



**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 523
	Lecturer in Charge	Asst. Lecturer
	Department/College	Interior Design / Engineering
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	Time(in hours) per week	Theory: 2 h.
	Keywords	Creative thinking
	Objectives:	<p>At the end of this lecture, the students should be able to:</p> <p>Establish basic concepts about <b>creative thinking</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	27/11/2018	3h	Imagination
8	4/12/2018	3h	Creative thinking
9	<b>11/12/2018</b>	<b>3h</b>	<b>Design thinking</b>
10			Design tactics
11			
12			
13			



## Previous lecture

- ▶ Creativity
- ▶ Creative process



# Design Thinking Strategies



## Course Reading List and References:

- ▶ How Designers Think

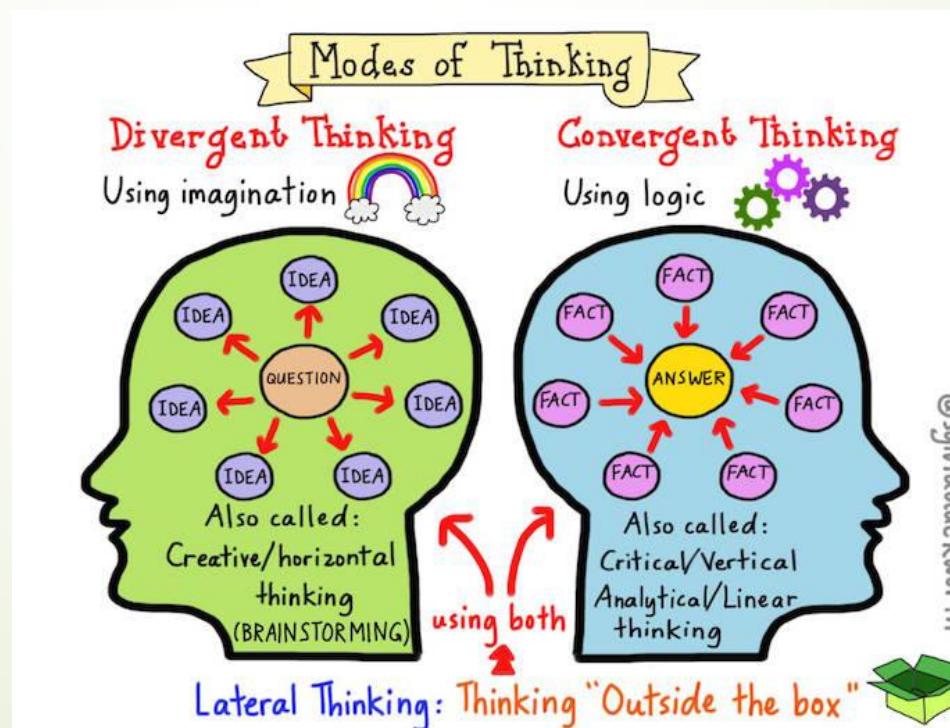
by Bryan Lawson

## Design Thinking Strategies

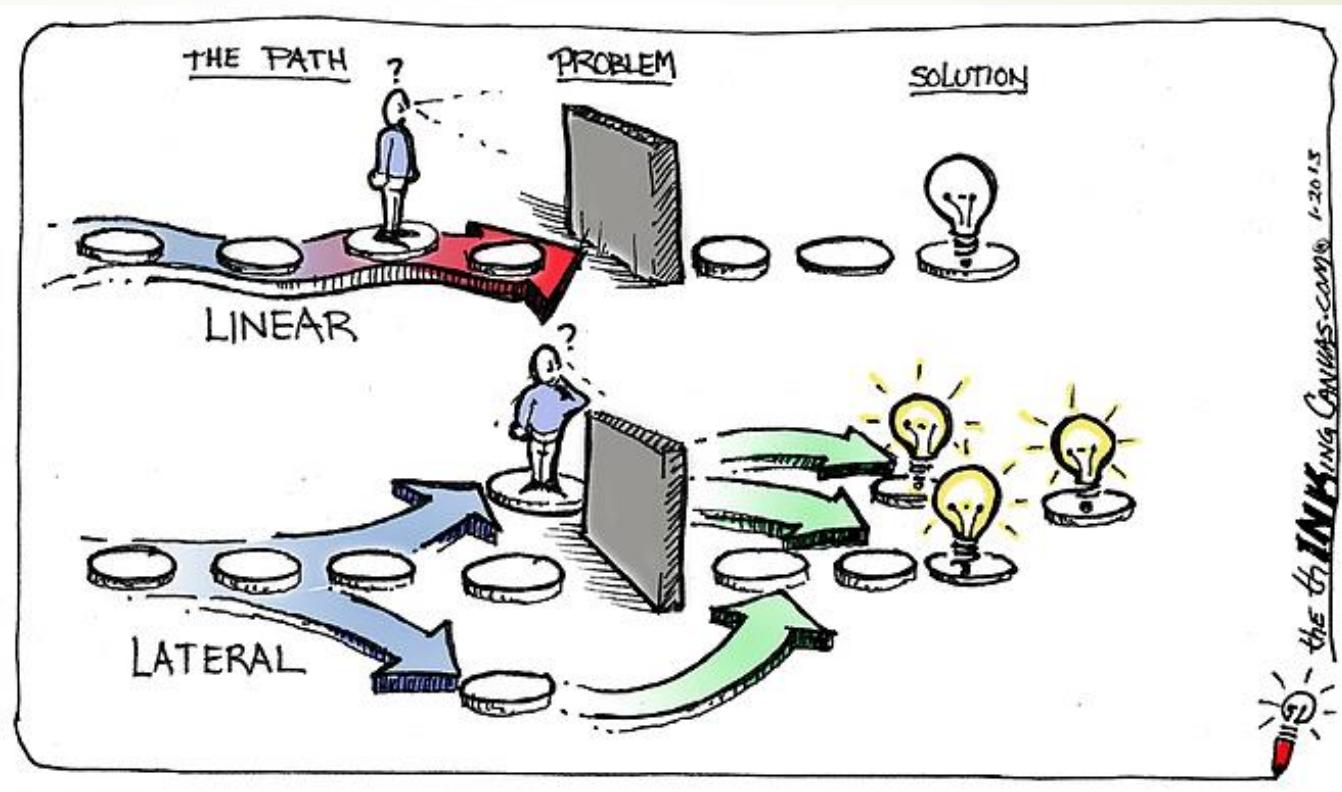
- ▶ By design strategies, **we mean those practical approaches in design which designers could apply to reach a design solution.**
- ▶ Design strategies, like design types, could be applied in more than one form simultaneously.
- ▶ They help designers throughout the design process to analyze, synthesis, and evaluate data.
- ▶ Different types of design strategies exist in which the common objective is to help designers to reach **the most appropriate solutions.**

