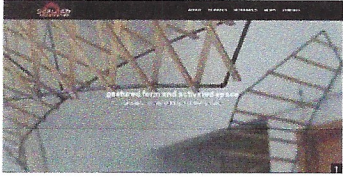


2024.03.13 Notes

OSU / Pratt / Thesis: **Proxemics**

15 STUDENTS

12:30pm



Welcome to 6 week course on **Design, Construction and Addition to Villa Vuoto**. Pleasure to present this material to you and look forward to questions / feedback.

4th class within Osher at CMU, **Gaudi (2020)**, **Guastavino (2022)**, and last year's **End of Architecture (2023)**. My intent is to offer a master level survey of architecture from the perspective of a practicing architect.

Villa Vuoto (2000-2004) my own house, where practice residential architecture for over two decades and live with my wife **Julianne**, two sons **Oskar** and **Olin**.

I believe a home is the **most intimate form of architecture** and therefore is **best conceived by the homeowner** themselves. **Villa Vuoto** is an example of this, designed and constructed by my wife and I, the recent **Addition** by all four of us, this house becomes **autobiographical**, thereby more meaningful place for daily life.

By presenting **Villa Vuoto as a course**, offers **clearest example of my personal approach to architecture**, examining the **leitmotifs**, **manifestos**, and **partis pris** in my education, writings and practice as an architect in the **Modern era**, at the threshold between the **Industrial Age** of the 19th century and **Age of AI** in the 21st century.

Copy of **Syllabus**? Date for **Tour** of Villa Vuoto? **Sat.**, April 20th or **Wed.** 24th?

Course overview:

Today's lecture will cover my **architectural education** at OSU and Pratt.

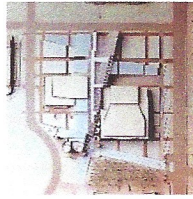
Next week, **Villa Vuoto as a Manifesto** on architecture, my ideas in written form.

Third week, will cover **design** of Villa Vuoto in drawings and models.

Fourth week, will detail the **construction** of Villa Vuoto.

Fifth week, Villa Vuoto as a **Case Study**, as **laboratory** for ongoing research.

Final week, recent **Addition**, 2 decades later, **changes in my views** on architecture.



Ohio State University (Bachelor of Science in Architecture, 1986-1991):
Deconstructivist Architecture exhibition at MoMA (1988): curated by Philip Johnson and Mark Wigley, launching careers of Zaha Hadid (**The Peak**) and Daniel Libeskind (**City Edge Competition**), including work by Frank Gehry (**Gehry House**), Wolf Prix (**Falkestrasse rooftop**), Rem Koolhaas (**Boompjes tower slab**), Bernard Tschumi (**Parc de la Villette**), and Peter Eisenman (**Frankfurt Biology Center**). Derived from combination of Jacques Derrida's **Deconstruction** philosophy and 1920s Russian **Constructivist** architecture style: **breaking down hierarchies and relationships**.

Wexner Center for the Arts (1983-1989), Peter Eisenman selected the narrow site fracturing between Mershon Auditorium & Weigel Concert Hall, overlaying campus/HighSt./BroadSt. & city neighborhood grids revealing 12.25 degree offset.



Abstract white steel 3D grid extension of Columbus' Jeffersonian grid arbitrarily overlaid east/west alignment over natural landscape, asymptote from campus oval. **Crossing the 'found' axis** is not simply a route, but **an event**, a 'center' for the visual arts.



Post-Modern brick turrets historically referencing former **Armory (1898-1959)**, deconstructing an **architectural memory**, layers peeled back like an onion.



Maya Lin's **Groundswell** (1993): **fragmented** tempered glass mounds, filling 'residual spaces' within Wexner Center's design, referencing Japanese gardens and prehistoric mound earthworks in Ohio. **Challenging cultural norms of safety: without (building code required) railing falling into pit of broken glass.**

Restored & reinstalled in 2013, after 10 years showing signs of natural elements: **struggle between manmade (industrial) & nature (pastoral)**, desire for pristine abstraction in art/architecture, in **denial of natural cycles of change/decomposition**.



