Unmediated Matter and Catenary Practices

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Since the 15th century, Albertian methods of notation have positioned media, or more precisely, ways of mediating between graphical representation and construction at the center of the architecture discipline. In the face of evolving digital processes, media continues to be the primary means for directing labor and for planning the organization of physical matter. Media gives labor its intellectual scope and connects mental and physical production. The work presented in this poster posits that complex geometries can be constructed without explicit direction or methods of mediating matter. In other words, complex - double curvature - forms can be built without construction drawings. If so, what is the role of media in forming physical matter into geometries that can resist gravity through form?

The vehicle for exploring this question is the double-curvature work and catenary practices of the late Uruguayan engineer Eladio Dieste. This work asks media to negotiate between digital craft and automated production of images. The images in this project are made using digital techniques, like grasshopper definitions for Rhino and other 2D line-based outputs in 3D-modelling software. Images are not used to generate irrational forms, but rather expand the familiarity and scope of ways of thinking and seeing catenary shapes. To this end, media is used as a speculative framework through which to imagine and construct complex forms without explicitly directing the labor that connects them to people and tools. Pushing media away from mediating matter, or rather, designing ways of fostering unmediated matter, is borrowed from Dieste's thinking about the role of graphical representation:
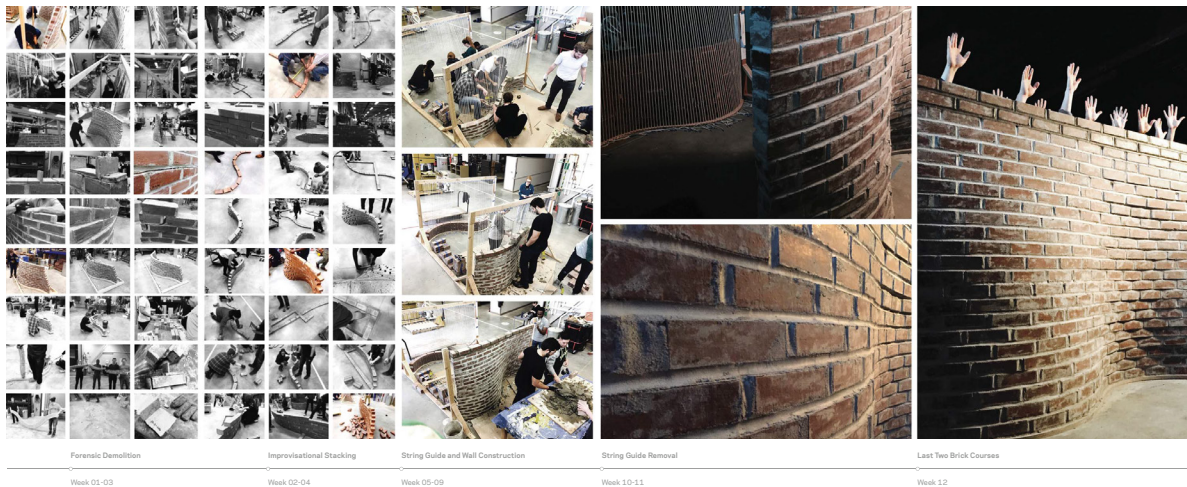
"All of the great structures of the past were built with extremely simple plans. I am aware that the organization of work was very different. I also know by experience the difficulties involved in envisioning things that cannot be expressed well in drawing, but many times the results are worth this effort." [1]

The idea of drawing not being a universal medium for architectural representation is evident in John May's writing, "Everything is Already an Image". May describes the technical aspects of three categories of media, or visual depiction, which define contemporary architectural culture: drawings, photographs, and images. He defines these categories through technical means because "architecture today seems uninterested in distinguishing between these three or, at the very least, seems unable to parse their ambiguities." [2] Unmediated Matter and Catenary Practices explores the relationship between drawings and images, as a means to question their instrumentality. According to May, "drawings are static hand-mechanical depictions that deposit geometric, rule-bound marks onto a stable surface." Images, unlike photographs, are the process of coordinating energetic outputs. Photographs manage chemical exposure processes; images manage data and energy.