## Design Thinking Strategies

- 1) **Lateral thinking** is a term invented by Edward de Bono (1970; 2000, URL3) and is in contrast with traditional logical thinking for which he uses "**vertical thinking**".
- Vertical thinking is used when analyzing a problem or putting forward an argument (with the yes or no answers).



However, lateral thinking is concerned with digging as many new holes as possible, for the solution to a problem may not be in the direction in which one is digging.





## Design Thinking Strategies

- ▶ One application of lateral thinking in education, is in generating several alternative solutions for a problem or parts of a problem.
- ▶ For example, asking students to develop various ideas for how and where to enter a building would encourage them to examine different levels, directions, and locations for entering a building.
- ▶ As a result, students will provide some answers and get a chance to see what others have developed, and then they will evaluate their answers and develop an appropriate solution.

## 2) Visual Thinking

- ▶ The subject of visual thinking is basically concerned with problem-solving and designing through the act of drawing and visualising the analytical as well as the synthetic steps of design.
- ▶ This way the designer will present the question as well as the solutions all in one medium.
- ▶ **The medium means to draw attention to the various possible means of visually communicating** (drawings on paper or on computer, collaging images, building models).

## Visual Thinking

- ▶ By drawing, designers can communicate their mental images about a design problem and illustrate them in 2-D or 3-D, depending on the appropriateness of the drawings for that particular stage of design.
- ▶ It would allow them to see the physical characteristics of the problems and this way they tend to activate a **spatial mode of thinking** which is most appropriate to apply in architecture – a discipline which mostly deals with creating spaces.

## Visual Thinking

- ▶ Today, a large number of designers use computers for drawing during the design process.
- ▶ Although computers have their own advantages as a **tool**, there are many critics who argue about the consequences of using them.
- ▶ One critical look at the use of computers is made by Brigit Cold .
- ▶ She states, "The use of the computer in the design process is growing fast. The computer is more accurate, faster and combines separate information as desired.

## Visual Thinking

- ▶ The computer as a sketching tool has been developed, but the machine, the hardware and the man-made programs **are barriers in the creative process compared with sketching on paper.**
- ▶ The difference between sketching and visualising ideas on a computer is **the involvement of the directness, the preconscious, producing and throwing away exformation during the sketching process.**
- ▶ The main reason for encouraging hand sketching is the importance of learning and knowing how 'to catch, keep and create' environmental impressions and conceptions directly in time and on the spot“.