Samarkand Culture Center

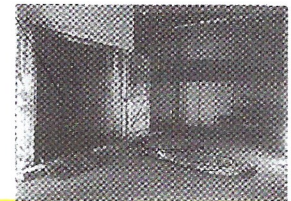
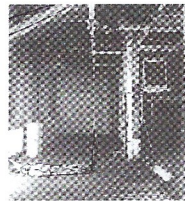
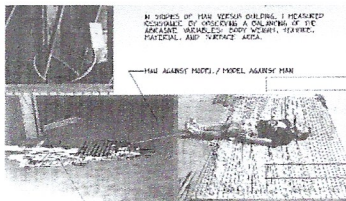
Jeffrey Kipnis & Peter Eisenman studio: **Event-Structure** and **Weak Form**: a structure of such a form that facilitates **juxtapositions of unplanned** events, **non-analytic** design process in relational space, **thresholds**, contextural **urban** space, social **events** derived from post-analytical designed structures.



**influence of
form on
behavior**



Frank Fantauzzi's vertical studio, off-site, architectural interventions using **warehouse as drawing/model**, Sawzall as pencil, building as palimpsest.



Studied resistance & abrasion of building on body (**influence of form on body**). **Lived/worked 24/7** for 10 weeks: constructed kitchen/**daily group meals**, meeting/dining table, **darkroom for documentation/mailings**, building maintenance, **Friday night short film series**, Saturday night exhibitions, **Sunday critiques**, and final review/open house.

As come/go to other classes on campus, could tell who was in building by cars in lot.

Sense of space: without body, jeep as form/signal (**influence of form on mind**).

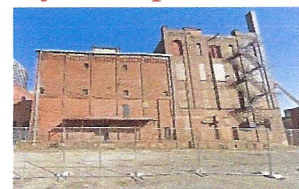
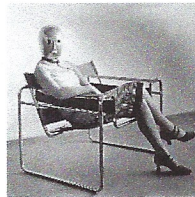




Figure Dwg.

Still seeking to understand the **language of form**, how it **communicates with body**, **influences our behavior** in space, and how to **refine form to be most effective**.
 Something that **wasn't taught in the school of architecture**: **building as form**.



Charlotte Perriand wearing
Oskar Schlemmer mask

Bauhaus (1919-1933) combining **crafts & fine arts** into a **Gesamt-kunst-werk**, design study of the **essentials**, of **materials in the doing** within **workshops**.
Marcel Breuer's carpentry shop, **Wassily Chair (1925-1926)** exploring sculptural **form engaging human body**, **as architecture**: aesthetics, comfort, functionality.



Spray House (1954)
 Gunite w/o formwork

Pratt Institute (Bachelor and Master of Architecture, 1992-1994):
John Johansen, a student of Breuer and of the **Harvard Five**: his studio taught a form of architecture exploring the **organic vocabulary of the human anatomy**.



Deborah Gans (undergraduate department chair & thesis advisor),
Architecture History & Theory courses, dialectic rhetoric of **Immanuel Kant & Friedrich Hegel**, wrote **scientific autobiography (1993)**, expanding on **metaphysical & phenomenological study** of **insideness (2016)**:

“**Intuition relates objects immediately**, affecting the mind in a specific manner, by means of **sensibility**. All thinking, whether it does so directly or indirectly, must ultimately relate to intuitions, for **no object can be given to us in any other way**. Through outer sense (a property of our mind) we **represent objects as outside us**. Within space the shape, size, and relation of these objects are determinate or determinable.”

[**Kant**, Transcendental Doctrine of Elements, **Critique of Pure Reason**, 1781]

“Our measure is constricted by the breadth of our view to the outside. And at night, when light is absent, the world outdoors is lost. Perception is limited to only what can be found indoors, this ‘insideness’ of being.

What is our familiarity with a shelter, more than the things sheltered from?

What is this desire to be inside?

[fear withoutdoors]

What is this trap that draws us in?

[objectification]

Comforted, soon familiar, then dependent.

[domestication]

That sense of enclosure we seek.”

[Schlueb, [mousetrap](#), 2016]



Alexander Kostellow, Iranian born, Studied in Paris and at University of Berlin philosophy and psychology, taught painting at Kansas City Art Institute,



Rowena Reed student (1922), married and moved to Pittsburgh to teach painting at Carnegie Technical Institute (1929), Rowena taught sculpture at private school, together developed structured language for understanding and teaching visual arts.



