Faculty of Engineering
Department of Interior Design

Interior Design Applications

3rd year – 2nd Semester

M.S.C. Madyan Rashan

Room No. 313

Academic Year 2018-2019

	Course Name	Interior Design Applications
	Course Code	INDS 321
	Lecturer in Charge	Asst. Lecturer
	Department/College	Interior Design / Engineering
	Contact information	e-mail: madyan.maher@gmail.com
	Time(in hours) per week	Theory: 2 h.
	Keywords	
	Objectives: At the end of this lecture, the students should be able to: • Establish basic concepts about **Mechanisms of perceiving space.**	

Week	Lecture Date	Number of hours	Topic
1	5/2/2019	2 h	Introduction, course ov erview
2	12/2/2019	2 h	Space as language
3	19/2/2019	2 h	Space and the human dimension
4	**26/2/2019**	**2 h**	**Mechanisms of perceiving space**
5		2 h	
6		**2 h**	
7		2 h	
8		2 h	
9		2 h	
10		2 h	
11		2 h	
12		2 h	
13		2 h	

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Mechanisms of perceiving space

Course Reading List and References:

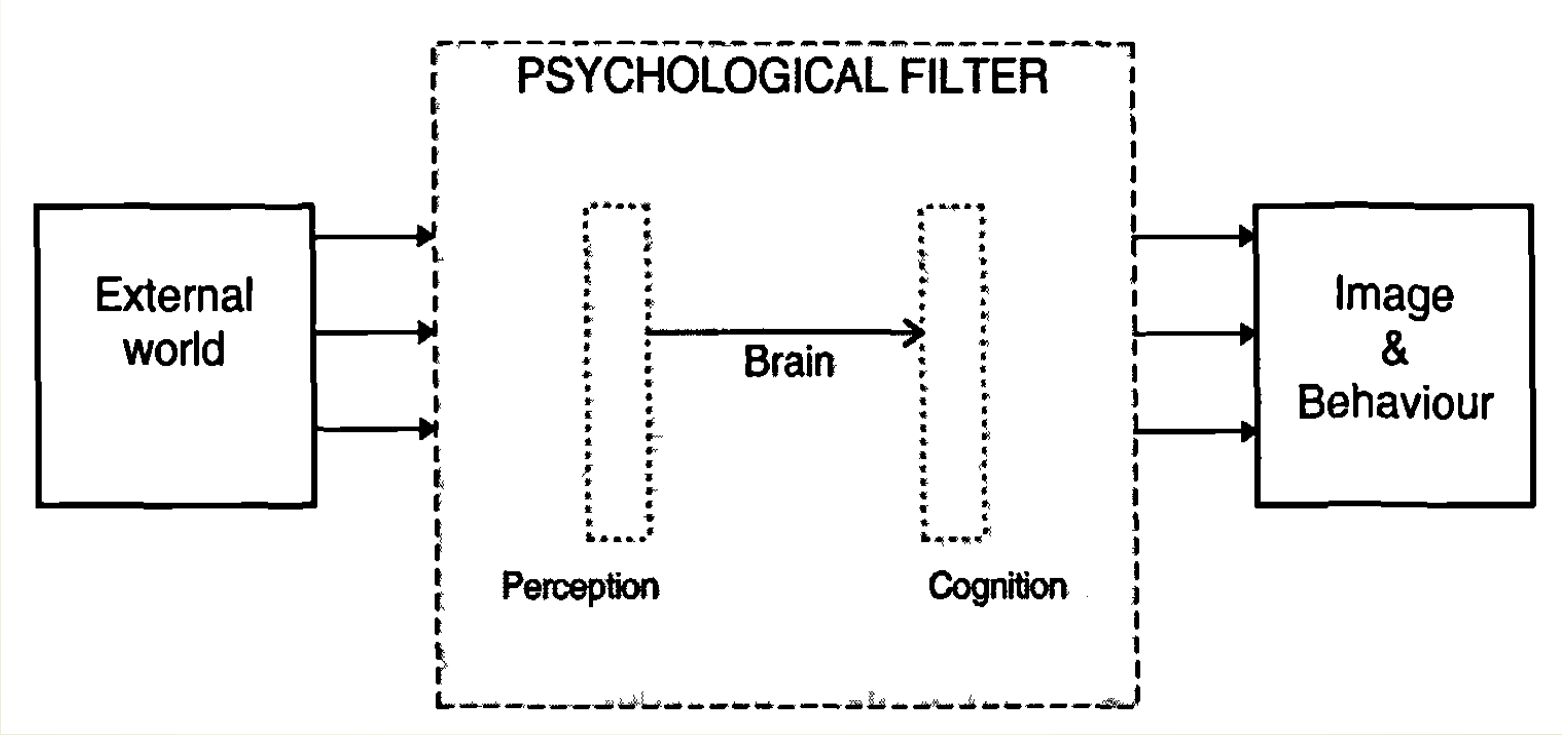
- Language of Space
  by Bryan Lawson

Perception and Spatial Cognition:

- Human beings relate to the physical built environment through the psychological processes of **perception** and **cognition.**
- Perception is the act of grasping through the mind and senses, of observing, of being aware.
