Introduction:
VISUAL PERCEPTION & ARCHITECTURAL AGENCY
This design studio course introduces visual perception and media as catalysts for generating ideas and critique of architectural space. To perceive is “to apprehend with the mind and senses” (excerpted OED definition). In architecture perception is facilitated by media where knowledge is analyzed, conceptualized, and invented using media: drawings, models, images, etc. While architecture is inextricably linked to media it can also be understood as a medium itself—it operates as a mediated condition and displays logics that are often similar to other (visual) media.

Furthermore, architecture is not only one media among many, it can also be seen as a mediator -- a go-between that negotiates multiple forces: physical, cultural, social, political, technological, environmental, etc. Feedback loops between architectural representation and perception allow us to see architecture as a media and mediator and infuse a distinct agency within architectural projects. This agency employs unique design methodologies that are derived from the discipline and practice of architecture. It is with this (architectural) agency we will explore the world around us, and beyond, to see how and if another world is possible.

Projects:
ANOTHER WORLD IS POSSIBLE
The semester long thematic: Another World is Possible will be explored through three projects introducing distinct design methodologies and utilizing combinations of analog and digital visual media. This slogan, recently popularized in 2001 as the motto of the first World Social Forum, now often stands for activists and alternative visions of the world. Our studio work will deploy this provocative statement into visual manifestos for three projects, titled: Hybrid World, Whose World and Another World. Each project poses specific problematics: human-machine space, multiple points of views, spaces of local-global assemblies, among other issues. We will focus on selected media and urban spaces as “sites” for imagining propositions that manifest the studio premise: Another World is Possible.

Excerpts: OED definitions:
perceive, v.
To apprehend with the mind or senses; to become aware or conscious of; to realize; to discern, observe; To interpret or look on (a thing, situation, person, etc.) in a particular way; To apprehend (something that is not manifest); To detect (that which is hidden, or not immediately obvious); to see through or into.

perception, n.
The process of becoming aware or conscious of a thing or things in general; the state of being aware; A direct recognition of something; an intuitive insight; an understanding; The action of the mind by which it refers sensations to external objects, phenomena, etc., as their cause.
Studio Projects:

**ANOTHER WORLD IS POSSIBLE**

**Project 1:**

**HYBRID WORLD**  
*From Algorithmic to Analog Systems: The Human-Machine Space*

(Algorithms) have transitioned from being something that we extract and derive from the world to something that actually starts to shape it -- the world around us and the world inside us.

– Kevin Slavin, Transcribed from TedTalk: “How Algorithms Shape our World”

*Chance comes in here to give us the unknown.*

– John Cage to Pierre Boulez, January 17, 1950

Project 1 Hybrid World will combine two distinct systems: one derived from algorithmic/computer-generated random order and the other based on analog processes or human actions that integrate random or chance events. The aim of the project will be to perceive and represent a human-machine space where these two systems form a productive or contentious dialogue and shape a new hybrid world. We will explore design concepts such as: randomness, order, chance operations, (un)predictability, repetition, difference, superimposition, intersection, etc. These investigations will lead to a series of drawings that will subsequently become a basis for a three-dimensional physical model. The project goal will be to produce a provocative visual manifesto in which the final results are not pre-determined but evolve out of a rigorous process of experimentation, sensorial observations, conceptual thinking and playful imagination.

**Project 2:**

**WHOSE WORLD**  
*From Multiple Points of Views: The Collective Film Project*

*A Camera movement anticipates one spectacle and discloses a different one.*


The second project will begin with a moving-image filmic examination of an urban space in New York City. We will document and record a highly active public space using mobile-phone cameras and apps. Our site documentation will focus on physical, cultural and social dynamics of a given space from multiple points of view. With moving images and editing techniques we will explore the shifting roles of significant buildings in cities as monumental landmarks, critical infrastructure and transitory spaces. The projects’ working process will also challenge the “auteur” (single-author) creative process and experiment with formats where many authors collaborate to combine plural, non-linear juxtapositions into a collective film on different worlds from multiple points of views.

**Project 3:**

**ANOTHER WORLD**  
*From City to World: New Territories of Local/Global Assemblies*

*A City is never simply in one place.*  
*Every building imagines a city, and a world.*  
*Every building can imagine another city, and another world.*

– Kadambari Baxi and Reinhold Martin, “Multi-National City: Architectural Itineraries”

The final project of the semester will explore a site that uniquely embeds local, global, transnational and planetary imaginaries: the United Nations complex in New York City. Using aerial photography, site maps, building plans and sections, informational data and virtual networks as source media we will explore the UN premises. We will also draw from the ideas explored in the first two projects and reuse aspects and techniques to develop the final project. The given site as an “international territory” and it’s surrounding spaces can be seen as “worlds within worlds” where diplomats, professionals, visitors and residents transverse. We will map the physical and virtual boundaries that govern—separate or bring together—multiple publics. The project will aim to recalibrate these spatial boundaries to insert another world that inscribes possible new territories of public assemblies.
DESIGN SKILLS
The studio curriculum will be an introduction to fundamental design and technical skills. Students are required to gain proficiency in the following: (workshops will be offered outside studio sessions for digital skills).

