

FALL 2010

2445: Landscape as Animation
Department of Landscape Architecture
Friday 2:00 – 5:00, 516 Gund Hall

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Course Description

This elective seminar studies the work of artist Joshua Mosley, in particular his methods of representing landscape through sequential photographic animation. In conjunction with four workshops delivered by Mosley, weekly lectures and technical exercises will advance a workflow of sequential drawing and photography to computer graphics (Maya) to editing and compositing (After Effects).

Assignments will respond to topics in landscape architecture, explored through the lens of animation, cinematography, and change over time. The ambition of the course is to incorporate these digital techniques into the design process and work towards developing a more expressive model of representation for the interstitial stages of landscape design. Work produced in the seminar in counterpoint to screenings of animation in film and contemporary art will formulate a basis for assessing design methods that unfold in time.

This course is offered through the Department of Landscape Architecture and is open to degree candidates in any discipline. No prerequisites.

REFERENCES

Tools and Methods

- <http://www.joshuamosley.com/gsd/>
- Trish Meyer and Chris Meyer, *Creating Motion Graphics with After Effects*, Fifth Edition
- Ervin & Hasbrouck. *Landscape Modeling*. New York: McGraw Hill, 2001
- Nicholas T. Dines, *Landscape Perspective Drawing*, 1990. ([pdf](#))

Ideas about Landscape and Film

- Philip Gilbert Hamerton. *Imagination in Landscape Painting*. ([pdf](#))
- Vincent Kling. *The Architect as Film Maker*. AIA Journal. February 1971: 23-25. ([pdf](#)).
- Jos Bosman. *Bernard Tschumi Architecture In/Of Motion*. Rotterdam: Netherlands Arch Institute, 1997.
- Dietrich Neumann (ed). *Film Architecture: set designs from Metropolis to Blade Runner*. Munich, New York: Prestel, 1996.
- Mark Lamster (ed). *Architecture and Film*. New York: Princeton Architectural Press, 2000.
- Neil Spiller. *Digital Architecture Now: A Global Survey of Emerging Talent*. London: T&Hudson, 2008.
- Dalibor Vesely. *Architecture in the Age of Divided Representation: The Question of Creativity in the Shadow of Production*. Cambridge, Mass: MIT Press, 2004.
- Christophe Girod. *Vision in Motion: Representing Landscape in Time The Landscape Urbanism Reader*. Charles Waldheim, ed. New York: Princeton Architectural Press, 2006. ([pdf](#))

SOFTWARE

QuickTime Pro
Adobe Photoshop CS5 and Bridge
Adobe After Effects CS5
Maya 2011 and Autodesk Matchmover

ASSIGNMENTS

Project 1: out week 02, due week 05

Project 2: out week 05, due week 08

Project 3: out week 08, due week 10

Project 4: out week 10, due week 12

Project 5: out week 12, due at Final Review

DESIGN PROBLEMS

- *Project 1:* Visit a site of focus from your current or past studio and isolate forces in flux. Through photography or drawing (selecting 3 of the 7 methods demonstrated in the workshop), produce **three ten-second animations** of these forces acting on the site. In the discussion we will evaluate the effects of the methods.
- *Project 2:* At the site from project 1 or a new site, use video to collect clips of motion. Use the footage to sample abstracted moving design elements for a new proposal on the site. In order to isolate the movement of the subject (as opposed to your own movement), use a tripod on most or all of the shots. In After Effects, track the moving elements and develop a concise scheme for representing the movement. Use the methods covered in the workshop to implement a **thirty-second** abstracted motion from the natural world.
- *Project 3:* Recreate a simplified model of a visual landscape. Use reference images or an environment as a guide. Consider locations that have potential for multiple narrative progressions. In Maya, block-in basic geometry. Define materials, lighting, and camera. Add 2D animated or static billboards and geometry clusters. Use opacities and translucencies to choreograph a sequence of a revealed view. Produce a **thirty-second** clip.
- *Project 4:* Continue with the model from Project 3. Keeping the lights and the blocked-in framework constant, create **two twenty-second shot sequences** (walk-through montage) of the same set, each that implicate a story without characters using cinematography. Use sound to further define the experience.
- *Project 5:* Using the variety of representation approaches covered this semester, develop a concept for a **one minute animation**. Isolate key effects and environments you would like to study further. Use a site as a point of departure, tracing existing and imagined forces that act upon it. Insert yourself into the act of motion and change. You may work in groups.

SCHEDULE

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| Week 1 | Aug 30 | M | - | <p>Course Presentation: Mosley, Zlateva</p> <p>Piper Auditorium <i>Meet with interested students, Q+A</i></p> |
| | Sept 3 | F. | <p><i>lecture</i></p> <p><i>screen</i></p> <p><i>lab</i></p> | <p>Introduction + Orientation</p> <p>Introduction to seminar objectives. Review syllabus, schedule, assignments, and software</p> <p>Examples of work to be produced in the course of the semester</p> <p>Basic introduction to After Effects. Overview of file management, creating solids, text layers, importing images, key framing, applying and editing effects, using RAM preview.</p> |
| Week 2 | Sept 10 | F. | <p><i>workshop 1</i></p> <p><i>lecture</i></p> <p><i>lab</i></p> | <p>Sampling Aleatoric Movement</p> <p><i>Project 1 out, due week 05</i></p> <p>Intro to Sampling and Reconstructing Motion in Existing Sites</p> <p>(1) Shooting Stop Motion, (2) Looping drawings, (3) Oscillating Photographs, (4) Animating Stereo Pairs, (5) Animating Sequences, (6) Time Remapping, (7) Combining Video and Stop-Motion</p> |
| Week 3 | Sept 17 | F. | <p><i>lecture</i></p> <p><i>lab</i></p> <p><i>demo</i></p> | <p>Sequential Imaging II</p> <p><i>Answer questions about acquisition and sequencing process.</i></p> <p>Look at acquired source material.</p> <p>Review processes (1-7) and work in class to post-process the material. <u>Rendering QuickTimes from Aftereffects</u>, QuickTime Pro Editing and Playback functions</p> |
| Week 4 | Sept 24 | F. | <p><i>lecture</i></p> <p><i>lab</i></p> <p><i>demo</i></p> | <p>Sequential Imaging III</p> <p><i>Answer questions about acquisition and sequencing process.</i></p> <p>Basic After Effects tutorial, After Effects Sequencing</p> <p>Nesting after effects compositions. Working with After Effects tools and palettes; After Effects Vector Masking Techniques.</p> |

