time, Chance, Motion**

Fourth week of November (Thursday & Friday): **Thanksgiving**

Week 14-16: **Spatial Illusion / Depth Cues**

Dec. 7: Last Day of Instruction. **All Projects Due**

Dec. 9 – 11, 13 – 15: **University Schedule for Final Exams**

Obtaining an ASURITE Computer Account at ASU

For this class you are required to have an ASURITE account because some projects and images will be password protected. You can use any type of computer (Mac, PC, UNIX) that has an Internet browser installed (such as Netscape or Microsoft Explorer).

Getting an ASURITE "userID" is all self-service. There is a special terminal set aside just for creating new accounts and adding new services. Go to the Computing Commons (about a block East of the MU). Look for the specially marked terminal on the First Floor, on the left next to the Computer store. Sit down and subscribe! The process takes about 15 minutes and your account will be ready to use in half an hour. If you have problems, the computing site staff will be happy to assist.

For more info, go to: <http://www.asu.edu/it/fyi/accounts/obtaining.html>

Lockers

Available in the Main Art Building. Sign up in Main Office. Bring your own lock.

Materials List

(This is a sample list. Your instructor may require slightly different materials)

Metal straight edge (12-18")

#11 Ex-acto knife and blades

Graphite pencils (2B and 4H minimum)

Prismacolor pencils

Ultramarine blue #902

Lemon yellow #915

Crimson red #924

White #938

Black #935

Pencil sharpener

Erasers (white plastic, hard pink)

1 technical ink pen--sizes .25 - .5 will do. Disposable pens are fine.

Masking tape ("drafting" tape that won't pull off paper)

Protractor with degrees

Watercolor brushes (synthetic white sable- approx. \$16.00)

Rounds: #5

Flats: 1/2"

White palette or mixing tray (small).

Cold pressed illustration board, 15 x 20" (available at art stores, pre-cut, 2 to package)

Tracing paper (roll, 16 - 18" wide)

Water container. No glass please.

Portfolio for carrying 2-D work (17 x 22 min.) and a box for materials.

Glue stick

Gouache (opaque watercolor)

Ivory Black

Zinc White

Brush cleaner or mild soap.

Three ring notebook with 8 1/2 x 11" "biology" paper for notes, thumbnail sketches, collages.

Tackle box (to carry your supplies)

UNIT I: *The Frame*

To quote out of context is the essence of the photographer's craft. His central problem is a simple one: what shall he include, what shall he reject? The line of decision between in and out is the picture's edge. While the draughtsman starts with the middle of the street, the photographer starts with the frame. The photograph's edge defines content. It isolates unexpected juxtapositions. By surrounding two facts, it creates a relationship. The edge of the photograph dissects familiar forms, and shows the unfamiliar fragment. It creates the shapes that surround objects. The photographer edits the meanings and patterns of the world through an imaginary frame. This frame is the beginning of this picture's geometry. It is to the photograph as the cushion is to the billiard table."

--from *The Photographer's Eye* by John Szarkowski, former director of the photography division of the Museum of Modern Art in New York

Possible activities (1st day)

- 1) Take a piece of construction paper (provided by your instructor) to a place anywhere within or near the 2-D classroom. Consider what could be "framed" by your paper within your chosen site. Cut or tear the paper in such a way that it becomes an unbroken, empty frame. Make the hole any size or shape you like, so long as it fits inside the boundaries of the paper rectangle. Once the hole is made, tape the black frame to your chosen surface, taking care to consider what "picture" or information you end up framing in the process. This should take fifteen minutes at most. When you are done, return to the room and be prepared to lead the class to your picture.
- 2) As a group, discuss what views in the room could be beautiful, interesting, well-composed, or explore a radical "point of view." Use a digital camera to capture these images and project in the classroom using a digital projector. Share the images over the web.

UNIT II: *Mark making and Lines*

Discussion: If one distills the graphic arts (e.g., painting, drawing, printmaking, computer graphics, etc.) down to their most fundamental element, one finds the "mark." Marks are like building blocks in that they are individual and discrete, but can be used in a repetitive manner to render almost any visual effect. Marks can be highly gestural and expressive, or highly controlled and mechanical. The degree to which artists can achieve certain desired effects is in large measure determined by their choice of tool, the nature of the medium used, and the quality of the gesture employed. In 2-D Design, initial discussion centers around the expressiveness of the individual "mark"--its descriptive, expressive, and conceptual potentials.