**Drawing skills**
Analytical Diagrams
Plans, Elevations, Sections
Three dimensional drawings: Axonometric, Isometric, Perspective, etc.
Freehand Sketching

**Digital skills**
Line drawings using Adobe Illustrator
2D/3D Renderings, Collages using Adobe CS
Three dimensional modeling using Rhino
Modeling Skills (Model-making using a variety of materials using paper, wood, chipboard, foamcore, wire, plexi)
Image+Moving Image Media (Adobe CS, iMovie)

LEARNING OBJECTIVES
1. Visually communicate architectural concepts and design intent using discipline-specific techniques including:
   - orthographic projections (plans, elevations, sections)
   - paraline projections (axonometrics, isometrics)
   - physical models using various techniques and materials
   - multiple media and/or combined representational strategies
2. Verbally communicate architectural research methods and spatial concepts.
3. Demonstrate an understanding of precedent and site analysis.
4. Demonstrate an understanding of design method as a step-by-step, iterative and incremental process of research, synthesis and feedback.
5. Demonstrate an understanding of design thinking as responsive to and shaper of social and cultural context.
6. Demonstrate the ability to work independently and collaboratively.
7. Demonstrate an understanding of the historical and theoretical contexts for architectural representational conventions.
8. Utilize a range of analog and digital techniques in the design process.
9. Utilize three-dimensional digital modeling software in the design process.

STUDIO PROCEDURES AND POLICIES

0.1 STUDIO PROCEDURES
This course is taught by the studio method. The core method of instruction is that of ‘desk crits’, a one-to-one dialogue at the desk between the student and the faculty or TA (also described as “Studio Critics”). At the desk crit, previous design work is reviewed and discussed and the student and faculty formulate the next steps in the process. Desk crits are supplemented by Interim Reviews, or ‘Pin-ups’, where all students in the studio present their design ideas for group critique and discussions. The culmination of each project is the Final Review in which students present their work for public evaluation by a group of Studio Critics and Visiting Critics.

Each student will have a desk in 404 Diana. You must work in the studio after hours, employing your piers as critics. You will be expected to equip your desk with the necessary tools and materials for your projects (see below). No excuses for incomplete work should be made for lack of equipment. Each project will use different equipment--more specific purchases should be made at that time.

0.2 STUDIO WORK
The studio work will consist of analog drawings, model-making and computer work. You will maintain a sketchbook throughout the semester that will be used for sketching and writing notes for all projects. This sketchbook will be reviewed during desk-crits. In addition to periodic presentations by the faculty, Teaching Assistants will conduct other informal evening workshops focusing on techniques and methods relevant to ongoing projects. These sessions are optional but you are strongly encouraged to attend.
0.3 ATTENDANCE
You are encouraged to work in the studio and to take advantage of the shared learning environment to discuss your work with your peers. Attendance is mandatory at all scheduled classes. Studio is held Monday and Wednesday beginning promptly at 9 AM. Any student arriving after 9:20 AM will be considered ‘late’ and arrivals after 10:00 AM will be considered as absent. The only excused absences are those for reasons of health or crisis, and you must alert your critic or TA by email. Unexcused absences, late arrivals, or early departures from class will reduce your course grade. Three consecutive absences or four nonconsecutive absences will mean that you have dropped the course, whether or not you have filed the appropriate “drop” form. Three non-consecutive absences within the semester will result in a grade reduction by one-half (1/2) of one letter grade (e.g., B to B-). You may NOT leave class early or after a desk crit. Plan to use your time in the studio productively and related to project assignments so that you are not simply waiting for your Critic.

0.4 GRADING
Each Studio Project will be graded with a letter grade. Your work will be evaluated by the following criteria: (1) analysis & concepts; (2) process & development; (3) final project materials: drawings, collages, models, etc. Final grade will be constituted as: Project #1: 25%, Project #2: 25%, Project #3: 35%, Overall Studio Progress, Success, Participation: 15%. Sketchbooks will be reviewed periodically by your critic and may be required for grading. The instructors recognize learning and improvement as important factors in determining your final grade.

Students are required to present their work in all Interim and Final Reviews. Failure to do so will reduce the grade of the exercise by a minimum of one letter grade (e.g., B to C). Work not presented at the designated time will not be reviewed at a later date. Project grades will be based on the work you present at your Final Review. Required work that was not completed at the Final Review must be completed in time for grading. Additional work completed after the Final Review and before grading will not be considered at the grading session unless otherwise stated by the Studio Critics. NO INCOMPLETES will be given at the end of the course.

