

#### 4.XXX

### AUTO-POIESIS: the Rise and Rise of Rule-Based Creative Strategies Across the Arts

Instructor: Prof Mark Goulthorpe *he, his, him* (Architecture) [mg\\_decoi@MIT.edu](mailto:mg_decoi@MIT.edu)

Day/Time: Tues 9-11am (can be changed to suit the group)

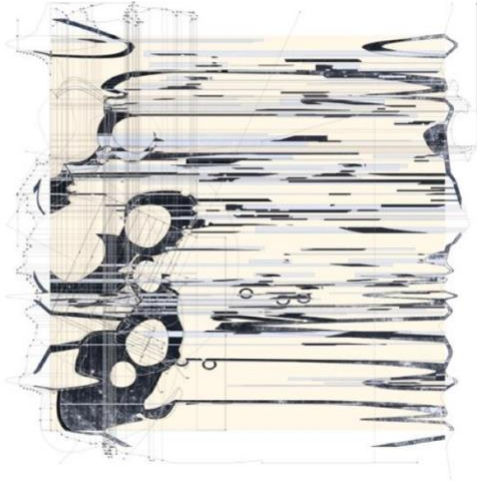
Location: 4-231

Credits: 2-0-7 (Grading per MIT general guidelines)

Equity: The course will follow MIT policies on gender, racial, sexual equality – please establish preferred pro-nouns, and feel free to express any concerns to the Instructor.



**Drawdles** by Morphosis Architects



This part-seminar, part-workshop looks to identifying changing patterns of creativity across the arts under influence of new technical *apparati* (phono, photo, filmic...) looking to trace the emergence of rule-based generative processes and their accelerating proclivity via current *computational media*. While there is evidence of parametric praxis as far back as the Roman engineer, *Vitruvius*, and iterative geometric processes implicit in historic Islamic and Oriental art forms, it is in the late 19th century and early 20th century that vivid new modes of auto-poietic praxis take hold, as if aspiring to a far greater degree of machinic salience. The resulting artworks - literary, sonic, kinetic, plastic - quite radical in their disjunctive form, were often scorned as bizarre in their novelty and aspiration. Yet their influence, looking to exceed intuition and direct creative aptitude in favor of symbiotic (human-machine) drives, was formative for modes of avant-garde production early C20th, and extends to ever-more normative generative practices late C20th and early C21st. As *computation* then absorbs all such prior disruptive *apparati*, imbuing them with powerful *generative* potency, so such lineage seems destined to become established, even dominant, in mainstream patterns of production and reception. We will look at a variety of cultural fields, but **architecture** will be the prime focus here, since despite being held to be slow to adapt to technical change, one finds pioneering works that offer plastic counterpoint to more agile literary or kinetic art forms...

This seminar component encourages *looking backwards* to vivid pioneers of *auto-poiesis* (in areas of your choosing), intending that you recognize that such *creative method is vital to the final artwork* (how working in a new manner leads to a new art-form). But pivoting to the workshop component, this prompts a *looking forwards* in you attempting precisely-indeterminate formative-isms, deploying such insights into creative experimentation via a now-digital imagination (whether using a computer or not). The lineage of experimental creativity intends to offer framing to new aptitude and imagination, and to theorize changing artistic motivations under influence of emerging technologies, as a means to release *auto-poietic* aptitude in your own work. At root is the idea that creativity or design is not static, but shifts through history under influence of the various technical systems that society adopts, none more powerful than the

current shift to digital media. This invites profound changes in cultural production *and* reception, aided by gaining insight into prior autopoietic habitudes as a key to emerging creative drives: it requires technical acuity and aesthetic openness.

### Case Studies



Auto-Poieticians in the **Literary, Sonic, Kinetic, Visual Arts**

*The seminar/workshop is for those interested in new patterns of creativity engendered by changes in technical apparati, evidently none more salient than the on-going shift to digital media and AI. It will ask for analytical and creative responses to material that we collectively identify and un-pack, and collaborative work will be encouraged. The instructor is a design architect, but with broad cultural and technical appetite, so all are welcome! Computational aptitude is not required, but can certainly be put into play! We will generate as a means to theorize...*

*Creative Figures we may Study (others are welcome)*

<b>Raymond Roussel</b>	writer/playwright	<i>Impressions of Africa, New Impressions of Africa, How I Wrote...</i>
<b>Antoni Gaudi</b>	architect	<i>La Sagrada Familia, Guell Chapel, Hanging Chain...</i>
<b>Eddie Durham</b>	musician/composer	<i>Moten Swing, Toby, Lafayette, Prince of Wails, Blue Room...</i>
<b>Kurt Schwitters</b>	artist/sculptor	<i>Merzbau 1, 2, 3...</i>
<b>James Joyce</b>	writer	<i>Finnegans Wake...</i>
<b>Bill Forsythe</b>	ballet choreographer	<i>Improvisation Technologies, Synchronous Objects...</i>
<b>Thom Mayne</b>	architect	<i>Drawdles, DrawdRules, Shanghai Campus...</i>
<b>Zaha Hadid</b>	architect	<i>Phaeno, Zaragoza, MAXXI...</i>
<b>Paul Steenhuisen</b>	composer	<i>Wonder, HypoSurface...</i>
<b>Marc Downie</b>	visual artist/film maker	<i>Saccades, Drawn Together...</i>
<b>Diemut Strebe</b>	visual artists/sculptor	<i>Sugabebe, kHouse...</i>