As one builds mark upon mark, a dynamic space for the interaction of marks and other elements of design such as lines and shapes emerges. A dynamic conception of this world would see the mark or point as having the potential for generating a line. Paul Klee explained the creation of expressive line as a matter of "taking a point for a walk " By extension, a plane can be seen as a moving line, and a three-dimensional volume can be understood as a moving plane (or line). This conceptualization of pictorial space is at least as old as Leonardo who discussed it in his notebooks. It finds a powerful set of exponents in the Bauhaus and, more recently, provides a clear basis for understanding the virtual 3-D space produced on the cathode ray tube (CRT) of a computer. Regardless of particular historical or technical biases, this conception of spatial description is a conceptually rich method of introducing the dynamic character of the picture plane. Consider how a point light source (e.g., a car head-light) will appear as a line in a time-exposure photograph. Or how a dancer's arm describes a plane in space.

What ever you try, students are encouraged to work through a lot of tools and media. They can also interact with one another, trading tools, and comparing notes. A conceptual basis for the discussion will help them connect technical exercises with their own experience. Finally, historical and cultural examples can really provide a range of options that may go well beyond what the students experiment with initially in class.

Vocabulary

mark, gesture, point, line, plane, volume, space, dynamic, calligraphy, representational, non-objective, actual lines, implied lines, psychic lines, shape, form. CRT

Reading

Design Basics, Introduction and chapter 7.

Artists / cultural references

Georges Seurat, Paul Klee, Wassily Kandinsky, Sumi-e painting, Australian aboriginal painting, Bauhaus,

Possible assignments:

1) Make a "dot" sampler, using the widest variety of tools and materials available; on a sheet of the same size create a "line sampler," and a "shape sampler" on a third sheet. Refer to this personal collection when studying the illustrations in books, observing the work of fellow students, or going to museums and galleries. (from a problem by Dantzig, *Design Dimensions*) Create a set of parallel sample sheets using the computer. [3-6 hours]

- 2) Explore the expressive range of a ~ tool--such as a finely pointed bamboo brush (the kind used for Asian calligraphy). See how many differing kinds of simple marks and brush strokes you can make, exerting almost no pressure at first, then slowly adding weight to your mark, causing larger areas of the brush to come in contact with the paper. Simply let the brush leave its mark--don't pull it or push it. Dilute the ink to add gray tones. Refer to sources of Asian painting, seeking only marks clearly determined by varying pressure on the brush. (from a problem by Dantzig, *Design Dimensions*) [3 hours]
- 3) Using a fine-nibbed pen or technical pen, experiment with different methods of creating areas of value and texture. Stippling, cross-hatching, parallel lines, Controlled squiggles could be used separately or in combination to render a wide range of effects. Translate two or more black and white photographs--or fragments of photographs--into a single pen and ink composition. Consider the transition between the images and the overall composition. [9 hours]
- 4) Do a non-objective drawing to music. What changes in the quality of the marks or lines as the music changes? Do short compositions to various kinds of music. Have the students compare their own sketches, then compare different students' work. Generate a discussion about the ease or difficulty of moving across different media or modes of expression. [3 hours]
- 5) Do a drawing that is made up of nothing but 200 lines. (Mary Frisbee Johnson)
- 6) Create a series of drawings that create the visual equivalent of an "edge." Use three or more of these techniques in a drawing. Variation: Use a set number of lines to do four different "arrangements"--chance, unified direction, implied shape, figure/ground reversal.
- 7) Produce an "Identity Sheet" that combines a vocabulary of personal marks with some "evidence" of who you are. This evidence could take the form of prints (fingerprints?), xeroxes, photographs (photo booth? Polaroid? family photos?), text, collage materials, maps, etc. Try using some of the marks and textures you created in the initial exercises (see above) with tools and media in combination with the above materials.
- 8) Consider the Discussion section above, try introducing a dynamic quality into the presentation of points, lines, and planes. Beginning with a point (or mark or dot), have the students plot a journey. They themselves are the dot. As they move, they generate lines. These lines are actual, implied, or "psychic" (as between the eye and a given target--see *Design Basics*) As time passes, this "trace" or linear record of their passage begins to move or to be acted upon. This moving line describes a partial plane, a shape, or a field. The final step may be introduced later in the semester --namely, creating three-dimensional volumes from planes set in motion. The initial problem could be handled in a variety of ways: the students could do a diagrammatic map to their house constructed as if they were traveling by foot--or by guided missile; they could make a record of a real or fantasized journey or a "map" of their favorite movie. In each of these, line is used symbolically and abstractly--try to avoid straight representation at this point.
- 9) Plan and execute a composition that reflects your attitudes to the question of "style." After exploring different tools, media, and gestures in a series of exercises, develop a work that creates a seamless transition between two different "signature styles."