Donald Dohner taught at Carnegie Tech, approached by Westinghouse to develop a use for their new melamine thermosetting plastic material, Micarta.



Kostellow saw opportunity in American industry, with Dohner proposed degree program in Industrial Design to Carnegie Tech, established first program in 1934, first graduates in 1936.


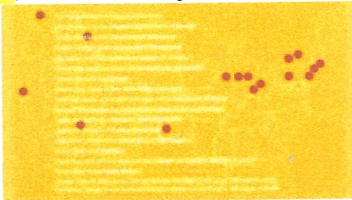
Belief that classical fine art painting was dead, the future was a focus on industry. Industrial Design began as a reaction against the mechanical work by engineers, the need for design to market sale of industrial manufactured products for home.



Dohner invited to Pratt Institute in 1936, to establish the **second program** in **Industrial Design**, Dohner's **practical/industry** approach, with Kostellow teaching **philosophy of color and design**, Rowena teaching **aesthetics of abstraction/form** (taught for 50 yrs.), became triangular foundation for Industrial Design program.

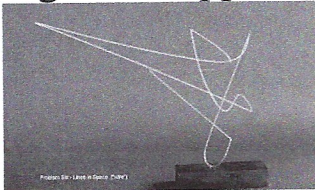
FOUNDATION COURSE
A prerequisite for advanced work in the Departments of Advertising Design, Illustration, Industrial Design, and Interior Design
GEORGIA EYFEST, Administrative Supervisor
ALEXANDER J. KOSTELLOW, Supervisor of Design and Structure

INSTRUCTORS
THE DIRECTOR History and Appreciation of Art
LAWRENCE BRUSH Structural Representation
ROBERT McVAY COCHRAN Nature Structure
DONALD R. JOHNSON Design
GEORGIA EYFEST Design
PAUL FRIEDLE Design





In 1939, developed **first of its kind Design and Structure** curriculum, later called **Foundation**, for first year students, using abstract elements emulating the **Bauhaus**, **RISD**, **IIT**, Cornell, Dayton Art Inst., CCAD, Purdue, **Stanford**, **Carnegie Tech**, ...

became the **prototype at schools across the country**, to supply students with organized approach to the mechanics of design, structure, forces that control them.



Line/wire #6

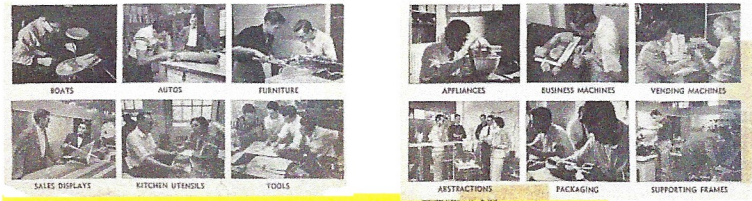


Planar #5

Visual organization was a discipline in itself, beyond structural or functional solutions. **Rowena**: "Never let function be an excuse for a bad design."



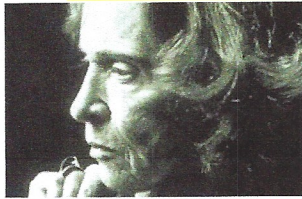
Mies van der Rohe opened the **New Bauhaus** in Chicago at **IIT** (1938), later became the **Institute of Design**, directed by **Laszlo Moholy-Nagy**, promoting the course of study established by **Walter Gropius** at the original Bauhaus. By **1940s**, debate about industrial design education within **school of architecture (ITT)**, gave way to teaching within **school of art (Pratt)**. Essential difference, **Rowena's** approach addressed **an awareness of space**, Bauhaus more interested in objects.



In 1952, Kostellow created an **Experimental Design Laboratory** at Pratt, providing **company designers office space adjacent to student** drafting and shop areas, to do **experimental work**, to **lecture** and **advise** students. Pratt given insights into production, with leading companies such as **General Motors, Shell Oil, Owens Corning Fiberglass Corporation** participating.



1954: Kostellow and Rowena invited by **General Motors** and **Frigidaire** to design the **Kitchen of the Future**. **Kostellow** dies from heart attack, while in Detroit.

