

# HYPERIMAGE

# PROTOCOLS

ARCH 4509/6509: SPECIAL TOPICS IN VISUAL REPRESENTATION

FALL 2025

THURSDAY 1:30 - 4:00

INSTRUCTOR: ZACHARY WHITE

OFFICE HOURS: BY APPOINTMENT

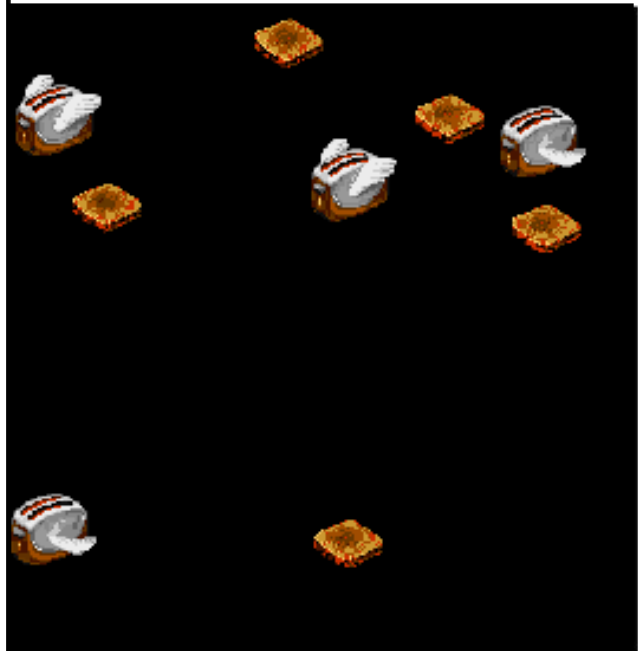
GRADING: LETTER

## Rationale

To practice architecture is to produce media. Designs must be embodied as drawings, proposals as renderings, theories as text, built works as photographs. But a medium is never neutral: each one shapes, in ways obvious and subtle, what can be said—perhaps even thought—by those who act through it.

Today, digital media are the dominant mode of visual communication in architecture. But architectural education rarely engages critically with digital representation on a fundamental level, as it does with drawing and model-making. Instead, students and practitioners alike operate within skeuomorphic recreations of print media and narrowly constrained distribution and presentation platforms. Is it any surprise, then, if architecture in the 21st Century seems anachronistically mired in the age of print: the flat, euclidean space of the blank page, the monochrome immutability of ink, the centralized authority of the press?

As long as there has been an Internet, the website—HTML, CSS and JavaScript, interpreted by a browser—has been the most open, flexible, and accessible mode of digital communication. Not long ago, the format seemed doomed to obsolescence, to be replaced by social media platforms and mobile apps. But in the face of ever more inscrutable algorithmic feeds, the extortionary toll of the app store, the increasingly erratic and craven behavior of tech moguls—not to mention advances in generative coding—the website is primed for resurgence.



## COURSE aims and OBJECTIVES

Hyperimage Protocols aims to expand students' representational repertoire to include the tools and language of web development. As a purely practical matter, these can be valuable skills for the online dissemination of portfolios, practices, and projects. They may also prove desirable for students considering professional trajectories at the intersection of architectural practice and technology or the arts.

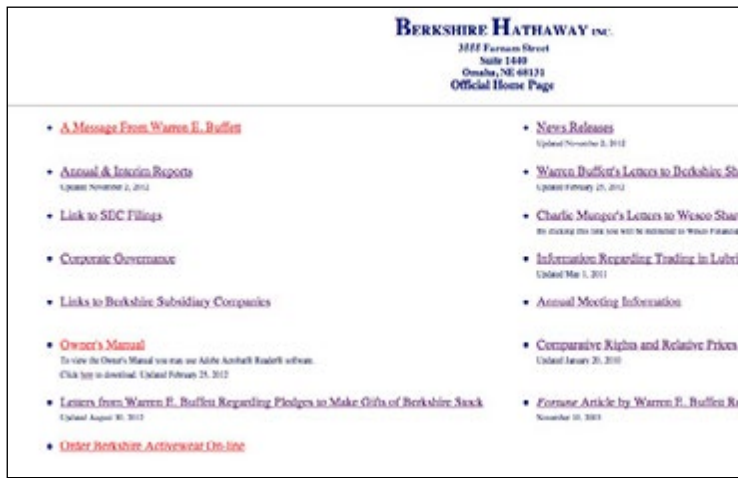
Looking beyond these more immediate uses, the class will challenge students to critically examine the conceptual, experiential, and political implications of digital communication. How do these tools shape architecture as it is practiced today? And how might the particular affordances of digital representation—the layering and juxtaposition of heterogeneous media, interactivity and collaboration, mutability and iteration, procedural design and parametric adaptation—shape how it is practiced in the future?



