



**College of Engineering**  
**Department of Interior Design**

# Design Methodology

4th year – 1st Semester

M.S.C. Madyan Rashan

Room No. 313

Academic Year 2018-2019

	Course Name	History of Interior Design
	Course Code	INDS 315
	Lecturer in Charge	Asst. Lecturer
	Department/College	Interior Design / Engineering
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	Time(in hours) per week	Theory: 2 h.
	Keywords	Imagination, architectural imagination
	Objectives:	<p>At the end of this lecture, the students should be able to:</p> <p>Establish basic concepts about <b>architectural imagination</b>.</p>

Week	Lecture Date	Number of hours	Topic
1	2/10/2018	3 h	Introduction, course overview
2	9/10/2018	3h	Design as process
3	16/10/2018	3h	Route maps of the design process
4	23/10/2018	3h	The multi-dimensional design problem
5	30/10/2018	3h	Problems, solutions and the design process
6	6/11/2018	3h	Thinking
7	<b>27/11/2018</b>	<b>3h</b>	<b>Imagination</b>
8			Creative thinking
9			Creative thinking
10			Design tactics
11			Design tactics
12			
13			



## Previous lecture

- ▶ Types of thinking
- ▶ Human intelligence
- ▶ concrete thinking
- ▶ abstract thinking
- ▶ Reasoning
- ▶ Convergent and Divergent thinking

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Imagination



## Course Reading List and References:

- ▶ How Designers Think

by Bryan Lawson

## ► Imagination

- Some concept like the imagination is necessary if we want to treat architecture as a mode of knowledge.
- Which is to say that thought needs a material image, something to carry the thought.
- We can treat the imagination as bridging the gap between perception and understanding.
- The imagination is different from other mental processes like **perceiving or remembering** in so far as to perceive something requires that something has to be there, and that's not required of the imagination.
- And even to remember something-- the event or the object or the person-- it had to have already been there in order to remember.

## ► Imagination

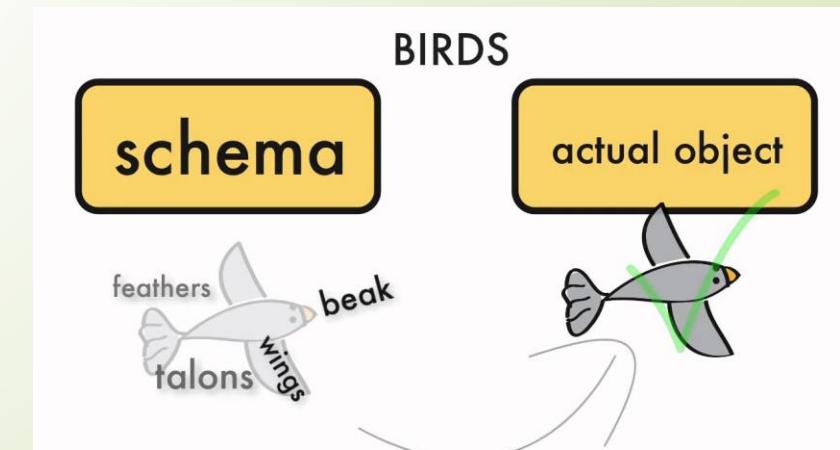
- But the imagination creates its image. The image isn't there until the imagination produces it.
- The imagination is also different from a **concept** because the imagination requires the materialization of thought.
- How to show you the concepts ? “Constructing a picture”
- **So we can define the imagination as the capacity** for producing images, the mental capacity to picture things.
- Description of the architectural imagination as essentially interpretive, as well as cognitively productive, borrows **from Immanuel Kant's** theory of the schema and its role in reflective judgment developed in his third Critique.
- For Kant, a schema of the imagination is not quite a concept and yet is something more than an ordinary image.

## Imagination

- ▶ A **schema** is something like a **script for producing images in accordance with the symbolic order — a synthetic operator between the sensible and the understanding.**
- ▶ In Kant's architectonic, the imagination must coordinate with the two other faculties — **the intuition and the understanding** — to construct its practical-empirical role out of mechanic parts.
- ▶ The intuition synthesizes sensory experience.
- ▶ The understanding spontaneously deploys concepts and categories.
- ▶ But intuitions are purely sensible, and the understanding cannot scan sensible objects. **So we need a way of relating and connecting these two separate faculties.** “There must be a third thing,” Kant writes.