- It is closely connected with events in the immediate surroundings and is linked with immediate behavior.
- The process by which individuals connect to their environment.
- A “sense-making” process

Perception and Spatial Cognition:

- Psychologists have tended to treat perception as a sub-set or function of cognition, which is the act or faculty of knowing, of consciously gaining and storing new information in the memory.
- The figure (below) illustrates that spatial information as filtered through a psychological filter, which results in images and behavior.



Perception and Spatial Cognition:

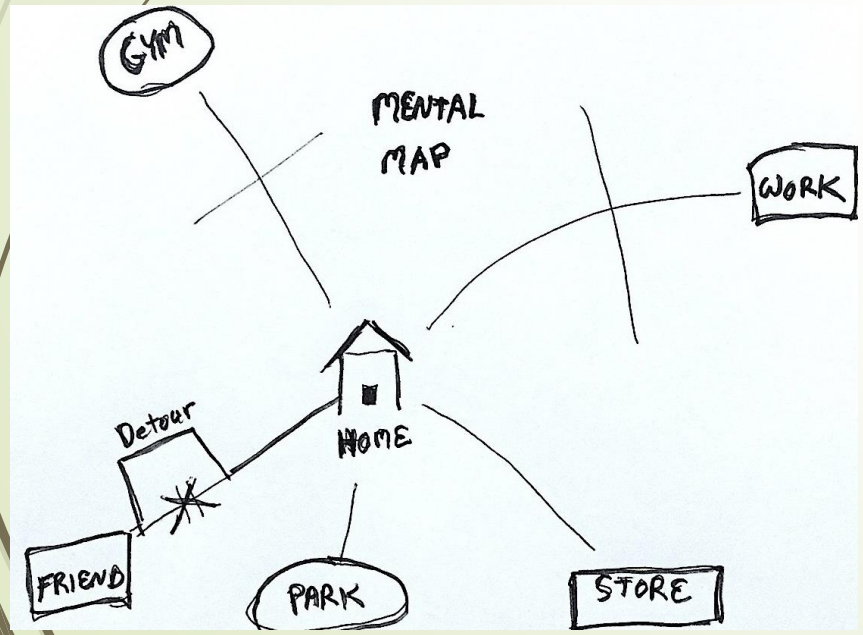
- The perception means the phenomena of experiencing the spaces through the senses of sight, sound, touch, smell and taste.
- Spaces are not just rooms, buildings, or outdoor spaces, but are total environments consisting of a wide variety of elements and stimuli.
- This process of understanding and judging phenomenon makes objects serviceable and enables people to respond appropriately to them .
- Thus, perception can be described as **the way in which people relate themselves to their surroundings by translating, understanding and drawing relationships between objects and stimuli within their surrounding environments.**