The effects of automated representation highlight the prevailing contemporary condition of seeing images masquerading as "digital drawings" - tasked with mediating matter. Pairing the technical distinction between drawings and images with the geometric specificity of Dieste's catenary forms exposes the role of media in forming physical matter.

NOTES

1. Dieste, Eladio. "Architecture and Construction", in *Eladio Dieste: Innovation in Structural Art, ed. by Stanford Anderson* (New York: Princeton Architectural Press, 2004), 183.

2. May, John. "Everything is Already an Image" in *Log* 40, (New York: Anyone Corporation, 2017), 12.

Forensic Demolition	Improvisational Stacking	String Guide and Wall Construction	String Guide Removal	Last Two Brick Courses
Week 01-03	Week 02-04	Week 05-09	Week 10-11	Week 12

UNMEDIATED MATTER *and* CATERNARY PRACTICES

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Catenary
Grasshopper Definition
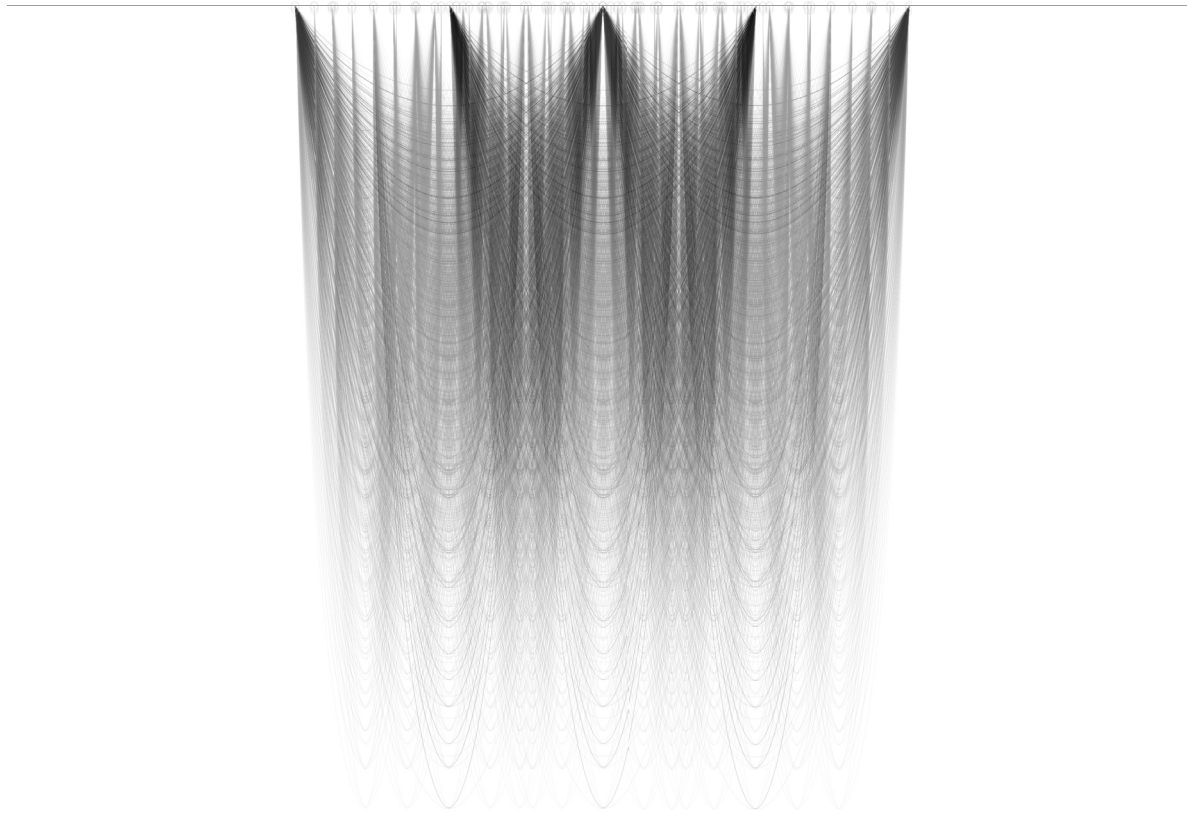
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