## Imagination

- ▶ This third thing is a product of the imagination; it is the **schema**.
- ▶ The function of the schema is to subsume the uncoded array of sensations, the empirical objects of intuition, and convert them into images that can be processed by the understanding.
- ▶ But a schema is not itself an image in an ordinary sense, because it is not a thing.
- ▶ Rather, a schema is a **rule** for an image that is produced in the act, or procedure, of schematization, a dynamic process that takes place in the imagination.



## Imagination

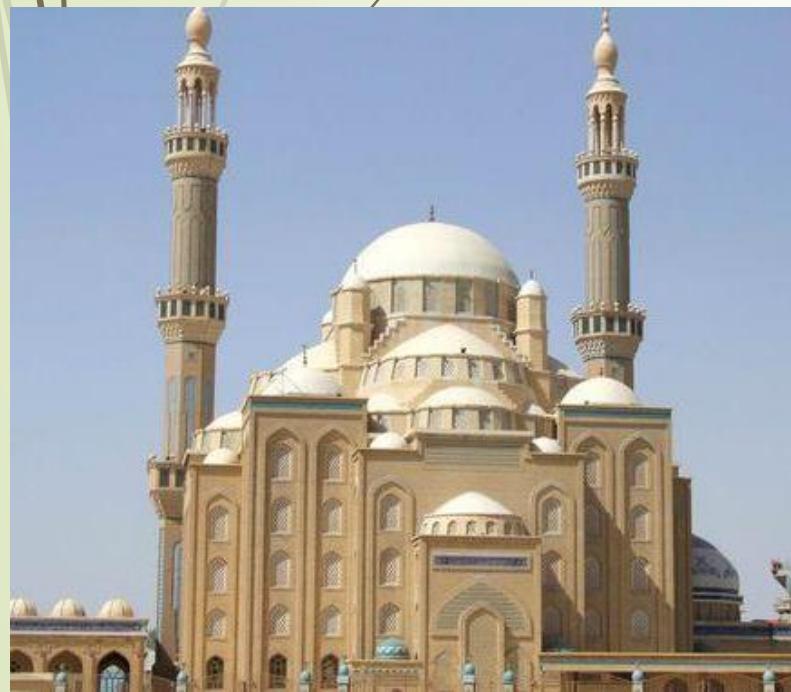
- ▶ Images remain attached to the senses, incommensurable with the concepts used by the understanding, while schemata regulate the abstraction of sensation into something the understanding can process.
- ▶ As one scholar put it, **“The schema is the procedure of the imagination in providing an image for a concept.”**

## Imagination

- ▶ Kant's formulation of the schema is very similar to Quatremère de Quincy's definition of **the architectural type**: "The word 'type' does not represent so much the image of something that must be copied or imitated perfectly, as the idea of an element that must itself serve as **a rule for the model**."

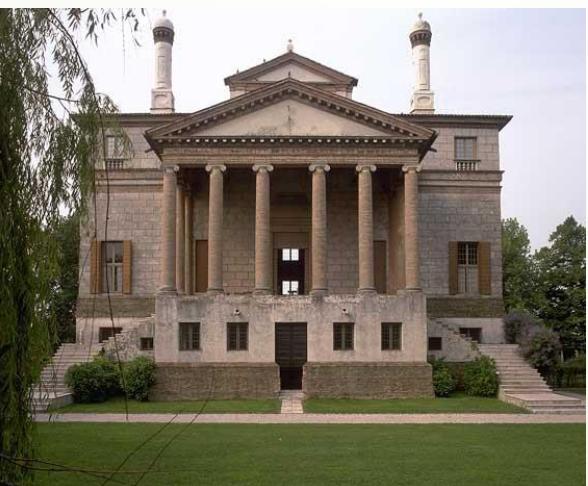
## Imagination

- The model, is an object that must be repeated such as it is; [the] type, on the contrary, is an object on the basis of which everyone can conceive of works that may not resemble each other at all.



## ► Imagination

- There's a very famous study by an architecture historian named Rudolf Wittkower called "Architectural Principles in the Age of Humanism."
- And it's a study of every villa that the Italian architect Andrea Palladio ever built.
- Wittkower "designs" a schema that totalizes the villa type as the geometric-mathematical systematization of the ground plan.
- And what he began to realize is that the villas, as different as they were, had some deep structural diagram in common, **some geometrical ordering system that was not always immediately apparent**, but was latent and could be discovered through this activity of measuring and drawing.

