systemic thinking = architecture as a series of intersecting systems

studying and building relationships and emphasizes connectedness
architectural academia
architectural academia
architectural tectonics is a systemic endeavor
architectural tectonics is a systemic endeavor

Tectonics is the formal amplification of the structural presence in relation to the assembly of which it is a part.
architectural tectonics is a systemic endeavor

The origin of architecture is not construction, but the visible representation of closed space originating from human dress.
architectural tectonics is a systemic endeavor

There are two components within a tectonic construction: the ontological *kernform* (work form) and its cladding of the representational *kunstform* (art form).
architectural tectonics depicts the poetic integration of assembly, materiality, representation, space, and environment.
tectonic = frame or assembly
(sky, light, dematerialize)
stereotomic = mass or piled
(earth, dark, solidity)
tectonic + stereotomic
SACRED + TECTONIC
duality and spirituality

Sacred architecture must recognize its position at the center, on an axis between earth and sky.

The power of the sacred radiates from this center with centrifugal force, but it also returns centripetally.
sacred center

The sacred center also appears in tectonic theory prominently in Semper’s four elements.

- framework
- enclosing membrane
- earthwork
- hearth

The hearth incorporated into a single element the public and spiritual nexus of the built domain.
We have the ability to develop empathy with static form:

A looming cliff face stands proudly at attention and seemingly in defiance; its outward projection instills the feeling of a lunging forward, perhaps in curiosity, perhaps in anger.
empathy
structure

- five linked problems
- centered on the study of sacred space
- multiple scales and mediums
- varied working perspectives
- each problem began with a critical reading and written response
task 1

Select a project to study
task 2

Analyze the project to learn its essential lessons, focusing on the tectonic
task 2

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Analyze the project to learn its essential lessons, focusing on the tectonic
task 1

Identify a location in the case study to which can be added a place for a visitor to pause and rest.

- zooming in
- assembly
- attention to detail
- bodily interaction with architecture
Design the intervention paying close attention to the relationship between the new element and both the tectonics of place and the human body: two key contexts.

**Task 2**
task 3

Build the intervention at full scale as accurately as possible.
task 3

Build the intervention at full scale as accurately as possible.
task 3

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task 3

Build the intervention at full scale as accurately as possible.
task 3

Build the intervention at full scale as accurately as possible.
task 3

Build the intervention at full scale as accurately as possible.
task I: groupwork

Analyze the city of Carbondale, IL through the lenses of the sacred, infrastructure, socio-political, and environmental contexts

- zoom out
task II: individual

Select and analyze a site within the context zone for the building of a new chapel for the town.
task II: individual

Select and analyze a site within the context zone for the building of a new chapel for the town.
task I

Building on the first three problems, design a new chapel for Carbondale, IL.

- analysis of the case study
- construction of the intervention
- context of the site

Develop a program for this small space building on the given outline.
task II

Contemplate the questions:

- What is the purpose of a chapel?
- What is the narrative of the place?
- How does the tectonic expression of the chapel reflect its purpose?
- How is the project contextually driven?
task III

Design the chapel.
MAKE AN IMPACT

THE SITE

INITIAL DESIGN CONCEPTS

THREE PRELIMINARY SCHEMES AND FINAL SCHEME

DESIGN CONCEPT

The main inspiration for my design came from the idea of natural shapes and forms. Weighing in the community, the building was to attract and give the building a sense of natural and organic form. The project was to be integrated into the existing landscape and provide a sense of place. It is to give the building the appropriate and existing values. The buildings were to be integrated into the surrounding landscape in a way that the structure becomes more interesting and suitably

DRAWINGS: P. MCKISSACK

P4: CHAPEL
LIVING WATERS

DRAWINGS: A. NEAL

P4: CHAPEL

The site chosen next to the church for such a facility will serve as the church's entrance and be the anchor point for the neighborhood. The open plan is such that the site is naturally divided into separate areas for study and prayer.

Living Waters Chapel is designed to be the focal point of the community. In the foreground, an extended lobby is located at the entrance of the chapel. This area can serve as a meeting and gathering space. The main entrance to the chapel is through the lobby, which acts as both a social area and a transition space.

The lighting in the sanctuary is naturally enhanced by the use of skylights and clerestory windows that allow natural light to bathe the interior. The skylights provide an additional source of illumination, creating a warm and inviting atmosphere.

The conclusion area continues over the roof of the sanctuary, featuring a flowing, open space. This not only serves as a transition to the worship area but also provides an outdoor area for relaxation and reflection.

The sanctuary is designed with large windows that frame the beautiful views, making the space feel more open and connected with the outdoors. The natural light enhances the atmosphere, creating a serene and tranquil environment.

The balcony level can be accessed from both the sanctuary and the结论 area, providing flexibility for various programs and events. This space can be used for additional seating or as a staging area for events.

The design of the sanctuary is focused on creating an inviting and welcoming atmosphere. The use of natural materials and colors, combined with the strategic placement of lighting, creates a space that is both functional and aesthetically pleasing.

The layout of the building includes a lobby area, a sanctuary, and a conclusion area, all designed to facilitate a smooth transition from one space to the next. The design is intended to encourage engagement and interaction among the community members.
Problem 4: Chapel
Derrick Amisi
ARC 351
Southern Illinois University
Carbondale, Illinois
Longitudinal Section
task I

Select a critical moment in the design of project 4 to investigate in greater detail.

- zooming back in
- tectonic assembly
- part to whole relationships
task II

Analyze this area of the building and figure out how it is constructed.
task II

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task II

Analyze this area of the building and figure out how it is constructed.
task III

Zoom in further and build one key detail from the zone of investigation at full scale.
task III

Zoom in further and build one key detail from the zone of investigation at full scale.
task III

Zoom in further and build one key detail from the zone of investigation at full scale.

CONSTRUCTION: J. WEST
task III

Zoom in further and build one key detail from the zone of investigation at full scale.
successes

- rigorous investigation was well received by students

- plenty of moments of success from each student in the class

- tangible connections to architecture through full scale work
challenges

- difficulty in translating lessons of the case study to the problem 4 chapel

- intensive case study driving the project caught some of them off guard

- need more time for problem 4 to allow for more contemplation throughout the design
challenges

- the site selection in problem 3 was poor

- problem 3, in general, was relatively disconnected from the rest of the series

- created a fissure in the semester

- this problem needs to be much more tightly controlled as far as selection goes
Tectonics depends on the fundamental aspects of the world: gravity, the structure of the materials we use, and the ways in which we put these materials together.