Open Experiment

Outline : We will divide your group into the designers and the players. The designers will prepare a set of shapes and assembly rules from an architectural drawing. The players will use the set to solve a design problem.

Designers :

1. Select a piece of architectural graphics. Choose a well-known and simple one. Simplify it if needs be.

Some ideas : layout of structural walls and columns in a plan of some famous architecture

floor layout of furniture

facade of a building showing various openings

2. Articulate it into a small number of component types (less than 10 but more than 2)

If you want a type to be parametric, indicate which dimension is a variable. For instance, you

might like to allow length of a wall to be changeable.

3. Prepare a set of shape transformation rules that guides assembling of the components. Try to design a

set that can re-produce the original graphics, and also can create other variations of the same style.

A simple rule indicates how one component is added to another.

C1 -> C1 + C2 (adding a room C2 next to another C1, for example)

Its variation can be

C1 + C2 -> C1 + C2 + C3 (inserting a wall C3 between columns C1 and C2, for example)

A more complex approach is to use abstract markers. For example, you can represent a linear

plan of special end conditions by a set below.

M1 -> M2 + M3 + M2 (M1 represents the whole. M2 are ends, M3 is the middle.)

M2 -> C1 (M2 can be replaced by the component C1.)

M2 -> C2 (It can also be replaced by the component C2.)

M3 -> C3 (The other end can be replace by the component C3.)

4. If your group is large, you may divide the designers into sub-groups and let each sub-group prepare a

set of rules.

5. Prepare a design problem which the players will solve through applications of the rules. For example,

if the original graphics is a plan, you can provide its basic program such as the number of rooms

required and the size of the building. If there are many players, you may give each a slightly

different program.

6. **Do NOT reveal the original graphics to the players.**

Players : Solve the design problem made by the designers. Try producing one or more alternative solutions.

Each design solution must be generated through applications of the rules prepared by the designers. The players must not be shown the original graphics. If a player feels that a rule absolutely needs to be modified/added, document your reasoning and what your modification does to the outcome of your design solution.

Medium : You can use any drafting software or Photoshop as a game board. If you want to avoid digital, use paper or transparency.

Presentation : Include the followings.

- the original graphics selected

- illustration of rules made by the designers

- description of the design problem prepared by the designers

- illustration of the design solutions made by the players

- illustration of the design development through applications of the rules by the players

1. How close or different were the design solutions in comparison to the original graphics?

2. Were the rules used as intended?

3. What rules did the players want to change or add if any?

4. Is there any way to improve the format of this experiment?