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| Week 5 | Oct 1 | F. | <i>workshop 2</i> | Abstracting Qualities of Motion and the Principles of Animation <i>Project 1 due/ Project 2 out, due week 07</i> Screen + Discuss Student Work <i>lecture</i> Perception of Aleatoric or Consequential Motion in a Built Landscape <ul style="list-style-type: none">- Organic Materials and Turbulence (water, leaves, trees)- Living Creatures and Machines- Atmospheric Irregularities, Seasons, Time of Day- Effects of Wear- Continual and Total Assembly of Perception (shift of thinking) Animating the Design <u>over</u> Animating the Visualization <ul style="list-style-type: none">- principles of animation (after Disney)- advanced animation by Preston Blair <i>lab</i> (1) sampling motion with chroma key or markers, (2) sampling motion from non prepared video (3) mapping nodes, curves, and images to motion, (4) warping images by captured motion. |
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| Week 6 | Oct 8 | F. | <i>lecture</i> | 3D Visualization I: the Set Detailing a scene, elements that create an environment. Examples. <i>lab</i> Maya navigation and modeling, <u>creating a camera, rendering settings for mental ray</u> , creating a point, directional or area light with raytracing. Best resources for online help. |
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| Week 7 | Oct 15 | F. | <i>lecture</i> | 3D Visualization II: Designing Motion Using your video motion studies of Site #2 - translate some of the moving textures to animations in Maya. <i>lab</i> Maya tutorial on animating with keyframes and nonlinear deformers. Introduction to locators, groups, and offsetting the pivot center. Use polygon geometry to replicate textures found in site #2. Propose 3 additional motion-textures that would augment the site. |
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| Week 8 | Oct 22 | F. | <i>workshop 3</i> | <p>Film Language – Principles of Animation for Camera</p> <p><i>Project 2 due / Project 3 out, due week 10</i> Screen + Discuss Student Work</p> <p><i>lecture</i></p> <p>Language of Camera Sequencing and Motion</p> <ul style="list-style-type: none"> - film as a theater (Méliès / Lumière) - critiques of the architectural walk through / fly by - vr user control and logic based cinematography - cinematic methods and physical camera rigs - screen film examples of sequencing <p><i>lab</i></p> <p>Animating position, lens attributes, motion, using camera movement plug-ins, and matching motion to live-action video footage.</p> |
| Week 9 | Oct 29 | F. | <i>lecture</i> | <p>Dynamic Environment II: Water + Dynamic Entourage</p> <p>Examining dynamic elements in architectural representations.</p> <p><i>lab</i></p> <p>Maya – how to create dynamic water material. Using 6-frame footage of plant in motion, apply to billboard and render. How to acquire and animate 3d entourage (cars, people, furniture, etc).</p> |
| Week 10 | Nov 5 | F. | <i>workshop 4</i> | <p>The Experience of Montage in Compositing and Editing</p> <p><i>GSD Open House/ GSD Midterm Reviews – Core Studios</i></p> <p><i>Project 3 due / Project 4 out, due week 12</i> Screen + Discuss Student Work</p> <p><i>lecture</i></p> <p>Montage Techniques and Implications</p> <ul style="list-style-type: none"> - Editing and Compositing Ideas - Creative <u>sound foley</u>, <u>sound design</u>, and text overlay. - Presentation Decisions <p><i>lab</i></p> <p>Rendering 3D for Compositing. Compositing, editing, and finishing. Review Discussion to propose direction for Final.</p> |
| Week 11 | Nov 9 | T. | <i>lecture</i> | <p>Mosley Public Lecture</p> <p>Sign up for individual afternoon meetings with Josh (exact times t.b.a.)</p> <p><i>Lecture at 5 PM</i></p> |
| | Nov 12 | F. | <i>lab</i> | <p>Post Production II: Working with Footage</p> <p>Working with footage – both found and captured; Compositing, editing, color correction, etc</p> |

SCHEDULE

Week 12 Nov 19 F. *lecture* **Post Production III: Sound**
Project 4 due / Project 5 out, due at Final Review
Use of sound in evoking an environment

lab Capturing sound, locating good sound libraries. Adding sound in After Effects and timing the visual graphics to the sound notes.

Week 13 Nov 26 F. *no class* **Thanksgiving Break**

Week 14 Dec 3 F. *workshop 5* **Final Workshop: Individual Preliminary Reviews**
Work in class on Final Project

FINAL Dec 17 F. *final* **Final Review**
Mosley and Zlateva with invited critics
Combine Projects 1-5 into one QuickTime Movie, archive files to DVD-r