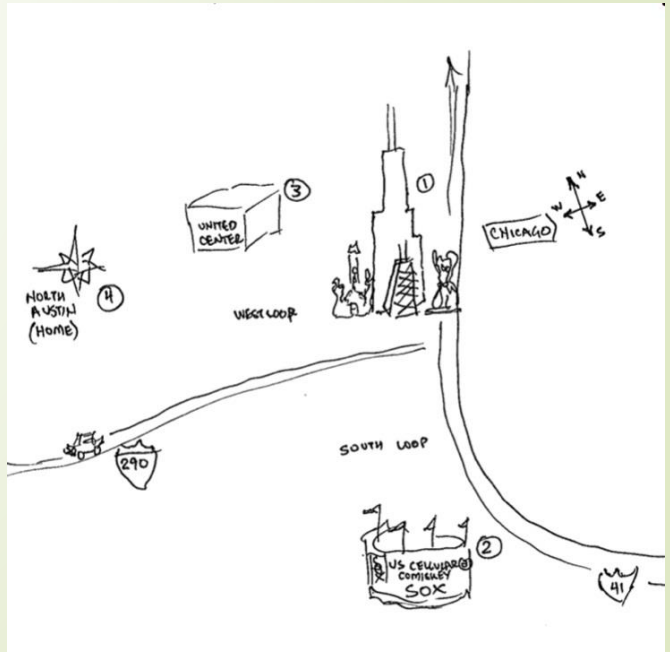
Perception and Spatial Cognition:

- The sequence of spatial learning is described from an ability to identify landmarks, to an integration of knowledge about the routes linking individual landmarks, and finally to an understanding of abstract spatial relations in a survey representation.
- Route knowledge as the knowledge of how to go from one location to another, without definitive knowledge of the relative positions of locations.

Perception and Spatial Cognition:

- The most developed spatial knowledge is 'configuration or survey knowledge', that is, a **'Cognitive Map'**, which is knowledge of the relative locations of objects in the environment.
- From the cognitive map, landmark and route information can be derived, even for routes never before travelled.





Perception and Spatial Cognition:

- The dimension of spatial knowledge includes: information on recalling and representing layouts; connecting locations; way-finding in real-world environments; landmark cognition; orientation; sketch mapping and many others.
- *Way-finding* refers to a person's cognitive and behavioral abilities to determine the path between a specified origin and destination and to successfully negotiate the path.

Perception and Spatial Cognition:

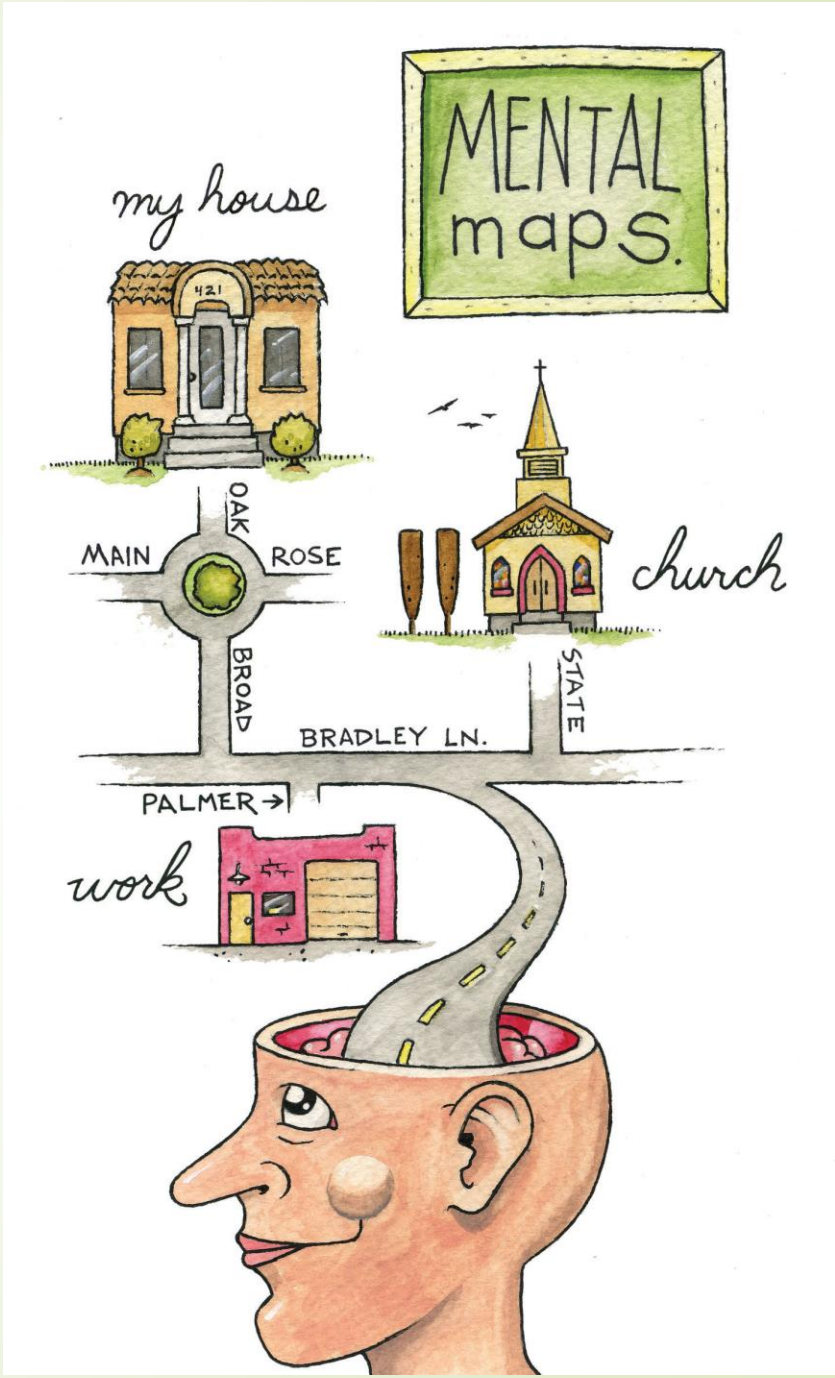
- *Cognitive distance* describes the relative spatial separation of objects in a cognitive map.
- It is accepted that cognitive distances may be asymmetric and that, in some cases, the distances may be interpreted in a functional, proximity, or similarity context rather than in a geometrical one.

Spatial Cognition:

- We can define **Spatial Cognition** as **the knowing of, and internal or cognitive representation of the structure, entities, and relations of space; in other words, the internalised reflection and reconstruction of space in thought.**
- It is the process by which the individual acquires, codes, stores, recalls and decodes information about the relative location and attributes of phenomena in the every day spatial environment.
- These environments include not only observable physical environments, but also memories of environments experienced in the past, and the many and varied social, cultural, political, economic, and other environments .

Spatial Cognition:

- **Methods for eliciting cognitive maps**
- Since cognitive maps are internal representations of the physical environment, their configuration can be inferred from verbal communications, drawings, or relational judgements.



Spatial Cognition:

- **Methods for eliciting cognitive maps**
- *Graphical representation is* widely used for representation of cognitive maps, commonly called *sketch mapping* and.
- *Sketch mapping* has long appeared to be a useful instrument for recovering information about the environment.
- Sketches are incomplete, distorted, mixed-metric, or nonmetric modes of representation; they are often full of blank- spaces and non-connected networks.

Spatial Cognition:

- With respect to errors and distortion in cognitive maps, we can propose three general elements in the cognitive maps:
- **First**, elements within regions in cognitive maps defined by 'anchor-points' are better co-ordinated spatially than are elements in different regions.
- **Second**, areas around anchor-points are magnified because they are well known.
- **Third**, like a magnet, anchor-points attract other spatial elements with a 'force' which decays over distance.


QUIZ
TIME!

Answer A or B:

- Q1: The privacy is a great force at the work of behavioural settings, discuss this statement.
- Q2: How we can increase the sense of security in the space?


THANK
YOU
FOR
YOUR
ATTENTION