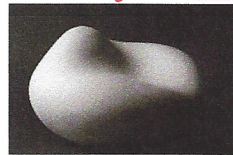
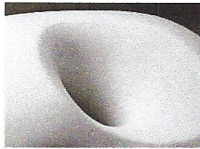


Rowena Reed Kostellow (*Elements of Design*, 2002) **Pratt: 1936-1986**
Headed the **Industrial Design** department in 1962, **retired** in 1966, legacy at Pratt the **Rowena approach** “for **plastic form**, the one thing the industrial designer can do that no one else can do.” Designer’s primary role as **form giver**.

She influenced her students as much through her **presence** in the classroom as by her principles. She was **quiet and imposing**. She **spoke softly and authoritatively** in complete, **precise sentences**. She used **physical gesture with conscious deliberation** and to great advantage. A typical Rowena class consisted of a **brief lecture** followed by hours and **hours of excruciatingly minute critique**. She would stare for a very long time, turning the exercise around and around, talking to what she saw from every angle. She’d comment on organization and balance and, using a pointer, **suggest trimming an eighth inch here or adding a sixteenth there**.

As **Professor Emeritus**, taught her **Space Analysis** for 20 more years. Hosted **Saturday Class** tutorials in her loft, attended by designers and architects seeking abstract experiences / rigorous critique. Developed new **Space Analysis** experiences, exploration of her passion: negative / positive space. “Seen people **very sensitive to form or organic volume**, but are **blind when it comes to space**.”

She waged life-long war with **architecture profession over their two-dimensional approach to teaching and practice**. “Are you drawing?” she demanded of a startled student in a **Space Analysis** class. Then, shaking her head as if to say I know what I’m going to hear, she asked “What did you study before you came to this class?” When the student innocently said it was architecture, she counted to ten, slowly and out loud. “Well, **that’s the way the architectural profession works and it’s wrong**,” she finally announced. “**You must learn how to think directly in three dimensions**. If you know how to **organize** in space three dimensionally you can learn how to **draw** three dimensionally, but it’s **not the way to design**.”



“**Three dimensional** object or space, concerning **depth**, the stimulus of visual perception, **designed three dimensionally**, can’t be created on piece of paper. Have to deal with **negative space** and can’t do that in two dimensions.”



BRIDGE 1:20
1:25

Formalism, **three dimensional abstraction**, has since declined, loss of rigor in principle-based approaches. Cautioned against using the computer (**CAD**), to do things she believed **only human eye and hand could do**. **Sensitizing the eyes**, to develop **visual discrimination**, visual **literacy**, to make the world more beautiful.

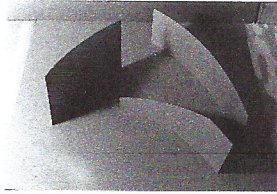
She created **Exercises** to study “**structure of visual relationships**” underlying all art and design. They were specific to **strengthening weaknesses** in a given area.

Focus on the eyes and feelings, not style. When a **space feels right / good**.

Experience 1: **close eye, sense hand gestures**: compare left to right hand position
[**proprioception**: sense relative position (gesture) via mechanosensory neurons]
[**kinesthesia**: sensing the movement (gesturing) of body parts]

Experience 2: **stand out/inside doorway, sense being out/inside**: **threshold**
[**somatosensory**: neurons connecting brain/skin, sensing physical environment]
[**transduction**: convert external stimuli (warmth,) into sensory impulses (intuition)]

Control and Design Models

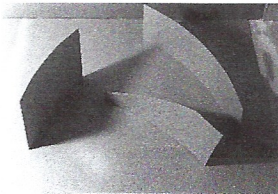


Original Condition

Make **2 model spaces exactly the same dimensions**, one the **design model**, the other is the **control to measure** progress. Introduce forms into the space, to create an organization that **expands the negative volume** (**enhance/activate the awareness** of negative volume), using the **axes of the forms** and **tension between**, as three dimensional as possible. Beginning with static form, then dynamic, and curvilinear, when complete, **negative volume in design model should appear larger** than in control (empty) model.

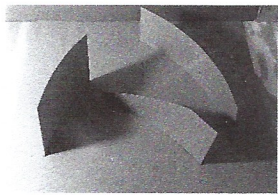
Forms should be **complementary, vary in character and proportion**, placed three dimensionally moving along X, Y and Z axes. All forms must **float** (not hanging), not intersecting or touching model (connections distract), **no symmetry**.