10) Graffiti project. Use any type of mark making device to create an image or "tag" that is a reflection of your personality. Create a site specific painting using this "tag." (Don't vandalize property!).

SAMPLE PROJECT

Project # 1: *Mark Making / Personal Identity*

Reading

Design Dimensions, Introduction and Chapter One. (Be prepared to discuss the ideas from text by next time)

Objectives

to introduce the varied possibilities of the "mark"--its descriptive, expressive, and conceptual potentials; to experiment with a range of "tools" and "techniques" for mark-making; to emphasize the innately personal character of tool selection, mark-making, and design

Materials

your choice of mark-making tools; biology paper (8 1/2 x 11) ,

Exercises

- a) Experiment with different tools; invent new ones. Try different "mediums" in different combinations with a variety of tools. Try different pressures, angles, speeds. Explore your chosen tools and mediums to the limit-and beyond.

- b) Produce 3 drawings that utilize the entire sheet of paper: 1) A single line that extends from one side of the sheet (oriented any way) to the other, 2) A drawing that completely covers the entire page with marks, 3) A drawing in which a "negative" line (the white of the paper) appears from a "field" of marks. (Avoid "representation"--just make marks...)

- c) Produce an "Identity Sheet" that combines a vocabulary of personal marks with some "evidence" of who you are. This evidence could take the form of prints (fingerprints?:), xeroxes, photographs (photo booth? polaroid? family photos?), text, collage materials, maps, etc. Try using some of the marks and textures that you have created above in combination with this evidence.

UNIT III: *Unity Principles*

Goal

To understand and apply the principle of [unity](#) as it relates to two-dimensional art.

Discussion

The ability to make order from chaos is one of the special talents of the artist and the designer. Good design is often a matter of perceiving potential patterns within fields of apparent disorder or visual complexity. There are some basic grouping or [unity principles](#) that can be applied to almost any kind of visual information.

Imagine dumping all of your possessions from your pack or purse on a table top to create a random or chance "composition." How could you begin to make sense of the chaos? As we saw in UNIT I, a [frame](#) helps to focus attention by placing a selection of objects within clear borders or boundaries. Imagine the tabletop as your "frame", and your possessions as art elements ripe for some organizational or compositional treatment. The frame is the first step in creating your composition--it provides "edges" to the field of chaos.

Now, what are some organizational principles we could use for the objects themselves? One of the most basic is the idea of proximity--that is, the clustering of objects. Imagine pushing all of the objects into one corner of the tabletop. Can you see how our attention follows? What if all of the objects are now clustered in the virtual center of the table except one? Our attention naturally shifts to the center of the table--then back to the isolated element. "Proximity" can be played off relative "distance"--in other words, clusters of objects can be balanced against objects that are excluded from the group.

Consider some other strategies. What if the objects were lined up, one after another, in a continuous "implied line?" Designers call this continuation or contiguity. We can use invisible pathways or other patterns (such as grids or controlling lines) to create an implied relationship between the objects.

Another solution would be to simply turn each object so that it faced the same direction--as if everything on the table were magnetized. The result of this treatment is called unified direction. Objects can be grouped according to a whole array of other factors including shape, size, color, texture, etc. Imagine segregating all of the light colored objects from the dark colored objects for example. Or lining up all of the shiny, metallic objects one after another.

Less obvious in its application is the concept of Gestalt. Gestalt theory suggests that we perceive visual events as "wholes"--overall visual patterns-- which are grasped all at once. An example would be seeing a "face" in the craters and patterns of the moon. The visual pattern of the human face is a powerful construct that emerges from the otherwise random distribution of dark and light shapes on the lunar surface.

Artists / Cultures

Victor Vasareley, Joseph Albers, Paolo Ucello,

Further Reading

Arnheim, Rudolph, *Visual Thinking*, 1980

Dondis, Donis, *Primer of Visual Literacy*, 1973

Vocabulary: mark, gesture, point, line, plane, volume, space, dynamic, calligraphy, representational, non-objective, actual lines, implied lines, psychic lines, shape, form. CRT

Reading: *Design Basics*, Introduction and chapter 7.