## FORMAT

## and

## PROCEDURES



Class sessions will be divided between lectures and pinups. Lecture sessions will consist of presentations providing conceptual and historical context, group discussions of readings, and technical demos of software and other relevant skills, with any remaining time devoted to one-on-one feedback. During pinups students will present their progress for feedback from both the instructor and their peers.

The class will be structured around the execution of two independent but complimentary projects exploring the representational and spatial potential of virtual space. Each will take the form of a functioning website, developed in VS Code and deployed via GitHub Pages. Supplementary material may also be required, such as static diagrams describing each site's structure and processes.

## assignment

1

Working individually, students will select a project from a previous studio to adapt for online publication. How can the medium of the website, through its aesthetic presentation, navigational structure, and patterns of user interaction, reinforce and supplement the project's core concepts and arguments? What opportunities does this format offer that distinguish it from other media?



## assignment

2



Working in pairs, students will select a local site to document and research, develop a critical position on, and propose an intervention into, using the language of the web in lieu of conventional drawing methods. What might an architectural proposal look like in a post-orthographic world? What assumptions embedded in architectural practice today might this prompt us to reconsider?

INSTRUCTOR'S

ASSUMPTIONS

It is assumed that students will have projects from prior architecture or urban design studios to provide content for Assignment 1.

Students are also expected to have basic facility with Adobe Photoshop and After Effects, or comparable image and video processing tools.



COURSE

REQUIREMENTS

Students are expected to arrive to class on time, having completed all weekly assignments and required reading. In-person attendance is mandatory, and more than two unexcused absences will result in a failing grade. In the event of both excused and unexcused absences, students are expected to meet with the instructor remotely within four days.



GRADING

PROCEDURES

Grades will be determined by participation in class discussions and assessment of submitted assignments, weighted as follows. Students on a trajectory to receive a C+ or lower following midterm presentations will be notified.

CLASS PARTICIPATION:	20%
ASSIGNMEENT 1:	35%
ASSIGNMENT 2:	45%

CLASS			SCHEDULE
DATE	TOPIC	DEMOS	
8-28	CLASS INTRO ASSIGNMENT 1 INTRO	essential software wireframes	
9-4	LECTURE 1: "CYBERSPACE / SCREENSPACE" STUDENT INTROS	HTML CSS	
9-11	LECTURE 2: "SKEUOMORPHISM & SEMIOTICS" DESK CRITS	GITHUB embedded media	
9-18	a1 PROGRESS PINUP		
9-25	LECTURE 3: "POSTDIGITAL AESTHETICS" DESK CRITS	BASIC JAVASCRIPT	
10-2	PRE-MIDTERM PINUP		
10-9	MIDTERM REVIEW		
10-16	LECTURE 4: "MEDIUM & MESSAGE" ASSIGNMENT 2 INTRO	WEB APPS	
10-23	LECTURE 5: "PROCEDURAL RHETORIC" SITE PRESENTATIONS	JAVASCRIPT LIBRARIES	
10-30	LECTURE 6: "GLITCH" DESK CRITS	BY REQUEST	
11-6	a2 PROGRESS PINUP		
11-13	DESK CRITS		
11-20	PRE-FINAL PINUP		
11-27	THANKSGIVING BREAK		
12-4	FINAL REVIEW		

