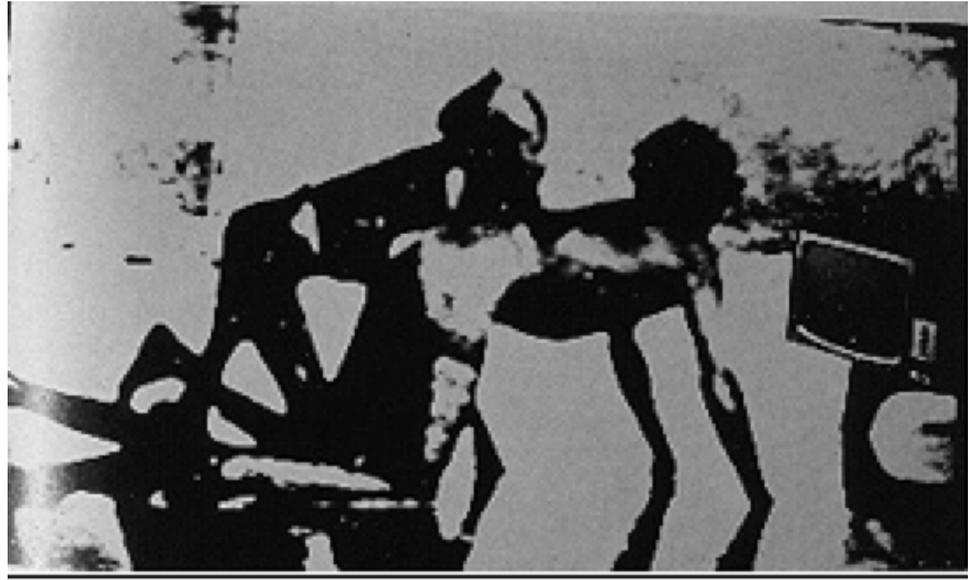


## **Architecture: Between Analog & Digital Civilizations**

### **The Analog-Digital Workshop**

*"It is not the architectural schools that follow the trends set by the professional firms, but now it is the professional firms that follow the trends set by the architectural schools."*

Rafael Moneo



#### **BACKGROUND** *(the issue)*

Since its origin, architecture has been the art of organizing physical reality, the act of establishing the material order of a cultural order. Until recently this has meant to work *in* and *with* the analog or material world. However, as our civilization moves deeper into the AI, 5G, internet of things, HDVR and the rest, cultural expressions (sources, processes and products) become increasingly dematerialized, virtualized. Needless is to say that architecture finds itself at odds with these developments because, in a culture of the simulacrum the concrete loses ground to the representational, the corporeal to the informational, the real to the simulational. As one's location, presence, and identity are intrinsically tied to the physical body, the new developments present us with a great challenge to the corporeal aspects of our humanity.

Thus we find ourselves in the midst of a struggle: the ancient, primordial calls of the body, emotions, and instincts (the unconscious) collide with the cultural demands of detached rationality, immaterial action, digital production, and consumption. This clash perhaps better than any other one reflects what has been termed 'the postmodern condition'.

Architecture is in a unique position to reflect and respond to this problem as it finds itself under the same dilemmas facing society. On one hand, the technological mutation underway is forcing a major shift from analog to digital modes of architectural production. The resulting shift is

profound enough to challenge our traditional representational systems and, more importantly, the way we think and make architecture. On the other hand, the mentioned cultural changes are requiring architectural responses defying all past traditions. Contemporary architects increasingly find themselves with the task of redefining architecture's purpose, technology, functionality, materiality, and aesthetics based on the needs and visions of the rising new civilization.

This workshop is an open laboratory to explore, reflect and act on *the implications of a radical technological revolution in our humanity/culture and architecture*. To do so, we will work within the conceptual framework presented in professors Bermudez & Hermanson's paper "*Tectonics After Virtuality*" (URL available on course website). The idea of **presence, transience, and hybrid/symbiotic architectures** will be considered as potential responses to today's schizophrenic zeitgeist.

## PEDAGOGY & SCHEDULE

To carry out this agenda, the A-D Workshop will:

**1.** utilize a variety of conceptual, design, representational, and technical exercises that facilitates the study of (a) the cultural transformation underway, and (b) the shift from analog to digital systems of production/consumption.

**2.** place students in the space lying *between* the analog and digital systems of production and request them to use either of these systems as design tools to advance architectural ideas and work.

A detailed schedule is available at the end of this document.

## TEAM WORK

The workshop will done in groups of 2 people to guarantee a diversity of interpretations and have enough critical mass to work simultaneously in analog and digital media. The students should rotate in their utilization of the media and not get 'specialized' in just one.

## SOFTWARE

We will use the following software:

- Imaging Processing: Photoshop
- Photo/Video capture/manipulation: I-Movie, Premiere, Photoshop.
- CAD modeling and rendering: SketchUp, Rhino, 3ds Max, Rhino, Revit (i.e., whatever you feel comfortable with)
- Digital presentation: PowerPoint.