Artists / cultural references: Georges Seurat, Paul Klee, Wassily Kandinsky, Sumi-e painting, Australian aboriginal painting, Bauhaus

SAMPLE PROJECT

Project # 2: Unity

Reading

Dantzig, Cynthia, *Design Dimensions*, Chapters 6 and 7;

Lauer, David, *Design Basics*, Chapter 2 (Xerox hand-out).

Objective

To introduce a range of principles and methods for unifying diverse elements on the picture plane.

Materials

"found objects," xerox machine, biology paper, rubber cement, x-acto knife.

Exercises

a) make a collection (minimum of 15) of smallish objects (~1" -12") that possess an interesting range of silhouettes and textures. (Flat or nearly flat objects will work the best for this project.)

b) Using a. xerox machine, copy groupings of objects placed upon the glass of the machine to illustrate particular aspects of UNITY in composition as discussed in class and in the readings. Produce at least five compositions illustrating the concepts of "Chance," "Proximity" "Unified Direction," "Continuation," "Unity with Variety."

c) After making several compositions for each problem, cut four strips of , white paper and arrange them around each copy, moving them in and out until you feel that the area left showing is a good composition. Cut the xerox copy out in this configuration and

mount the best solution to each problem separately on biology paper. (You might consider using black or gray construction paper as a backing to produce a darker border.)

Challenge: You might also try to produce an "implied shape" or experiment with filling in the objects with ink or gouache to produce all black and white compositions. Try reversing the black and white relationship to create a "figure-ground reversal."

(derived in part from a problem by Mary Frisbee Johnson)

UNIT IV: *Figure/Ground*

Objective

Introduction of "positive and negative space," introduction to "figure/ground" relationships such as "alternation," "figure/ground ambiguity," and "interpenetration."

Discussion

At the threshold of perception we see objects against backgrounds. The whole visual world may be thought of as a continuous series of figure/ground relationships with objects overlapping their backgrounds. The perception that objects seem to stand out against a background is defined as a "figure/ground :. relationship." Several kinds of relationships can be identified: the "vignette" in which the object "floats" away from the edges of the sheet or ground; "interacting" or "integrated" F/G relationship in which both the figure and the ground have equal importance; "ambiguous" or "alternating" F/G relationships in which it is unclear just what is the "figure" and what is the "ground" (e.g., a checkerboard, or the classic vase and profile reversal). "Interpenetration" involves a reversal of the F/G relationship at selected points where contour lines would otherwise be lost against a predominately dark or light background. (e.g., Graphic designers will often do a F/G reversal where text is run over alternating dark and light areas. Though the value of the text is shifting dramatically, the relative contrast of the F/G relationship remains the same.) (thanks to Tim McGinty, ASU School of Architecture)

Vocabulary

figure/ground relationship, interacting or integrated, alternation/ambiguity, interpenetration, positive/negative space, abstraction, non-objective

Reading

Chapter 8, *Design Basics* (with emphasis on pp. 137-147)

Artists/ Cultural References

"Mimbres Painting: An Artist's Perspective," by Tony Berlant. (2-D Supplementary Readings)

Possible Assignments

1 Make a composition from a series of "found" silhouettes, Emphasize the use of the whole paper, Avoid "vignettes",
(Collins)

2) Using a partner and a portable lamp, trace a series of shadows from interesting parts of the body. These can be full figures or fragments--but the final composition must be no larger than 15 x 20 inches (this requires severe cropping in most cases). Encourage the use of integration and interpenetration. Have the students try to achieve a total "non-objective" result-- or, conversely, try to focus on a clear story or narrative. (avoid the middle ground. ..) (Collins)

3) Plan and execute a black and white composition (i.e., drawing, painting, relief print) that attempts to protest or persuade. Your focus should be on effective definition of shape, use of symbols, figure/ground relationships, and impact on your intended viewers.

Unit.V: Grids, Scale, And Proportion

Objective

to introduce the "grid" as both a regulating system and as an aid to "scale" change; to introduce the concepts of "size," "scale," and "proportion."

