Enchanted Architecture
Applying the tropes of magic to design and the built environment

Subject 4.s23
Time W 2-5 (1st half SP 19)
Room 9-217
Credit 3-0-3
Instructors Gilad Rosenzweig + David Rose
In the 1960s, the architectural group Archigram proposed a walking city that crawls across the land (and water) like giant bugs. Radical ideas like these emerged in an age of provocative and performative avant-garde contemporaries like the Independent Group, Superstudio and Ant Farm—groups that shared a countercultural sensibility and debts to predecessors like Bruno Taut and Buckminster Fuller. We are inspired by their reinvention of design with new materials like the hanging Dymaxion house or the prefab Vipp shelter.

In addition, science fiction, cartoons, comics, and cinema with utopian or dystopian futures present us with landscapes and architecture that challenge, liberate and contemplate our notion of reality. These media free us from the ‘rules’ of architecture, physics and culture to explore fantastical design.

But today, with novel materials, embedded computation, AI and robotics we might be able to question the validity of those rules and go even further to rethink the ordinary and every day; make it enchanted—to radically reimagine the built environment and create unexpected delight.
This subject will lead students to the design and presentation of new concepts for elements of architecture. However, the impetus for that design should not emerge from program, site or precedent. Instead, we want your work to be derived from an interplay of technology and imagination, and a study of the tropes of magic. We will learn the formula of magic, and see the magic of objects and spaces that are all around us (even those we don’t actually see or hear.)

How might we reverse engineer spectacle and astonishment with the tropes of magic.

In class exercise:

In groups of 3-4, students will brainstorm 5-10 human-scale enchanted experiences.

1. Start with a pain-point, a wish, a fantasy, or new technical capability.
2. Take an ordinary object or situation
3. Inspired by magical effects, add an unexpected but delightful service/feature/experience

Assignment 1:

Research and present a few precedents in enchanted architecture.

Think about the following questions:

1. What is the wish/desire that they hope to satisfy?
   (omniscience, telepathy, safekeeping, immortality, teleportation, ...)
2. What magical effects do they employ?
   What is the pledge, the turn, and the prestige?
3. Where do they fall on the spectrum of astonishment?
   Surprise, Delight, Wonder, Awe, Miracle

Don’t restrict your research to the 1960s! Biblical texts, ancient myths and medieval fairytales are wonderful resources too.
Class 2
[Feb 13]

Design in human scale (less than your arm-span)

Part I: In-class exercise

Invent / sketch five original examples of design-rooted technologies that can enhance responsiveness or conjure enchantment.

Part II: Context (even magic needs a real venue at times)

We will introduce three design “sectors” in which you will apply your transformations: Healthcare, Transportation, Retail. These sectors are general enough to allow a plurality of ideas and concepts to emerge, but also specific to places with well-established programs and processes that have constant interaction and flow, public and restricted spaces, and are constantly reinventing themselves to reflect emerging technologies.

Assignment 2:

Visit a place within the context you choose; go to the airport, train station, hospital, or store and do contextual research: play and observe. Look beyond what is seen and question the reality that is presented. In addition, study the history of the space or typology over generations of its existence and look at contemporary developments. Document your findings and discoveries in the media of your choice (photos, film, sketches, audio) and return to the next class questioning the sector and conjuring ideas for improvements or change.

Class 3
[Feb 2]

Bringing in the experts

We will present opportunities for transformation at the architectural scale. Two sector leaders from Gensler (Bill Hooper, Aviation and Jim Crispino, Healthcare) will speak to the class about innovation and future trends in their fields.

You will continue to focus on one particular function or element in any of the previously identified spatial typologies: transportation, healthcare, or retail.

Students will form groups by interests or context to begin designing a new architectural element, process, or object.
Class 4  
[Feb 27]

Each group presents their draft ideas for daring, provocative, visions of a future responsive environment. The scale of an idea can be at room, building, or city scale. Ideas need to be supported with technological evidence (or an indication that the technology is emerging), and show an understanding of the sector needs as learned in Class 3.

Class 5  
[March 6]

Lesson:  
Introduce prototyping techniques for smoke and mirror film: stop motion, AR / VR.

In class exercise:  
Storyboarding and scriptwriting

You need to convey your idea, make others believe it can be real. The last three classes will be dedicated to storyboarding, prototyping and presenting your work. This is not an end to the creative work needed in the product or system design itself, you will continue to experiment and revisit the design throughout this process as well.

Lesson:  
Building a venture

This class is a chance for you to think of the objects and elements of architecture and not one design or client. You are essentially creating a new scalable design venture. We will examine venture design and review the curriculum from the designX accelerator course and discuss its implications on your new ideas. Who is the potential market for your idea? What value do you bring them (both financial and societal), what is the potential business model for your idea and how would you scale it?
**Class 6**  
[March 13]

**Mockup** small-scale prototype. Plan shots and storyboard, shoot, edit, voice-over, soundFX, how do people use it? How does it delight people?
A new piece of architecture or component, a game changer, way outside the box thinking, leveraging feasible but novel technology. E.g. responsive walls, lighting, windows, seating/tables,

**Class 7**  
[March 20]

**Present** your work as a film, experiment, play.

First motivate the idea, then show a scenario of how it will work, and finally someone’s reaction to your invention.

Discussion of the secondary effects of your idea or technology. Who is affected, positively or not, by your work.

**READINGS (a start…)**

- Banham, Reyner  
  *Theory and Design in the First Machine Age*

- Massey, Anne  
  *The Independent Group: modernism and mass culture in Britain, 1945-59*

- Rose, David  
  *Enchanted Objects*

- Schrijver, Lara  
  *Radical Games: Popping the Bubble of 1960s’ Architecture*.  
  Part III Technology in Architecture: The Ghost in the Machine  
  P 95-145

- *Works of*  
  Bill Viola  
  Laurie Anderson  
  James Turrell  
  Zaha Hadid  
  Rem Koolhaus

- *Articles*  
COURSE REQUIREMENTS

Work for 4.s23 will include class participation, design development, presentations, and documentation of projects and workshop deliverables. Student grades will be determined as follows:

- Participation in group discussions: 50%
- Design projects and presentations: 50%

Stellar is MIT’s web-based platform that contains all relevant information for the course. You need MIT web certificates installed on your computer. See the Instructors if you have any problems.

Students and all participants are expected to attend each class. Repeated absences or lack of participation on a team project will be noted and, if not resolved, will affect your grade. As the class only meets 7 times, more than 1 absence will not be accepted.

ASSIGNMENTS

We will distribute information on assignments as the semester progresses and provide assistance to students in undertaking the work.

MIT NOTES

Disabilities. If you have a documented disability, or any other problem you think may affect your ability to perform in class, please see the instructor early in the semester so that arrangements may be made to accommodate you.

Academic Integrity. Plagiarism and cheating are not acceptable. Never (1) turn in an assignment that you did not originate or write yourself, (2) turn in an assignment for this class that you previously turned in for another class, or (3) cheat on an exam. If you do so, it may result in a failing grade for the class, and possibly even suspension. Please see the instructor, if you have any questions about what constitutes plagiarism. MIT’s expectations and policies regarding academic integrity should be read carefully and adhered to diligently: http://integrity.mit.edu