SELECTED

BIBLIOGRAPHY

and

Recommended

READING

year	author	title	PUBLISHER
1964	MARSHALL McLuhan	UNDERSTANDING MEDIA	MIT PRESS
1967	MARSHALL McLuhan	THE MEDIUM IS THE MESSAGE	GINKGO PRESS
1997	STEVEN JOHNSON	INTERFACE CULTURE: HOW NEW TECHNOLOGY TRANSFORMS THE WAY WE CREATE AND COMMUNICATE	BASIC BOOKS
2001	LEV MANOVICH	THE LANGUAGE OF NEW MEDIA	MIT PRESS
2006	ANNE FRIEDBERG	THE VIRTUAL WINDOW: FROM ALBERTI TO MICROSOFT	MIT PRESS
2006	MARK NUNES	CYBERSPACES OF EVERYDAY LIFE	UNIVERSITY OF MINNESOTA PRESS
2007	IAN BOGOST	PERSUASIVE GAMES: THE EXPRESSIVE POWER OF VIDEOGAMES	MIT PRESS
2009	OLIA LIALINA & DRAGAN ESPENSCHIED, EDS.	DIGITAL FOLKLORE	MERZ & SOLITUDE
2013	LEV MANOVICH	SOFTWARE TAKES COMMAND: EXTENDING THE LANGUAGE OF NEW MEDIA	BLOOMSBURY
2015	LAUREN CORNELL & ED HALTER, EDS.	MASS EFFECT: ART AND THE INTERNET IN THE TWENTY-FIRST CENTURY	MIT PRESS
2017	HITO STEYERL	DUTY FREE ART: ART IN THE AGE OF PLANETARY CIVIL WAR	VERSO
2019	JOHN MAY	SIGNAL, IMAGE, ARCHITECTURE	COLUMBIA BOOKS ON ARCHITECTURE AND THE CITY
2019	GALO CANIZARES	DIGITAL FABRICATIONS: DESIGNER STORIES FOR A SOFTWARE-BASED PLANED	APPLIED RESEARCH + DESIGN PUBLISHING
2020	LEGACY RUSSELL	GLITCH FEMINISM	VERSO
2021	OLIA LIALINA	TURING COMPLETE USER: RESISTING ALIENATION IN HUMAN COMPUTER INTERACTION	HEIDELBERG UNIVERSITY

## LIVING

## LAND

## acknowledgements

The Department of Architecture acknowledges that Cornell University is located on the traditional homelands of the Gayogohó:no' (Cayuga Nation). The Gayogohó:no' are members of the Haudenosaunee Confederacy, an alliance of six sovereign Nations with a historic presence on this land. The Confederacy precedes the establishment of Cornell University, New York State, and the United States of America. We acknowledge the painful history of Gayogohó:no' dispossession, and honor the ongoing connection of Gayogohó:no' people, past, and present, to these lands and waters.

The Gensler Family AAP NYC Center is located on the unceded homelands of the Lenape people. We offer this acknowledgment in recognition of the original people of this land, the Lenape, their resilience in the face of settler colonialism, and their deep connection to this place. The land that the Lenape occupied before the arrival of European settlers is known as Lenapehoking, Land of the People, an area including NYC and extending from Western Connecticut to Eastern Pennsylvania and from the Hudson Valley to New Jersey and Delaware. Lenape nations, communities, and individuals live in locations spanning the world, including five federally recognized nations in Oklahoma, Wisconsin, and Ontario. We acknowledge the painful history of Lenape dispossession and attempts of erasure, and honor the continuous connection of the Lenape people, past and present, to these lands and waters.

## academic

## INTEGRITY

Each student in this course is expected to abide by the Cornell University Code of Academic Integrity. <http://cuinfo.cornell.edu/Academic/AIC.html>

Any work submitted by a student in this course for academic credit will be the student's own work, except in the cases of projects that are specifically structured as group endeavors. Work by others shown in presentations and excerpted in papers must be properly cited and credited.

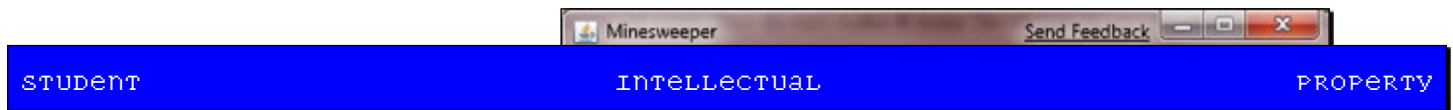
Students are encouraged to study together and to discuss information and concepts covered in lecture and the sections with other students. Students can give "consulting" help to or receive "consulting" help from such students.

Should copying occur, both the student who copied work from another student and the student who gave material to be copied will both automatically receive a zero for the assignment. Penalty for violation of this Code can also be extended to include failure of the course and University disciplinary action.

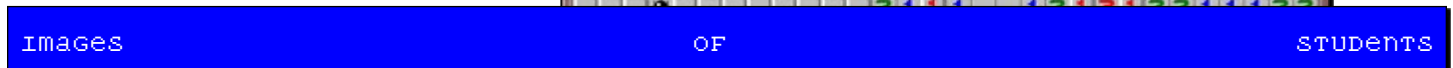
During examinations, you must do your own work. Talking or discussion is not permitted during the examinations, nor may you compare papers, copy from others, or collaborate in any way. Any collaborative behavior during the examinations will result in failure of the exam, and may lead to failure of the course and University disciplinary action.