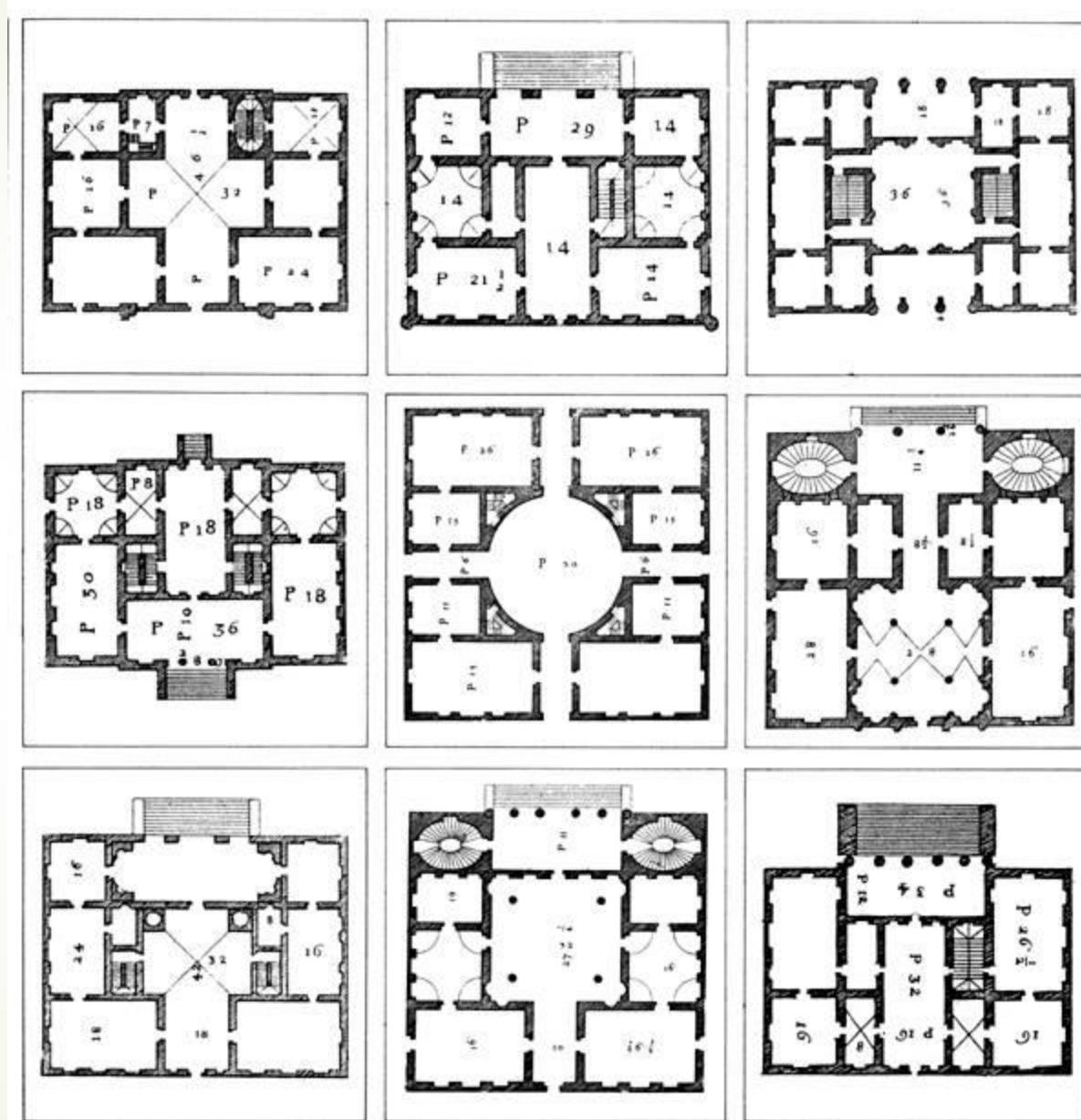


## ► Imagination

- Some of the villas were simple farmhouses.
- They were not decorated compared to the great urban villas in Italy.
- Others were lavishly decorated, both on the inside and on the exterior.
- Some of the villas were made of different material-- stucco.
- Some actually were made of more precious materials like stone.
- Wittkower didn't look at any of that.

