Perspectives on the Evolution of Structures
The Fine Arts Center

In class assignment and homework: The Fine Arts Center
Due at next class meeting

Names:

Today we will visit the Fine Arts Center (FAC), make drawings, decipher the structural behavior, and consider critiques of the structure. You are to complete 5 tasks in groups of 2 or 3 (interdisciplinary preferred). All drawing is to be done by hand.

1. Produce three sketches of the overall structural form of the ‘bridge’ part of the FAC, one viewing the structure from the south, one from the east, and one from the north. You may attempt an axonometric drawing of all or part of the structure if you wish. Do your best to make your drawings close to scale.

2. On a copy of your south elevation (xerox it), draw the load path for the snow load that would accumulate on the roof of the FAC bridge. Comment on whether you think wind load would be important in the design of the FAC bridge.

3. Investigate the cross section A-A of the FAC bridge, perhaps by going into the building. Attempt to draw this cross section through the FAC bridge.

4. Investigate the main columns supporting the FAC bridge. Describe and/or draw their shape. How do they connect to the FAC bridge proper? Can you think of any motivations, either scientific, social, or symbolic, for their shape?

5. Make any additional comments on the FAC bridge including some beginning ideas about a criticism of the structure in the context of the 3 S’s and 3E’s. Be brief and specific.

To orient you to the descriptions in the assignment, here are some labeled photographs of the FAC.