

Mike Jordan

Connections: Line, Point  
Plane, Mass

Architecture  
Auburn University  
Auburn, AL 36830

Entries in the problem sweepstakes

1. "Connections" has been used in first through fourth year studios with excellent results at each level. It is accompanied by lecture/slides on public spaces, spaces with a focus, and the nature of grids as generative devices.

2. Point / Line / Plane / mass is used as an exercise in formal vocabulary. It is accompanied by a lecture illustrating the usage in painting, sculpture and architecture.

- Line = column
- Point = column in plan
- Plane = wall
- mass = form.

Mike

Assigned October 31, 1977

Due - 5:00 P.M.

November 4, 1977

CONNECTIONS

Problem Emphasis

Further explorations in space, form, color, human scale, etc. introduction to symbols in architecture, grids as generative elements, etc.

PROBLEM

1. "SITE" - 12" x 12" white illustration board
2. Design a GRID base on one of the following elements:

SQUARE  
TRIANGLE  
CIRCLE

You may also use combinations of these forms.

3. Draw your grid on the "site" with black ink.
4. Using the grid patterns as a generative device, design and build the following elements at a scale of  $1/4" = 1'-0"$ :

ONE MAJOR SPACE of at least 300 s.f. containing a focus or point of interest

ONE MINOR SPACE of at least 100 s.f. containing the functions of entrance

ONE CONNECTION between the two spaces listed above. It must be at least 40' in length

VERTICAL dimensions of any space may not be less than 7'-0".

5. Spaces and connection may be below, on or above the surface of the "site."
6. Geometric forms derived from the grid you have designed must be used to express the three-dimensional qualities of your design (triangular grid = triangular building elements.)
7. The forms you design may be covered, partially covered, open or any combination of these.
8. Color may be used to reinforce the spaces.
9. Include at least one scale figure in your presentation.

ISSUES TO CONSIDER

symbolic form  
scale  
sequence of spaces  
color  
etc.

PRESENTATION

A presentation model at the indicated scale. You have a free choice of materials.

# Auburn University

AR 110

Design Fundamentals  
Fall Quarter, 1978

## POINT/LINE

### PROBLEM EMPHASIS

To explore, in two dimensions, the principles and elements of design.

### FORMAT

White illustration board cut into a Golden Mean Rectangle whose minimum dimension is 8 1/2" (refer to Design Handbook).

### PROBLEM

#### PART 1

Using the "Design Handbook" as a source, identify 1-3 design principles which you would like to explore. Make certain that they are not mutually exclusive, as a symmetry/asymmetry.

Using these principles as a source, develop a composition consisting of ONE POINT and ONE LINE. The composition is to illustrate the design principles you have selected. The point and line are to be cut from black paper and glued to the surface of the format. You should, however, try several solutions in sketch form before final assembly of your solution.

The design principles which you used in the composition are to be lettered on the front of the format.

#### PART 2

On a standard sheet of tracing paper with border lines and title block, draw your composition, and the format on which it occurs, at full scale. (Think of it as a plan drawing) Use graphite only.

### QUESTIONS TO ASK YOURSELF

1. How large can a point be before it becomes a plane? Does a point have to be round?
2. How wide can a line be before it becomes a plane?
3. What is the relationship between the point and the line?
4. Etc.

AR 110  
Design Fundamentals  
Fall Quarter, 1978

LINE/PLANE

PROBLEM EMPHASIS

Continued exploration of the basic issues of design.

FORMAT

Exactly the same as that used in POINT/LINE.

PROBLEM

PART 1

Using only the solution you developed in POINT/LINE, extend the point into a LINE in the third dimension and the line into a PLANE in the third dimension. These extensions should be designed so as to reinforce your original design principles. The extensions do not have to be perpendicular to the format surface. The top surfaces of the plane and line do not have to be paralleled to the format surface.

Use either chip board or illustration board for the third dimension extensions of your original concept.

PART 2

On one or more standard sheets of tracing paper with border lines and title block, draw four elevations at one-half full scale. Use graphite only.

AR 110  
Design Fundamentals  
Fall Quarter, 1978

PLANE/MASS

PROBLEM EMPHASIS

Continued exploration of the basic issues of design.

FORMAT

Exactly the same as that used in POINT/LINE.

PROBLEM

PART 1

Keeping your original design principles in mind, extend the line in LINE/PLANE in any direction to form a PLANE. Likewise, extend the PLANE to form a MASS.

PART 2

On a standard sheet of tracing paper with border lines and title block, draw a PLAN OBLIQUE of your PLANE/MASS solution. If necessary, change the scale of your drawing to make it fit the sheet. Plan Oblique is explained in Architectural Graphics and will be reviewed in class.

AR 110  
Design Fundamentals  
Fall Quarter, 1978

ADDITIVE/SUBTRACTIVE

PROBLEM EMPHASIS

To explore the possibilities of additive and subtractive design in the context of the design principles.

FORMAT

Exactly the same as that used in POINT/LINE.

PROBLEM

PART 1

Assuming the design decisions you made in PLANE/MASS are fixed, either SUBTRACT or ADD to the PLANE/MASS composition one 2" diameter x 8" long cylinder. This should be done in such a manner that it penetrates both the PLANE and the MASS.

PART 2

Use your PLANE/MASS plab oblique as a source, develop one drawing, either freehand or mechanical, which renders the volumes in your ADDITIVE/SUBTRACTIVE composition as three-dimensional forms. Refer to the drawings on p.p. 75-76 in Architectural Graphics for inspiration. The drawing is to be on one standard sheet of tracing paper.