Discussion

A "system" is simply an orderly way of doing something. Art that seems to result from the application of a specific procedure, from repeated use of a pattern or set of patterns, or from adherence to a body of rules is sometimes referred to as "systemic art" or "systems" art. A "grid" is understood, in most instances, as a system of fixed horizontal and vertical divisions. Grids are among the most adaptable and universally applicable of all systems. Any flat shape, no matter how irregular, can be conceived of in terms of what coordinate geometers would call X (horizontal) and Y (vertical) axes. The mechanical regularity of a grid can be used as an aid in copying, in scale or proportional changes, or to reveal complicated relationships within a work of art. (thanks in part to Basic Design, Richardson, Coleman, and Smith) "Proportion" is a relationship or ratio between parts of a given whole. "Size" is a quantitative description of an object that only makes sense in relationship to either another object or an agreed upon standard of measurement. (e.g., something is "big" only in relationship to something already agreed to be "small.") "Scale" is a proportional relationship between two sets of dimensions. In general, "scale" refers to the mathematical relationship between an object and a measurable quantity (the scale referent). We say that an object is "full-scale" when it corresponds 1:1 with real life. If the same object is rendered such that any given linear dimension is one-half the length of the original object, we understand this to be at "half scale" or 1 :2. One quarter the length would be "quarter scale", 1 :4, or 1/4th scale.

Vocabulary:

system, grid, size, relative, scale, anamorphic distortion, ratio, proportion

Reading: Chapter 5 and vpp. 167-169, *Design Basics* (Lauer); Chapter 2, *Basic Design* (Richardson, Coleman, and Smith) (see 2-D Reading Supplement)

Artists/Cultural References:

see illustrations from Reading

Possible Assignments

1) Create a composition that includes the following: a simple silhouette of a "found object" at "full scale;" a transformation of the object into "quarter-scale;" a "blow-up" of the object to at least 2:1; and (optional) "anamorphic distortion" of the object. While the mechanical aspect of changing relative scales and proportions is very useful, try to have the students go beyond this to make a composition that is conceptually and aesthetically pleasing. (Collins)

2) Create a composition that illustrates transformation of scale and proportion through the use of typography. Try to link the meanings of words with their graphic look and feel.

UNIT VI: *Modules and Patterns*

Objectives

To understand and apply the principles of "patterning" as applied to two-dimensional art. To introduce the concepts of "design process," "module," and "pattern." To explore the range of part-to-whole relationships that can result from the considered design of modules and their application to different patterning schemes. To indicate the universal aspects of patterning as found in cultures throughout the world.

Discussion

Pattern is an orderly arrangement of things forming a consistent or characteristic arrangement or sequence. While in two dimensional art we can produce patterns comprised of repeated shapes or modules, a pattern can also be any regular rhythm in time or space. Patterns can also be used to create identical shapes or parts. Pattern-makers--from dress-design to boat manufacture--are highly valued for their conceptual and design abilities.

Patterns pervade nature. People and plants grow in patterns, and so do spirals and money in the bank. Pendulums move in patterns, as do waves and spinning tops and springs. Sailors are on the lookout for patterns of sea and sky and wind that tell of bad weather. Parents look for behavior patterns in children that spell different kinds of turbulence ahead. Economists look for patterns of spending and saving.

Patterns are essential to perception because if we could not pick out patterns among the sound vibrations we heard or the light vibrations we saw, all the world would be a buzzing white confusion. All animals--and probably plants--have built-in pattern perceivers as part of their innate biological structure. Indeed, pattern perception or pattern recognition is important to the survival of every organism. Our ability to perceive the most subtle of patterns helps us to navigate and understand the world in which we live. Consider the patterns of clouds; the ways in which water moves; the tracks animals leave; the irregular beating of a heart or the "sticky valve" of a car engine. Each "orderly arrangement of things" allows us to perceive something different about our world.

Sometimes the patterns we employ to perceive the world filter out other less familiar patterns, and make us literally blind to new ways of seeing and thinking. Patterns extend our perceptions and also obscure them.

A pattern implies that something happens over and over again. It can help you find out where you're going, and where you've been; what's happening now, and what's going to happen next. It can be a sequence of things, a mutual force, a relationship in time or space. If one thing follows another in a repeatable way, you may think they are related by cause and effect. When two patterns collide or intersect they often create an "interference pattern" such as a moire pattern in which two patterns produce a third "wave-like" pattern.

Texture can be understood as simply pattern that is better appreciated with fingers rather than the eyes; textures are really just very small repeated patterns. Very fine patterns or textures feel smooth to the touch. Subtle differences between textures may only be discernable through the sense of touch. Coarser textures may be readily perceived by the eyes--for example, corduroy fabric or the surface of a rasp. When creating a composition that requires intermediary tones, visual texture--such as cross-hatched lines or rubbings (frottage)--can be used to provide interest and richness to a visual field.

