Chapter 1: Precedent Study

To orient ourselves to a way of thinking about architecture that emphasizes component, joint, and assembly each student will investigate a work of architecture and identify these elements within it. The precedent may be straightforward, such as a building that employs a space frame of interchangeable steel components. Some examples may be more fluid, like a wood framed house where the components are cut to various sizes but joined in a standard way. Others might be more unintuitive, such as the manner in which the molecules in cement bond around aggregate to form concrete. No matter what the precedent chosen, the course of action will be to break the work of architecture down into its constituent parts in order to understand how they are assembled into a whole.

The precedent study will require the following steps:

1. Identify the precedent. Criteria for selection could range from work by an admired architect, a particular time period, or a particularly intriguing structural system. Keep in mind that we are primarily interested in the component systems of the architecture. Some examples will be easier to analyze than others.

2. Identify the component assemblies of the architecture. How many unique components are used in the construction?

3. Analyze the assembly logic. How are components joined to similar components to form assemblies? How are disparate components joined together to form larger assemblies?

The product of the precedent study will be a brief presentation consisting of the following components:

1. An overview of the architectural precedent. Where is it located? Who was involved in the design, engineering, and construction. When was it built (or designed, if unbuilt)?

2. Details of at least three unique components used in the structure. What are the dimensions of these components? Of what material are they made?

3. Details of the joints that link these components together. Are there variations possible within the constraints of each joint? Are other hardware components necessary to complete the joint? Does the joint allow for movement, or is it rigid?

4. An overview of how each of these component assemblies joins to the others in the architecture to form a whole. The entire structure does not need to be represented to convey this information, but enough detail should be included such that the progression from component to assembly to whole is apparent.

The presentation slides should be in PDF format. There will be class time available for feedback before the presentation. The presentation will be given on Monday, November 8th.