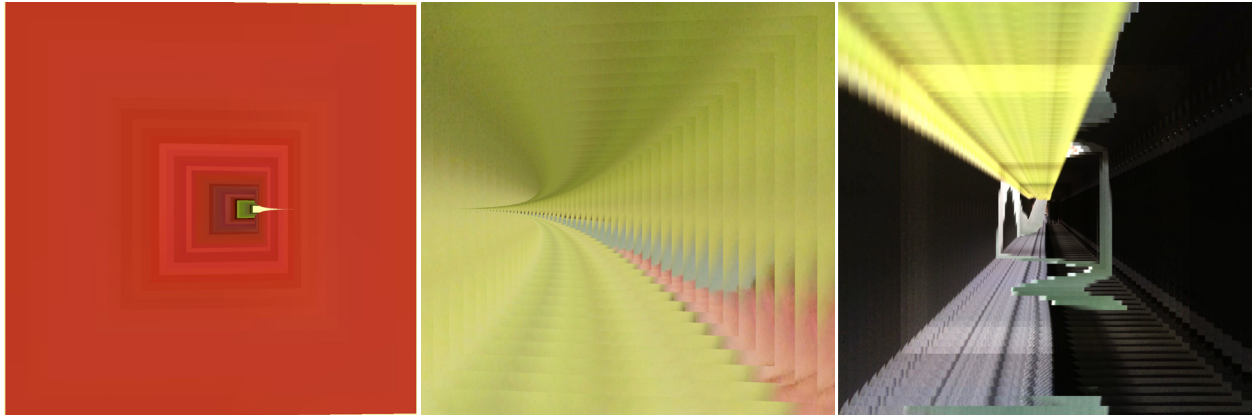# Atmospheric Animations

ARCH 4050/6306 | 3 Credit Hours | Fall 2021 | Instructor: Catty Dan Zhang (cattydanzhang@uncc.edu)

Storrs 272, Thursday 11:30am-2:00pm

Still frames excerpted from real-time interactions with a webcam. The webcam, drawing with masking tape, sticky notes, hand gestures, and artificial lights using a customized script, turns ordinary objects and daily life activities into an illusion of an infinite corridor with abstract color figures appearing in motion. ©Catty Dan Zhang

Premise:

Gino Severini remarked in his Futurist Manifestos *The Plastic Analogies of Dynamism* that "speed offers an altered perception of all types of phenomena", from physical to social and beyond. Empowered by technological innovation, both the spatial and temporal data of swift movements could be fathomed with high accuracy and fine details. Nevertheless, the experiential aspects of motion still have great challenges being either quantitatively measured or qualitatively described. The investigation of atmospheric animations builds upon measured representation techniques in both spatial and temporal dimensions. The course introduces theoretical and technological methods of the visual, mechanical, and algorithmic transformations of instruments and images that produce, perceive, visualize and analyze motion in the built environment, in order to establish spatial logics of mediating perception as well as the cultural and social consequences under present conditions.

Objectives:

· To integrate techniques of computational drawing with principles of camera apparatus as a tool for design;
· To understand the built environment through mediated vision;
· To examine space, time, and perception through theoretical texts, precedents, as well as new technologies;
· To explore mechanisms that unveil the relationship between the physical eye and the mind eye; as well as between the factual and the perceptual data of motion;
· To explore measured drawings and raster images as design agency.

Method:

This class consists of technological and theoretical lectures as well as hands-on workshops, including emerging motion graphics software and immersive technologies. Students will be working in groups for design exercises. This course welcomes all students who have interests in digital media and computation. Basic scripting skill is a plus but not required.

Attendance:

Full attendance of each class is required. 2 unexcused absences will result in a lowering of your course grade by one letter; more than 2 unexcused absences constitute grounds for automatic failure of this course.

Evaluation:

Participation: 10%; Assignments: 30% (tutorials/exercises/presentations); Final Project: 60%.

Texts:

Readings will be available in PDFs. Suggested texts include Paul Virilio, *The vision machine* (Bloomington, IN: Indiana University Press, 1994); Marina Warner, *Phantasmagoria: Spirit Visions, Metaphors, and Media into the Twenty-First Century* (Oxford, New York: Oxford University Press, 2006); Sean Cubitt, *The Practice of Light: A Genealogy of Visual Technology from Prints to Pixels* (Cambridge, MA: MIT Press, 2014); Jones Mather Uchill, eds. *Experience: Culture, Cognition, and the Common Sense* (Cambridge, MA: MIT Press, 2016).