Vocabulary

Design process, module, pattern, edge, alignment (unified direction), rotation, axis, symmetry, tangency, gestalt, transition

Reading

Lauer, David, *Design Basics*, p. 160

Further Reading:

Richardson, Coleman, Smith, *Basic Design*, Chapter 7

Briggs, John and David Peat, *Turbulent Mirror*, Harper and Row, 1989.

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Miller, Mary, "The Practical Fractal," *Exploring Magazine*, Vol. 16, No.2, Summer 1992.

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Stevens, Peter S., *Handbook of Regular Patterns*, The MIT Press, 1980.

Zaslavsky, Claudia, "Symmetry along with other Mathematical Concepts and Applications in African Life," *Applications in School Mathematics* (Yearbook, National Council of Teachers of Mathematics, Sidney Sharron and Robert Reys, eds.), 1979.

Harris, Mary, "Symmetry and Dissymmetry in Mathematics Education: a View from England," *Leonardo*, Vol. 23, 1990. (A challenging feminist look at symmetries, using 'women's works' as examples.)

Artists/Cultural References

Sol Lewitt, Moshe Safdie, Buckminster Fuller, Kenneth Snelson, Frank Lloyd Wright, Andy Goldsworthy, Le Corbusier, fast-food packaging, Islamic architecture, Japanese paper, Navajo Weaving, African textiles (Sudanese, Akwete, Cameroon, Uganda, Ashanti), paving patterns world-wide, early American quilts, African textiles, Amish Quilts, Crystallography, M.C.

Escher, Fractals, Islamic architecture, Agnes Martin, Bridget Riley, Victor Vasarely, Navajo Weaving, Robert Zakanitch

Possible Assignments:

1) Learn to use the "Photoshop" software on a Macintosh Computer. Generate a series of unique patterns. Laserprint them and mount on illustration board. (Collins)

2) Design a paper quilt. (See problem #3, MF Johnson)

- 3) Using a step by step design process, create a module that can be used to create three different patterns: unified direction, a personal symbol, a transition between two opposites. (See problem #84, Collins)

- 4) Plan and execute a paper tapestry that illustrates a "cosmology" (a metaphysical picture of the origin and structure of the universe...whew!) that you have either researched from another culture or invented from scratch. (See artCORE website, Collins)

UNIT VII: *Compositional Strategies*

Objective

To introduce a range of organizational methods and "compositional strategies" including "typology," "unity," "emphasis" (focal point), "balance" as aids to pictorial design.

Discussion:

While you have used grouping or unity principles in Unit III (*Unity*) to focus attention and move the eye across the picture plane, we are now going to explore several methods for creating effective overall 2D compositions.

Balance--the equal distribution of visual "weight"--is a feature of many effective compositions. Imagine a balance beam--like a seesaw--with a fulcrum at its midpoint. As you know, two objects of equal weight, placed at opposite ends of the beam, will achieve equilibrium across the two sides of the beam. Similarly, a composition can be balanced by adjusting the distribution of "weight" across the picture plane. This balance can be achieved in many ways.

The most straightforward method is to distribute elements equally on both sides of an imaginary center line by repeating or reflecting shapes from one side onto the other. This vertical "mirroring" is called *symmetry*. An *inkblot* is a perfect example of a symmetrical composition--that is, a composition that repeats the same elements on both sides of a central vertical axis. (It should be noted that while the elements are not "identical"--they are "left hand and right hand versions" of one another--the result constitutes perfect "symmetry" nonetheless.)

The use of *asymmetry* can result in compositions that are still "balanced" as far as visual weight. The difference is that elements such as value, color, shape, texture, and line are used in varying combinations to achieve that balance.

Radial symmetry can be used to create "multi-symmetrical" compositions that have a strong visual center of interest and a high degree of optical energy. Radiation patterns include: *centrifugal* (radiating from inside to outside--like a starburst), *concentric* (target like forms), *spiraling* (iris and nautilus shapes), *centripetal* (radiating from outside to inside) patterns.

Another compositional strategy includes *allover* composition or *crystallographic* balance where equal emphasis is given to every area of the picture plane. Examples of this range from Jackson Pollack's allover drip paintings to simple checkerboard patterns where every square is identical.

Finally, there are mathematical systems for determining "perfect proportion" and balance that date back to the ancient Greeks. One of the most famous systems is that of the Golden Section.