## HARDWARE

PC or Macintosh

Input: scanners, smartphones, digital cameras (photo-video)

Output: Printers

Network

Back-up storage (studio): shared google-drive folder

## MODELING MATERIALS (Analog Process)

MATERIALITY	Find as many materials as you can get a hold of and bring in more than you think you need. You will not have time to buy extra materials while in studio. Find good quality materials that abstract the idea of the <i>nature of materials</i> , not representational of materials.
FLAT ELEMENTS	<p><i>Opaque</i> cardboard (several thicknesses: 1/8", 1/16", etc.), chipboard, foamcore, bristol board (or strathmore, museum or matt board), tag board (or rail-road board), water color paper, balsa wood sheets, cork (different thicknesses) (at craft stores), other kind of papers/boards, bass wood (art materials), metal sheets (copper, aluminum, etc.), aluminum foil, copper foil, mirror glass, sand paper, birch bark, found materials, rusted, etc.</p> <p><i>Semi-transparent</i> Gauze, screen (plastic, metal, scrubbers), fabric</p> <p><i>Transparent</i> acetate/plastic films, fiberglass (with or with/out sanded surface -w/sand paper), acrylic, plastic sheet, glass.</p>
LINEAR ELEMENTS	wood dowels and strips, metal wire (thick), metal wire by the foot (thin, thick); balsa wood sticks (different sections), spaghetti noodles, barbecue skewers, strip of metal (very cheap), bronze wire, rods (plastic, metal), found (natural) wood sticks.
VOLUMETRIC ELEMENTS	Clay, plato/plastilina, wood piece, plaster, styrofoam (expanded polystyrene or polyurethane/polyisocyanurate), stone, salt/sugar blocks
OTHERS	String, rope, rods, screws, nails, hinges, monofilaments (fishing line).
TOOLS	<p><b>glue gun</b> (with transparent glue sticks), knife &amp; cutting board, tracing paper, crayons, charcoal, thick markers, thick graffito, soft pencils, scissors, etc.</p> <p>8 1/2 x 11 sheets of acetate for protection of flat-bed scanner glass.</p>
WHERE TO GET THEM	<p>Specialty Bookstore, Arch. &amp; Art School Modelshops, Hardware stores, Art Supply Stores, Craft Stores, Junkyards/Scrapyards, Hobby shops, Builder's supply centers, Bait and Tackle shops. More specifically,</p> <p>Scrap metals: aluminum, steel Montgomery Scrap Corp 15000 Southlawn Lane Rockville MD 301-424-3000 <a href="http://www.scrapmsc.com">www.scrapmsc.com</a></p> <p>Woods, plastics, other Hobby Works 12274 Rockville Pike Suite G Rockville MD 20852 301-468-6330 <a href="https://www.hobbyworks.com">https://www.hobbyworks.com</a></p>



## **Schedule**

### **WEEK ONE**

#### **DAY 1 (Monday 26 August)**

2:10-3:00	Welcome/Studio space + Lectures 1: The A-D Workshop
3:00-4:00	Lecture 2: Tectonics after Virtuality
4:00-5:00	Exercise 01 ( <i>text table</i> )
5:00-	Exercise 02 ( <i>photos</i> ) begins

*HOMEWORK* Exercise 02

#### **DAY 2 (Wednesday 28 August)**

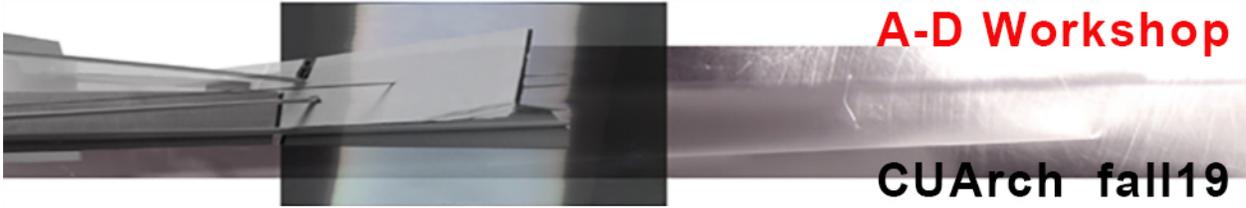
2:10-2:40	School Townhall
2:45-3:15	Critique Exercises 02
3:15-3:45	Lecture 2: Rip'n'tear <i>Modeling</i>
3:30-4:30	Exercise 03 ( <i>rip'n'tear</i> — <i>first round</i> )
3:30-5:30	Exercise 04 ( <i>palettes</i> )
4:30-5:30	Exercise 03 ( <i>rip'n'tear</i> — <i>second round</i> )
5:30-....	Review Exercises 03 and 04

*HOMEWORK* Exercise 05

#### **DAY 3 (Friday 30 August)**

2:10-3:30	Exercise 06 ( <i>selected images</i> )
3:30-4:00	Review of 06 vis-à-vis ideas
4:00-5:30	Exercise 07 ( <i>scans &amp; sketches</i> )
5:30-6:00	Lecture 3: <i>Synthesis Image</i>

*HOMEWORK* Exercise 08



**Schedule**

**WEEK TWO**

**DAY 4 (Wednesday 4 September)**

2:00-2:45	Review of Exercise 08
2:45-3:15	Lecture 4: Architectonic Project Explanation
3:30-5:00	Exercise 09 ( <i>rip'n'tear</i> – first round)
5:00-6:00	Exercise 09 ( <i>rip'n'tear</i> – second round)

**DAY 5 (Friday 6 September)**

2:10-3:00	Review Exercise 09
3:00-5:00	Exercise 10 ( <i>Ortho Translation</i> )
5:00	Exercise 11 ( <i>Digital Model 1</i> ) begins

*HOMEWORK*                      Exercise 11

**WEEK THREE**

**DAY 6 (Monday 9 September)**

2:10-3:00	Critique Exercise 11
3:00-6:00	Exercise 12 ( <i>digital model 2 and analog model 3</i> )
5:00-6:00	Screen Reviews and desk crits (analog model)

*HOMEWORK*                      Exercise 13 begins

**DAY 7 (Wednesday 11 September)**

2:10-4:10	GUEST JURY (first part: teams 1 through 4)
4:10-4:30	Jury break
4:30-6:00	GUEST JURY (second part: teams 4 through 8)
Anytime	Electronic files uploaded to Studio G-Drive Folder