Place **first form with great consideration**, will **establish main movement** in space and **set up a vibration** that should affect how everything else works. Establish **dominant, subdominant, and subordinate relationships** between forms and spaces.

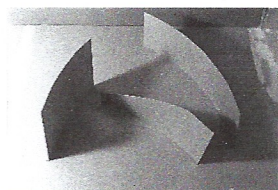


Subdominant Variation

Movement of the axes, **tensions between surfaces** of forms to **activate the space**. To expand the space, create a sense of volume, focused orientation point restricts that sense. **Two largest surfaces should really pull apart**, not the surfaces but the tension between them. **Avoid spaces between individual surfaces or groupings to feel like separate spaces**, rather all part of a whole, a matter of **unity not just flow**.



Subdominant Improved



Subordinate Improved

Improved Condition from Original:
Unified Design, spaces as whole,
expands negative into perimeter.

Rowena taught for 50 yrs. (1986+), suffered a heart attack, died on **Sept.14, 1988**. Chose **Pratt to learn her method for design of form and space**, what was **missing** in architecture schools. Thesis advisor, **Martin Skalski** taught **transportation design** within **Industrial Design** department, **student of Rowena**, and **William Fogler**.



‘standing up’ or ‘lying down’ is a body language that speaks louder than words.

Somatosensory transduction: body sensing external currents in surrounding space (warmth, moisture, wind, sound, smell, light, gravity, ...), neurons converting these into **intuitive feelings about environment** you’re occupying: **atmosphere, vibe**.

Without our bodily senses, can not perceive our surroundings. All form and space is biased, relative to our body doing perceiving: **subjektiv, personal, specific**. It can not be any other way, **objectivity of scientific method is an illusion**.

[reason, anti-intuition]

[technology, anti-humanism]

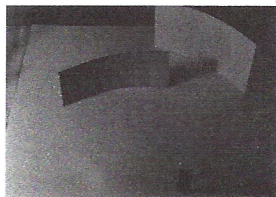
Form is the original/first language, communicating through space.

An architect must have a sincere understanding how it speaks, to create form.

A **phenomenological seeing**: the feel of space, **studying perceptual envelopes** and thresholds, **refining lines** and surfaces in very **subtle ways**.

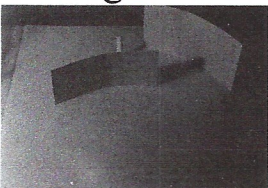


Front Figure



Subdominant wall refined by position of scaled Figure

Instructed by **Martin Skalski**, gestured form models **studied scaled figures** enveloped in activated space. Gestured forms were adjusted and **refined to expand and contract space**, shifting thresholds, **enveloping and isolating** the scaled figures.



Rear Fig.



Subdominant refined



Both Figs.



Refined with both Figures



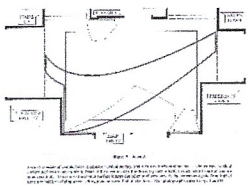
'floating'
Forms



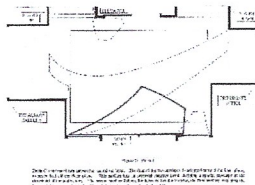
shaped steel bars
lath tied with wire

Gestured Form and Activated Space (1994) an investigative research study into the visual perception of architectural space, exploring the proxemics relationships between the inhabitant and inhabitable form.

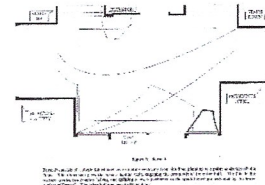
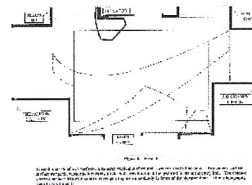
Dominant Form



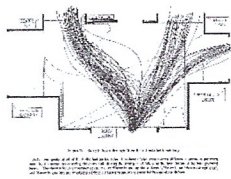
Subdominant



Subordinate Forms



Four full-scale gestured forms created and installed in Main Bldg. entrance lobby leading to the President's office, to study their influence on human movements through the lobby by refined adjustments of the form placement.