Vocabulary/Concepts

UNITY: gestalt, proximity, repetition, continuation, unity with variety, stress on unity, stress on variety; *EMPHASIS*: by contrast, by isolation, by placement, degree of emphasis, absence of emphasis; *BALANCE*: horizontal vs. vertical balance, symmetry, asymmetry, radial balance, balance--

by color, by value, by shape, by texture, by position, by eye direction; combinations of strategies, all-over pattern ("crystallographic balance").

Reading

Design Basics, Chapters 1, 2, and 3

Artists/Cultural References

Possible Assignments

1) Part A: Make a list of 20 items with similar characteristics--shapes, colors, textures, functions, etc. Discuss the idea of "typology"--that is, organization with regards to "type"--as an aid to achieving "unity" in one's design work. Part B: Using two clear "typologies", generate a composition that illustrates one or more of the compositional strategies discussed in class . (Collins)

2) Explore methods for shifting the focal point of a composition. (See problem # 83, "Changing Emphasis" by Beth Shook)

3) Copy objects placed on the glass of a Xerox machine so that each copy illustrates a particular aspect of *UNITY* in composition. (see problem #46 by MF Johnson, Allyson Comstock, and Kathryn Lanier) ,

4) Using letter and number forms, create works that emphasize specific methods of achieving compositional balance. (see problem #22 by Patty Haberman)

5) Mount two small fragments of black and white photos at opposite ends or sides of a large sheet of drawing paper, and .then make a complete drawing connecting the two. Attempt to camouflage the original elements into a composition of your own making. (see problem #19 by Ron Gasowski).

6) Illustrate methods of achieving *UNITY* using found objects, the students in the class, or performance. (Collins)

7) Plan and execute a mandala, based on a radial composition, derived from your own vocabulary of symbols. (Fritz)

UNIT VIII: Value/Color

Objective

To introduce the concepts of "value, .. "value relationships," "color," and "color relationships," as related to the two-dimensional picture plane.

Discussion

This is to be seen as a basic introduction--not as competition for ART 113 ('Color). While the instructor may choose to have the students use color earlier in the semester, there's something to be said for exploring the concepts of the first half of the semester in black, white, and possibly gray. Color is a wild card that can lead to both wonderfully personal projects or complete frustration. A few basic hints and some vocabulary will help the students sort out their own relationship to color--and help in refining the language used in critiques.

Vocabulary/Concepts: VALUE: middle gray, tint, shade, value scale, value contrast, achromatic grays, chromatic grays, high key, low key, chiarascuro; COLOR: hue, color wheel, primary' color, secondary color, tertiary color, intensity (chroma, saturation), simultaneous contrast, afterimage, optical mixing, COLOR SCHEMES: cool vs. warm, monochromatic, analogous, complementary, triadic, split complementary

Reading

Design Basics, Chapter 13,

Artists/Cultural References:

Possible Assignments:

- 1) Using the handouts provided in the Supplementary Packet execute a "color triangle" and three value scales. (see problem #88 by Dan Collins)
- 2) Gather 15 to 20 "color samples" from a favorite activity, hobby, place, etc. Organize these "actual" colors into four different color schemes. Variation: translate the colors into small "swatches" using, prismacolor pencils. (Collins)
- 3) Two Color Schemes/One Composition: Create two identical line drawings in light pencil. Color in the spaces between the lines to produce two compositions of contrasting emotion. (see problem # 89 by Dan Collins)
- 4) See "Value/Texture Paper Quilts Problem" (#3) by Mary Frisbee Johnson. Consider ways of incorporating the introduction t'qf Value and/or Color Schemes into a finished composition. Break ,the problem into two steps: A) an exercise illustrating the basic concept; B) a finished composition employing the actual materials of the exercise.
- 5) Using a color scheme derived from found color samples, the challenge is to create a mosaic

that expresses some aspect of your own identity.

UNIT IX: *Time, Change, and Motion*

Objective

To introduce a range of ideas and practical methods for visually communicating time, change, and motion. To demonstrate the intimate link between these three concepts.

Discussion

All materials and objects--actual and represented-- bear some relationship to the concepts of time, change, and motion. At the very least, the processes of decay and entropy-- while imperceptible to the casual observer--significantly condition our perception of a given object. Consider, for example, the fading of a piece of colored paper hung in sunlight: the process of fading--the physical change in the character of the dyes in the paper--records the passage of time. Or consider the Grand Canyon and its impressive revelation of geologic time. Many conventions and methods exist for conveying a sense of time, change, and motion. Cartoonists have developed a symbolic short hand for suggesting movement. Photographers use slow shutter speeds or panning techniques to accentuate change and motion. Some time-related processes rely on actual physical changes or mutations (e.g., an hour glass); others convey time, change, or motion symbolically (consider the innumerable paintings of the Stations of the Cross with the narrative unfolding as a series of still images; or consider the work of the Futurists who employed multiple, overlapping images within a single frame). The task of this UNIT is to render the largely abstract notions of time, change, and motion as palatable subjects for two-dimensional art.