## Design Principle and Standards

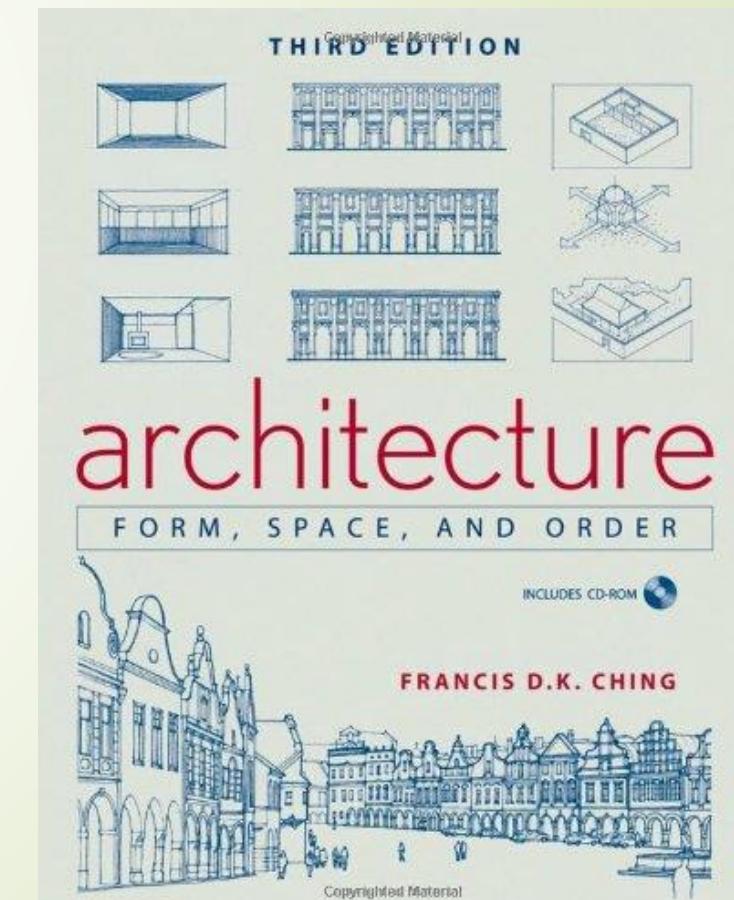
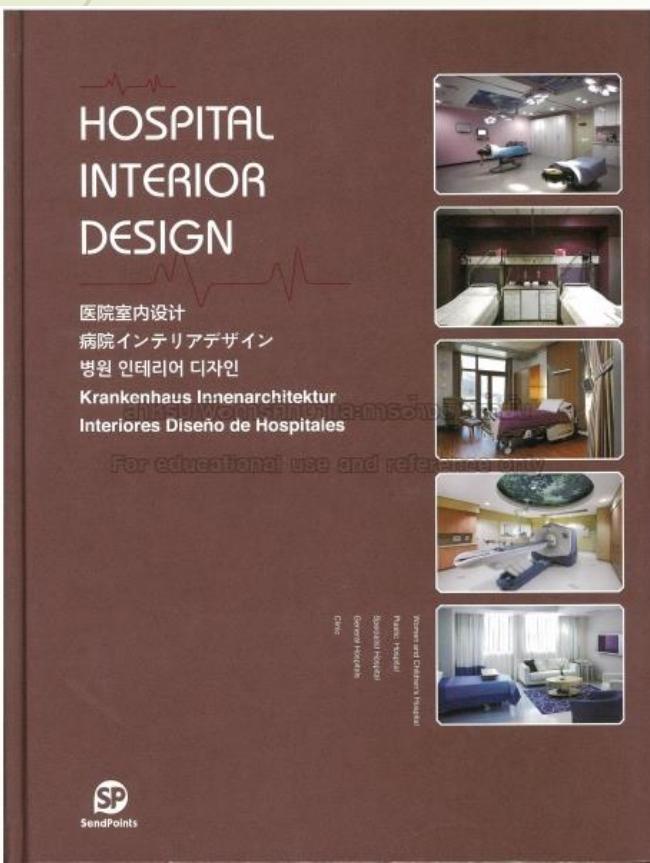
- ▶ Professionals in all the design fields use design principles very extensively in moving from a series of problem statements to solutions.
- ▶ Design principles are not fundamental truths, laws, or propositions specifying a condition or a relationship.
- ▶ They are rules for guiding action.
- ▶ **They save the designer from having to re-invent the wheel for every problem he/she faces; they enable designers to make decisions on matters about which they know very little; they reduce design-by-habit situations that really require creative problem-solving.**

## Design Principle and Standards

- ▶ Some design principles **provide general knowledge for designers within a specific subject, location, or condition.**
- ▶ For example, there are books written about design principles in an arid climate (i.e., *Design Primer for HOi Climates*, by Konya, 1980).
- ▶ These types of design principles, provide some facts and some list of concerns for designers to address during their design process.

## Design Principle and Standards

- The other types of design principles, include a variety of design handbooks, standards, regulations, and so on, which provide some general design information and are usually prescribed by some governmental organisations.



## Group Discussions

- ▶ Group discussion strategies are extremely viable design strategies which enables designers to reach some design solutions through simple conversations with other designers, experts, or the general public who are involved in the project or are simply interested in the subject.



## Group Discussions

- ▶ Brainstorming is another common technique in design which consists of a formalized group activity organised to encourage the flow of original ideas.
- ▶ Brainstorming encourages **cross-stimulation, and the apparently crazy ideas of one participant will stimulate quite useable ideas from another.**



## Group Discussions

- ▶ Usually, all ideas are recorded, either on tape or in shorthand, and afterwards the list of ideas is circulated to the members of the group, for their afterthoughts.
- ▶ Finally, a full list of ideas is prepared, and each idea checked for feasibility, preferably by a panel of specialists who took no part in the original brainstorming.



THANK  
YOU  
FOR  
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ATTENTION