## Imagination

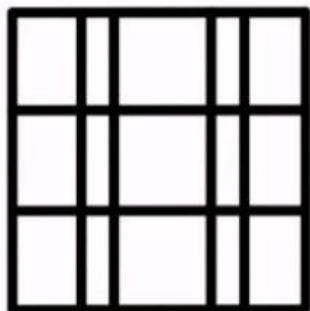
- ▶ All Wittkower cared about was this common diagram, this template.
- ▶ And out of that template, he devised or he imagined the geometrical essence of the Palladian villa.



# Imagination

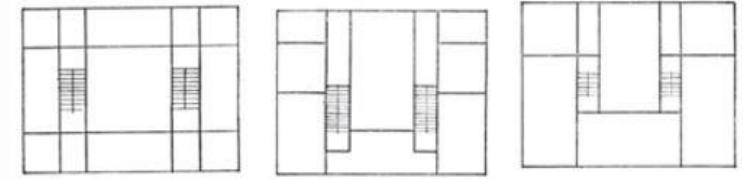
- And in his final diagram, Wittkower draws that diagram.
- This is the architectural imagination at work.

UNDERSTANDING



SENSORY DATA

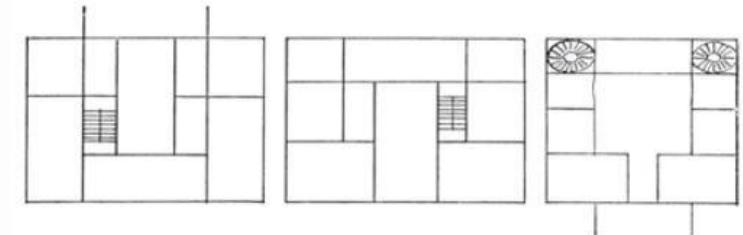
PALLADIO'S GEOMETRY: THE VILLAS



Villa Thiene at Cicogna

Villa Sarego at Miega

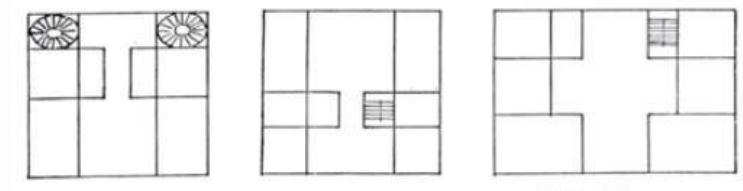
Villa Poiana at Poiana Maggiore



Villa Badoer at Fratta, Polesine

Villa Zeno at Cessalto

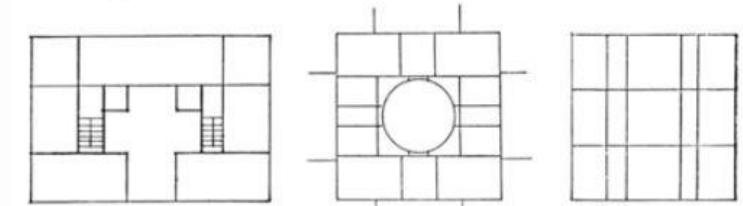
Villa Cornaro at Piombino Dese



Villa Pisani at Montagnana

Villa Emo at Fanzolo

Villa Malcontenta



Villa Pisani at Bagnolo

Villa Rotonda

Geometrical Pattern of Palladio's Villas

## ► Imagination

- It's one part of a three-part system.
- At the **lowest level**, we might say, is our sensory experience, our sight, our touch of the materials of a building.
- But those arrive as raw sense data. They're un-encoded, unprocessed.
- And **the understanding**, which is at the highest level, knows nothing of those raw sense data.

## ► Imagination

- The imagination is the third thing that operates in the space between the sense data and the perceptions of the building and the architectural understanding.
- And the work of the imagination, what it has the capacity to do, is schematize.
- He actually draws the deep structure of those villas and that schematization, that deep structure that the understanding can scan.
- The understanding has templates already available that it can match to that geometrical schema.

## ► Imagination

- When the imagination presents its schema to the understanding, it sets us on the path toward knowledge.
- And whatever knowledge is, it will have something to do with this interaction of the understanding and the imagination.
- The important thing for us is that this is a specific kind of architectural knowledge.
- It comes from the experience of architectural sense data.
- It's been schematized into an architectural diagram, and the architectural understanding has scanned it.
- In some ways, you might understand the imagination and the understanding as opposed.



## Imagination

- ▶ So we might say that the imagination organizes the sensuous manifold according to organizing principles that can be received by the understanding.
- ▶ And here we have the idea that **architecture produces knowledge.**





THANK  
YOU  
FOR  
YOUR  
ATTENTION