Pursuant to Title 17 of the U.S. Copyright Act and Cornell University Policy 4.15, faculty own the copyright to all original course content – their copyright embodies course lectures as well as notes summarizing or capturing the lecture content. Students may take and use lecture notes solely for personal scholarship, and may share lecture notes only with others enrolled in the subject course. Students may not post, copy, republish, distribute or share lecture, course, or class content in any form or medium with anyone not enrolled in the subject course absent the express written permission of the faculty copyright holder. This prohibition applies to any platform or medium to which course lectures or notes are posted for the purpose of further distribution, whether for-profit or fee-free. Impermissible uses of copyrighted content constitute acts of copyright infringement and may further subject the student to violation(s) of the Code of Academic Integrity.

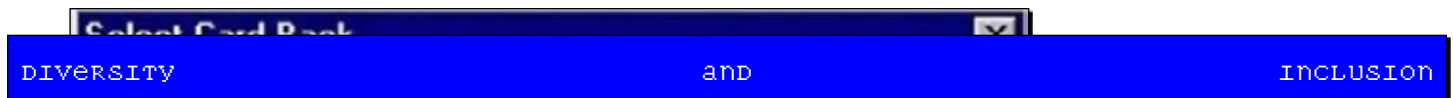




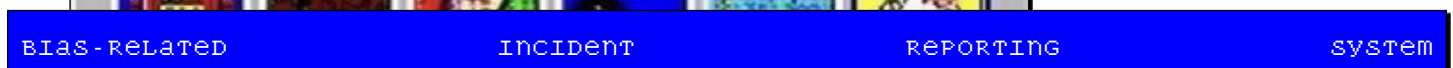
Students own the copyright to their work except under conditions specified in University Policy. The instructor and department may use students' copyrighted works in their teaching, lectures, etc., internal to the course. If the Instructor wishes to further display or distribute the work beyond Cornell's academic environment, the instructor will obtain of express permission from the student and provide appropriate attribution. Permission forms will be available in the College communications office.



For reasons including FERPA, DACA, and other privacy concerns, student permission is required before sharing photos or videos taken in studio, class, or on a field trip.



We believe that design is a principal instrument of positive social change, and that progress and innovation are driven by a commitment to inclusion across race, class, ethnicity, gender, age, religion, ability and identity. For this reason, we explicitly confirm our resolute commitment to accelerate Cornell University's actions to be a diverse and inclusive institution. We embrace the responsibilities of ongoing internal critical reflection, dialogue, and action as individuals and as a community. We support the Cornell teaching community—our faculty, staff, and students—in their efforts to act with an ethos of inclusivism and antiracism in creating and sustaining diverse teaching and learning environments.



Cornell University is committed to fostering a safe, respectful, and inclusive living, learning, and working environment for our entire community. The bias-related incident reporting system is one step toward promoting that we, as an institution, live out these values. The reporting system allows for you to safely and anonymously report an incident you may have experienced or witnessed, receive support, and explore options for resolution.

To report an incident, individuals can use one of the following methods:

- By submitting an incident report online at <https://www.biasconcerns.cornell.edu/> (non-emergency)
- By contacting the Cornell University Police Department (CUPD) at (607) 255-1111 or 911 for emergency assistance

For students in New York City dial 911 for emergency assistant NOT CUPD.





## ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

In compliance with the Cornell University policy and equal access laws, the instructor is available to discuss appropriate academic accommodations that may be required for students with disabilities. Requests for academic accommodations are to be made during the first three weeks of the semester, except for in unusual circumstances, so arrangements can be made. Students are encouraged to register with Student Disability Services [<https://sds.cornell.edu>] to verify their eligibility for appropriate accommodations.

## RELIGIOUS HOLIDAYS

Cornell University is committed to supporting students who wish to practice their religious beliefs. Students are advised to discuss religious absences with their instructors well in advance of the religious holiday so that arrangements for making up work can be resolved before the absence.

The New York State Legislature (since July 1, 1992) requires all institutions (public and private) of higher education not to discriminate against students for their religious beliefs. Accordingly, the pertinent parts of Sections 3 and 4 of the law state:

“3. It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school, because of his or her religious beliefs, an equivalent opportunity to . . . make up any examination, study or work requirements which he or she may have missed because of such absence on any particular day or days...”

“4. If . . . classes, examinations, study or work requirements are held on Friday after four o'clock post meridian or on Saturday, similar or makeup classes, examinations, study or work requirements shall be made available on other days, where it is possible and practicable to do so.”

A list of religious holidays can be found here: <https://scl.cornell.edu/religiousholidays>

