

THE ARCHITECTURE OF LIFE

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This course aims to distill and expand upon the theme of the "Architecture of Life", an exhibit curated by Lawrence Rinder to celebrate the opening of the new Berkeley Art Museum in January 2016.

We come to know ourselves from the living art forms around us: the symmetries of organization and order that inform life. We notice the exquisite architecture of a bee hive, or a bird's nest, a spider's web, an ant hill, or a school of ducks swimming in synchronized silence over a pond. For thousands of years, humans have marveled at the perfect hexagonal figures in honeycombs and wondered how bees can instinctively create a shape that humans can only reproduce with a ruler and compass. A piece of romanesco broccoli exemplifies fractal symmetries in nature. All of these forms combine efficiency, beauty, and a sense of necessity. What makes them 'art' is at the core of creative understanding and endeavor. Built on a foundation of existing knowledge, the creative act seeks to reveal or make possible an experience that reconfigures this knowledge for the perceiver, illuminating emotions and perceptions heretofore unseen, untapped or untouched.

Pierluigi Serrano will lift off from this foundational insight to explore various phenomena – ranging from animal architecture, to Alvar Aalto, to expressionism, to skeuomorphism, to biomimicry – from the most minute living forms to the greatest extant monument. The creative act is, in a sense, constantly responding to its own iterations over time. He will explore the various understanding of the word, "organic" in the architectural world, and how nature has invariably remained a most powerful reference in the making of the environment- past, present, and future. Ever since computers replaced pencil and paper, a new world of forms has come upon us. How do we understand them? What is their connection to nature, and therefore to life?

Philippa Kelly will examine the nature of "time" itself as an evolutionary concept. This will set in motion her exploration of the architecture of identity through prominent aspects of the everyday world in Shakespeare's England. Key items are the church clock and the mirror. Why were these objects – both connected to time – so important to perceptions of the corporeal and eternal worlds, presided over by a divine architect? How did the clock and the mirror inspire artistic expression, which itself shaped understandings of selfhood? And in what ways do we draw on this history to shape the architecture of our selves today?

We look forward to going on a four-week journey with you, engaging your sensibilities, via our specialized training, to explore what creativity is, means, and inspires human beings to be.

WEEK ONE April 7

Animating themes:

- *Nature's entropy, nature's order;*
- *Human forms of order: why we make order, how and where;*
- *'Time' as a construct.*

Lecture material

- *Life as architecture: entropy and the mysterious order innate in nature.*
The manifold manifestations of the link between the organic and design worlds will provide the visuals for the core argument of the lecture. What are the sources for the formal and symbolic world that designers reproduce to meet the needs and aspirations of their fellow humans in their environment? Alertness to nature's infinite repository has historically been the engine to shape settings that work in rhythm with their collective occupants. Life offers the model of architecture pursued in artifacts of all sizes, from the infinitely small to the extraordinarily large.
- *Shakespeare's time: what is time, and where has it come from?*
How has time evolved as a means to shape, and even militate, our identities? How did we get so crushed by time? This aspect of the lecture explores time as an evolving human construct.

Reading:

- Lawrence Rinder, "Architecture of Life";
- Rebecca Solnit, "Private in the Public".

WEEK TWO, April 14

Animating themes:

- *Measuring 'reality' by what we see: mimesis and theories of representation;*
- *Self-portraiture and the relationship between 'reality' and time;*
- *Architecture as a representation of reality in and out of time.*

Reading:

- Spyros Papapetros, "Architecture of Life: Biological Analogies and Tectonic Oppositions".

Lecture topics

- *The architecture of a preindustrial self.*

The word "individual" traces a huge arc in meaning in early modern England. From "indiuidual moates" and the unwillingness to be divided from one's mate, the word moves from the indivisible to the very features that divide one particular human from another. By the time we reach its common usage in the nineteenth century, 'individual' has settled into an unequivocal mark of singleness and autonomy: 'An individual is that which cannot be divided without ceasing to be what it is' (1860 Thomas *Laws* Th. 56.86). Theories of identity, the universe, and how human beings took their place, will be examined in this part of the lecture. We will have a special focus on early modern portraiture in context with epistemology.

- *Classical architecture as a representation of life in stone.*
Classicism is typically presented as a system of mathematical relationships offering a model for the design of religious and civic buildings. The ratio between the various parts is routinely accounted to be a source for architectural expression. The plans, the elevations, the details, proportions and numbers – all of these factors shape the spatial experience. This lecture dives into the roots of that logic, demonstrating the tight connection between the animal world and plant species to extract the essence of natural growth in produce meaning. We will take a huge architectural sweep from antiquity through to the pre-industrial world.

WEEK THREE, April 21

Animating themes:

- *the drive to reproduce and re-purpose the world we know;*
- *the truths we seek in reflection: selves, structures.*

Lecture material

- *The architecture of our living world- organic skins, animal architecture, skeletons as structures.*
Architecture, whether contemporary, modern, or historical, rests on processes of growth rooted in Nature. While Euclidian geometry is an abstraction of the relationship between parts, the living world is crowded with an extraordinary set of volumetric marvels constantly rediscovered with each generation. The skinning of a building directly refers to the correlation between structure and exterior found in the dimensions of animal and vegetative forms. By observing Nature, architects have learned about weaving, skeletons, circulation, anchorage, and more, to develop a human-made world forged on natural laws. This lecture reveals some exemplary feats of contemporary design.
- *Shakespeare's mirrors.*
In the sixteenth and seventeenth centuries the concept of mirroring, developed from a burgeoning industry in glass mirror-making, was importantly linked to the

complex realm of individuality through an abundance of artistic tropes. The mirror afforded a fascinating “window” into debates about who, or what, 'the self' was. Mirrors in *language* helped shape the very concept and practice of self-representation.

Reading:

- Sabrina Dalla Valle, "Hearing the Metron".

WEEK FOUR , April 28

Animating themes:

- *The dawning of diversity – how different skin colors found a place in Elizabethan England;*
- *Building the world we don't yet know.*

Lecture Material

- *The Architecture of Sound.*
This lecture explores music as a scaffolding for identity. How was music used in early modern performance and in life generally? What instruments were invented then? What is the impulse for instrument invention? The lecture will introduce the 7 pm performance (the same day, April 21) by Paul Dresher and Joel Davell at the Berkeley Art Museum in a music event that permeates the gallery. Paul Dresher will visit our class to talk about instrument invention.
- *Architecture as the Book of Nature.*
Computing has unleashed an incomparable exploration of free forms. They are increasingly populating the space of our present. Woven into the urban fabric, these new artifacts raise questions about their intelligibility as containers of human actions. When design is produced in an ambiguous relationship with the architecture of life, it triggers varied responses in the users' unsettling notions of the fit and appropriateness of form to function to context. In this final delivery, a survey of situations offsetting and reinforcing the inner natural compass will disclose a set of first principles in navigating an ever-evolving present and a contemplation of what is yet to come.

Reading:

- Padma D. Maitland, "Mandalas: Whole Symbols";
- William Shakespeare, *Othello*.