27 isolated movement patterns were identified and studied,

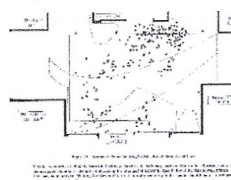


lowered
6 inches

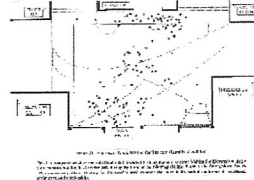


lowered
8 inches

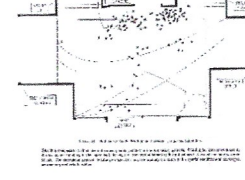
and stationary points where people stood waiting on the arrival of the elevator. By adjusting two of the forms (at elevator door and over the main entry door),



Existing
Condition



Installed
Condition



Adjusted
Condition

the stationary 'standing' points shifted in proxemic response, resulting in an improvement / fewer obstructions for movement patterns through the lobby.

Aside from finding refinements in the gestured forms to influence human behavior, more interesting was the debate that ensued in my review, on whether architecture is a subjective act by designer as an individual in a Humanist tradition or as a science of building design and human nature as it is practiced today.



“Sunlight filtered by altostratus, the day feels **heavy**, a **seriousness**, as if conditions are **inescapable** today. The star that warms is kept at a distance, chill from a damp wind has taken precedence. Sun is no further than yesterday, yet strength is **diminished** by a blanket of clouds.



Yesterday the sky was a deep blue sea, no clouds to be found. Treetop branches bare, fissures at the edges, terra taking hold of a crisp, clear, invisible air. A kitchen window is open somewhere out of sight, at the distance a fresh baked pie can **flavor** a lingering breeze with the taste of cherries.



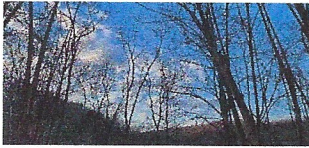
On the same air, **vibrations** are carried, of a string instrument practicing suites, sharps and flats striating the backdrop overhead. We are **sensuous creatures**. In a **world layered by multitude of channels**, uniquely **blended by each person** into an impression, **resonating with meaning** from their lives in that moment, in that place.



The universe is not universal, it is **subjective**. Taken in by each subject, on a case by case basis. In our case, on this earth, it is **through light, sound, smell**. Traversed through air, water, land. It is **not magic**, but can become magical, when a ball of fire in the sky, the one energizing our body and mind daily, stops time to fill our soul as it touches the horizon, setting skies ablaze.

This is the language we speak, words are **felt** not spoken. The unspoken carrying more weight than all the articulation otherwise. Because it is **immediate**, nearly simultaneous. A place **can not be void of feeling**, the substance which permeate all things.

Without **proximity**, there would be no **measure**, no **differentiation**, no **individual**. Life would have no means to call attention to **significant** features, **essential** characteristics, to respond to stimulus. It is the **distance between that determines** influence, whether a variable is **close enough to be felt** or **too far away to be noticed**.



With all of this chatter going on, sustaining interaction and exchange, it is no wonder **human beings are social creatures**. And in the end, after a gesture is perceived, a feeling is felt. It is the **emotional aspect that drives motivation**, influences our actions, colors life with the **thrill** of adventure, **curiosity** to explore, **silliness** to play. When proximities are considered in architecture, form and space are tuned to the senses, heightening emotional experiences.



It is the **nuance in a gesture that holds the precision**. So precise, any variation and attraction is absent. It happens in a fraction, so quickly **consciousness** can not keep up. Or so slowly, only the **subconscious** can make sense of it. We simply feel the impact, not aware how. This is the space in which proxemics happens.”

[639: proxemics 2018.10.02 unpublished]

[She demanded that all the students in the class focus on each individual's effort with her. She had no preconceived notions whatsoever. She would just look at the work, turn it around, warm up and go on for hours. I always admired that quality of going in with an open mind. It's the sign of a great teacher. Rowena had the greatest eye in the universe. Her attention and standards of judgement were the same whether she was evaluating a senior project or a modern classic. "I forget who I'm talking to and I talk to the design." She was teaching me not just for my own education but to make me a teacher.]

[“Symmetry is easy, any dancer can stand on two feet. Assuming a dynamic posture with one leg in the air, that's difficult.” “Most people can't handle a dynamic axis, but you strengthen your design muscles by becoming disciplined, learning to do the most difficult things, that will allow you to express yourself more clearly, because you are able to control exactly what you want to say.”]

Collective Subconscious (2024.03.07 11:18am oo)