0.4 SECURITY
Please attend to the security of the Studio space. Because there is occasional theft, it is highly recommended that you not leave any valuables unattended when away from your desk, and that you not leave costly tools or devices (iPods, laptops, cameras, etc.) in your desk even if locked. One very workable solution is to carry your more valued items with you! You may leave your parallel rule attached to your desk. Barnard Security does make periodic checks of the studio but security is a responsibility that we all share; please help us maintain a safe and productive environment. IF SOMETHING OF YOURS IS TAKEN, PLEASE MAKE SURE YOU CONTACT SECURITY, DEPT. ASSISTANT AS WELL AS THE STUDIO FACULTY. Finally, University policy prohibits smoking in classrooms. Please be considerate of your classmates.

0.5 STUDIO WORK PRACTICES
Please refrain from the use of spray paints, spray adhesives, or similar products in the studio and all adjacent spaces. This may be done only in the model room annex to the studio. The hallway, stairwells, and sidewalks outside the building are not to be used as working spaces for model building, etc. The overspray from spray paints and adhesives are destructive to the building. In order to maintain a productive workspace for all, music must be listened to through your headphones. Please keep the studio and DAL clean. DO NOT LEAVE FOOD ITEMS IN STUDIO. (We are trying hard not to enforce a “NO FOOD” policy in studios).

0.6 STUDIO EQUIPMENT
Sketchbook (minimum size 8”x10”)
Basic Tools and Materials:
-Borco (board cover)
-parallel rule – Mayline
-architects’ scale (6 sided)
-8” or 10” adjustable triangle
-12” or 18” role white tracing paper
-drafting dots
-lead pointer, lead holder, leads
-white pencil eraser
-X-acto with #11 blades
-24” metal ruler with cork backing
-elmers or sobo glue
-model making materials (as needed)

CONTACT:
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Taylor Zanke <tlz2106@columbia.edu>
Office hours: Mondays & Wednesdays: 2-3 PM (subject to change, see sign-up sheets)
Selected Readings:
(See updated reading list and PDFs on courseworks)

Project 1:


Thierry Lagrange, “A Matrix as an Analogous Space / A Mental Tool for New Insights” in *OASE 85: Productive Uncertainty*

Project 2:


Film: “The Man with a Movie Camera” Dziga Vertov, 1929

“Man with a Movie Camera: The Global Remake” Participatory Video Project + Website: (http://dziga.perrybard.net/)

Project 3:
*See Project Assignments after the mid-term*

General Reference Readings:


Robin Evans, “Rumors and Extremities,” in *The Projective Cast*


Architectural Representation:

Francis Ching, *Design Drawing* by Architectural Graphics

Ramsey/Sleeper, *Architectural Graphic Standards*

Watson/Crosbie, *Time-Saver Standards for Architectural Design Data*
<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Activity</th>
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| 1    | Wed. 20 JAN | Introduction Studio Syllabus and Semester Overview  
|      |             | Project 1 Assigned                            |
| 2    | Mon. 25 JAN | Project 1 Desk crits                          |
|      | Wed. 27 JAN | Project 1 Pin up                              |
| 3    | Mon. 01 FEB | Project 1 Desk crits                          |
|      | Wed. 03 FEB | Project 1 Desk crits                          |
| 4    | Mon. 08 FEB | Project 1 Desk crits                          |
|      | Wed. 10 FEB | Project 1 Desk crits                          |
| 5    | Mon. 15 FEB | **Project 1 Final Review**                    |
|      | Wed. 17 FEB | Project 2 Assigned                            |
| 6    | Mon. 22 FEB | Project 2 Desk crits                          |
|      | Wed. 24 FEB | Project 2 Desk crits                          |
| 7    | Mon. 29 FEB | Project 2 Pin up                              |
|      | Wed. 02 MAR | Project 2 Desk crits                          |
| 8    | Mon. 07 MAR | Project 2 Desk crits                          |
|      | Wed. 09 MAR | **Project 2 Final Review**                    |
| 9    | Mon. 14 MAR | SPRING BREAK                                  |
|      | Wed. 16 MAR | SPRING BREAK                                  |
| 10   | Mon. 21 MAR | Project 3 Assigned                            |
|      | Wed. 23 MAR | Project 3A Site Visit                         |
| 11   | Mon. 28 MAR | Project 3A Pin up                             |
|      | Wed. 30 MAR | Project 3A Desk crits                         |
| 12   | Mon. 04 APR | **Project 3A Final Review**                   |
|      | Wed. 06 APR | Project 3B Desk crits                         |
| 13   | Mon. 11 APR | Project 3B Desk crits                         |
|      | Wed. 13 APR | Project 3B Desk crits                         |
| 14   | Mon. 18 APR | Project 3B Pin up                             |
|      | Wed. 20 APR | Project 3B Desk crits                         |
| 15   | Mon. 25 APR | Project 3B Desk crits                         |
|      | Wed. 27 APR | Project 3B Desk crits                         |
| 16   | Mon. 02 MAY (TBC) | **FINAL PROJECT REVIEW** (Date to be confirmed) |