Vocabulary

TIME: actual time, real time, geologic time, illusion of time, metaphorical. time, viewing time, timelessness; **CHANGE (SEQUENCE):** additive sequence, subtractive sequence, direction-change sequence, size-change sequence, position-change sequence, metaphoric sequence, distortion/destruction sequence; **MOTION/MOVEMENT:** anticipated movement, repetition, blurred or fuzzy outlines, multiple image, optical movement, illusion of motion, kinetics, alternating rhythm, progressive rhythm.

Reading

Design Basics, Lauer, Chapters 6 and 11

Design Concepts and Applications, Cheatham and Owens (see Supplementary Packet), Chapter 8

Artists/Cultural References

Bernini, Rodin, Duchamp, Boccioni and the Futurists, Muybridge, Eisenstein, Lew Alquist, sun dials Nancy Holt, John Baldesarri, Christian Bysantine art showing the stations of the Cross, cartoon sequences, film, process art, M.C Escher, Trajan's column, Japanese room with alcove that reflects the changing seasons.

Possible Assignments

- 1) Using two or more devices for illustrating motion (see Chapter 11, Lauer), communicate visually a sense of change, time, and motion. You may use any media or format. (Collins)
- 2) Tell a narrative story using 12 or more steps. It may be objective or non-objective. (see problem #45 by April Katz)
- 3) Illustrate an explosion (see problem #81 by Randy Crimmel) Variation: illustrate an imperceptibly slow process Combine the two.
- 4) Generate a list of action verbs. Invent techniques for illustrating particular verbs. Create a composition using three of your techniques. (Collins)
- 5) Create a "self-portrait in time" comprised of a sequence of images.
- 6) Your challenge is to plan and execute a [photomontage](#) that both explores a "dreamlike" sense of time and conveys the feelings of a personal fantasy or dream.
- 7) Your challenge is to plan and execute a mural, cartoon, or animation that uses time, change, or motion to convey an idea about the natural world.

UNIT X: *Depth Cues*

Objective

To introduce various methods for suggesting or denying spatial illusion or depth. To introduce various techniques of perspectival construction.

Discussion

Vocabulary

picture plane, heuristic scale, overlap, transparency, location, horizon line (eye level), aerial or atmospheric perspective, linear perspective, vanishing point, one-point, two-point, three-point, multi-point perspective, amplified perspective, multiple perspective (cubism), isometric projection and "Oriental" space (dynamic space), planar recession vs. diagonal recession.

Reading

Design Basics, Chapter 10,

Further Reading

Perspective Drawing Handbook, Joseph D'Amelio

Artists/Cultural References

Possible Assignments

- 1) Do a series of "mini-compositions", each of which illustrates a different form of spatial construction--overlap, isometric, one-point perspective, "flattened space," etc. Use the same elements and color scheme throughout. (Collins)
- 2) Create an exciting design through the intentional misuse of linear perspective. (see problem #68 by Margo Delk)
- 3) Construct a composition to literally "teach" a particular form of perspective. Do not use words. Make it graphically explicit. (Collins) (see problem #57 slides)
- 4) "Objects in Space": Part A: Conceive of the picture plane as a 3-dimensional space with a foreground, middle ground and background. Use as many of the "depth cues" as you can to suggest a convincing spatial illusion. The human figure may be used to help suggest the scale of objects in space. Part B: Repeat Part A except ;this time attempt to keep the sense of the picture plane by eliminating all signs of 3-dimensional space and making the space as "flat" as possible (see problem #53, David Snow/Robert Mueller)
- 5) Produce a series of photographs that deny the reality of spatial recession. The cliché would be

the snapshot of the fish you caught last summer made to look oversized by being placed in the foreground, while still aligned with your hand in the distant background. Try to go beyond one-liners. (Collins)

6) Create a [photomontage](#) that both creates a convincing spatial illusion and conveys the feelings of a personal fantasy or dream. Your focus should be on the effective use of depth cues deployed in a convincing perspectival space. Your final composition can be understood as an opportunity to give visual expression to your fantasies--whether of heaven or hell.