### Readings



Auto-Poieticians in the **Plastic Arts**

*Theoretical Texts*

- Andre Breton**, *Surrealist Manifesto*, 1924
- Gaston Bachelard**, *The Poetics of Space*, 1958
- Gregory Ulmer**, *Heuretics, The Logic of Invention*, 1994
- Martin Heidegger**, essay 'The Question Concerning Technology', 1954
- Gianni Vattimo**, *The Transparent Society*, 1989 ch 4,5,6
- Walter Benjamin**, essay 'Art in the Age of Mechanical Reproduction', 1936
- Marshall McLuhan**, *Understanding Media, the Extensions of Man*, 1964

**Jacques Lacan**, *Seminar 23*, 1976

**Luce Irigaray**, essays *Plato's Hystera* and *The Mechanics of Fluids*, 1987

**Bernard Cache** *The Tower of the Winds of Andronikos of Kyrros*, 2009

**VS Tkwembe**, *Vindicating Karma*, (PhD) 2007

**Betti Marenko** *UnDesign. The Un-designability of the Virtual*, 2015

## Speakers

We will have some contemporary auto-poieticians present their work, and invite speakers to frame the work of others, with a degree of flexibility according to the interest shown by the class. Students will also frame their subjects of study, allowing the class to absorb a range of creative practitioners and auto-poietic methods.

## CourseWork

Students will be asked to produce three pieces of work: one *analytical* (hermeneutic), one *inventive* (heuristic), one *collaborative* (analytical or inventive). You are encouraged to seek media that are appropriate to the production and reception of your project, as did the creative practitioners and theorists under study. *Risk* is vital to conveying the production and reception of such pioneering works: *in their moment such works were often seen as aberrant and a-cultural!*

### 1 Research

An initial period researching creative exemplars and texts on cultural innovation, devising ways to capture the salience of the works so the group gets to understand a range of theoretical viewpoints and generative methods.

### 2 Engagement

Select an auto-poietician (from those offered or another that seems equally redolent of the kind of profound interrogation of cultural tradition that these figures enact), and develop the means to communicate the essential methods and drive of their praxis. Also select a theorist (from those offered or another that seems equally focused on patterns of creativity) as a means to assess the given artist/artwork. Perhaps use a *CATTt* framework from Gregory Ulmer to try to articulate what each artist was attempting: *Contrast, Analogy, Target, Theory, tale*.

Some of these figures are quite well known by *Prof Goulthorpe*, or their work quite well understood; so perhaps choose others that are less well grasped (for instance a Jazz pioneer such as Eddie Durham or architect Zaha Hadid): *but the choice is yours*.

### 3 Invention

You are to extend or create an auto-poietic process that derives from ANY of those witnessed by the group, and that uses any of the theorists cited. By all means use one of your own projects, or invent one, as a vehicle for this – it can be any artform (literary, sonic, kinetic, visual, plastic...)

The *CATTt* analytical armature may be turned into a generative device, forcing lucid but surprising material – what I term a “precise indeterminacy”. This will force you to provide an impetus (to/from) and a justification (examples/theory) to give form to the artwork.

## Calendar

This can be loosely adhered to – we will look at artists of particular interest to the group.

Feb 1 Auto-Poiesis Introduction

*Example:* Bill Forsythe Frankfurt Ballet (*speaker:* Ros Sulcas)

*Example:* Antoni Gaudi (*speaker:* Mark Burry)

Feb 8 *Theory:* Greg Ulmer CATTt

*Example:* Raymond Roussel (*speaker:* Iris Giannokopoulos)

Feb 15 **1 Student Theoretical Outlines**

Feb 22 PRESIDENTS' DAY HOLIDAY (*No Class*)

Mar 1 *Example:* Paramorph + HypoSurface

*Example:* Paul Steenhuisen (*speaker:* Paul Steenhuisen)

Mar 8 *Example:* Kurt Schwitters (*speaker:* Rodanthe Vardouli)

*Example:* Thom Mayne

Mar 15 **2 Presentation of Artist Portraits**

Mar 22 SPRING BREAK (*No Class*)

Mar 29 *Example:* Marc Downie (*speaker:* Marc Downie)

*Example:* Diemut Strebe (*speaker:* Diemut Strebe)

April 5 Desk Crits

April 12 **Review of Auto-Poietic ArtWork**

April 19 PATRIOTS' DAY HOLIDAY (*No Class*)

April 26 Desk Crits

May 3 **3 Presentation of Auto-Poietic ArtWork**

May 10 **3 Presentation of Auto-Poietic ArtWork**