



Notes

## ATTENTION AND PERCEPTUAL PROCESSES

Remember the first time you went to a movie hall? What did you experience when you entered the hall? Did you enjoy watching all the images, light and sound being flashed on the screen before you? Did you wonder how you could feel, see and experience everything which was not actually there?

### This is an activity for you to understand yourself

1. Think how far away a candle should be for you to see its flame on a clear, dark night?
2. How much salt you would need to add to 500 liters of water so that you can taste it?
3. In an average three-room home, how much room freshener will be needed to diffuse through?
4. How far should you stand to be able to hear the ticking of a clock in very quiet conditions? (answers given at the end of the chapter)
5. What kind of visual cues do we need to judge distance and depth?
6. How can TV commercials inspire you to buy the product? What makes the advertisement so appealing?



### LEARNING OUTCOMES

After studying this lesson, learner :

- describes attention, sensation and perception;

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- differentiates between laws of perceptual organization;
- applies cues of depth perception in the real world; and
- identifies what are illusions and understand what is Extra Sensory Perception.

You must have read about the sense organs and how sensations are received by the body. These sensations are like the window to the outside world- receiving information continuously. However, all sensations are not attended all the time. As you walk down the road there are different stimuli which arouse different sensations- like the aroma of a hot samosa or the sight of a colourful kite in the air or even the feel of the wind in your face and maybe the voices of the vendors calling out to sell their wares. All these stimuli are impinging upon different sense receptors but it is only few that we actually pay ‘attention’ to. How do we distinguish between good and not so good wares, aromas or colours? Some people like one set of colours, others do not – so what is it that makes us ‘perceive’ the stimuli that we receive? We need to understand this process, called Perception. Our perceptual processes are the tools that we use to understand the innumerable sensations which we experience all the time.

### 6.1 WHAT IS ATTENTION?

As you watch the Republic Day parade or remember your physical training sessions at school, the first thing you are taught to respond to is ‘Attention’!

The moment this command is used, we become attentive- which is a state of vigilance, alertness and focus – when you ‘ready’ yourself. Thus the process through which you pick up certain stimuli from a group of others is generally referred to as attention. It is a central process and perception may not take place if you do not attend to the stimuli. Thus, attention precedes perception. The process of attention helps organize perceptions and other cognitive functions. The functions of attention include:

1. **Alerting Function:** In this state there is a complete physiological and mental preparedness. For example- when waiting for orders, the parade waits for further instructions from the platoon commander.
2. **Selective Function:** Here one selects the object of attention. It may be noted that it is not possible to pay attention to more than one thing at a time. Can we attend to more than one thing at a time?

In everyday life we seem to attend to several things at the same time. You may have seen people driving a car and talking to a friend or attending to phone calls on a mobile while listening to music. If you notice there is more effort to driving



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than to other activities, even though some attention is given to other activities. It means that sometimes attention can be given to more than one thing; However, this happens only *with highly practiced activities*, because one activity then becomes almost automatic and does not require so much attention. This process is then called **automatic processing** which has three main characteristics.

- (i) It occurs without intention,
  - (ii) It takes place unconsciously, and
  - (iii) It involves very little (or no) thought processes (e.g., we can read words or tie our shoelaces without giving any thought to these activities).
3. **Limited Capacity:** There is only a selected number of articles or stimuli that one can attend to. For example, you see so many things on the class blackboard but you choose to notice or pay attention to only few.
4. **Vigilance:** Paying attention to a task continuously, for a long time, like looking at a screen at the ATC (Air Traffic Control), is called vigilance or sustained attention. It has been found that attending to a task for long is taxing, particularly if the task is monotonous and it can lead to decrease in performance.



### HOW DO YOU

#### Explain The Nature Of Attention?

Attention has a focus as well as a fringe.

When the field of awareness is centred on a particular object or event, it is called focus or the focal point of attention. But when the objects or events are away from the centre of awareness and one is only aware of them in the periphery-they are said to be at the fringe of attention.

Eg stare at- E

Now you notice what else is surrounding this alphabet- edge of the paper, desk, or those in the back ground....

#### 6.1.1 Classification of Attention

Attention has been classified in a number of ways. A process-oriented view divides it into two types, namely *selective* and *sustained*.

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### Selective Attention

Selective attention is concerned mainly with the selection of a limited number of stimuli or objects from a large number of stimuli. It means that at any moment we focus our awareness only on a limited aspect of all that we are capable of experiencing. Example listening to a class teacher over other sounds coming in through the corridor. You block information coming from periphery (fringe).

Another example of selective attention is to attend to only one voice amongst many. While talking to a group of people at a party, if someone in the far corner of the room utters your name in a conversation, you are still able to attend to it even though you are not engaged in that conversation. This is called cocktail party effect, a term that was coined by the English cognitive scientist Colin Cherry in 1953, and refers to our ability to focus our attention on a particular person's voice amongst other voices and background noise.

Since our perceptual system has a limited capacity to receive and process information, it can deal only with a few stimuli at a given moment of time. Which of these stimuli will get selected and processed? Psychologists have identified a number of factors that determine the selection of stimuli.

### Sustained Attention

While selective attention is mainly concerned with the selection of stimuli, sustained attention is concerned with concentration. It refers to our ability to maintain attention on an object or event for longer durations. It is also known as "vigilance" as discussed above. Sometimes people have to concentrate on a particular task for many hours. Air traffic controllers and radar readers provide us with good examples of this phenomenon. They have to constantly watch and monitor signals on screens. The occurrence of signals in such situations is usually unpredictable, and errors in detecting signals may be fatal. Hence, a great deal of vigilance is required in those situations.



### INTEXT QUESTIONS 6.1

1. The process of selection of few/certain stimuli over the others is called \_\_\_\_.
2. \_\_\_\_ in this state there is a complete physiological and mental preparedness to receive information.
3. Nature of attention includes \_\_\_\_ and \_\_\_\_.

4. There are two types of attention \_\_\_\_ and \_\_\_\_.
5. The term \_\_\_\_\_ was coined by the English scientist Colin Cherry in 1953.

You must be thinking why we pay attention to some stimuli and not to others. These are the factors which we will discuss now.

### 6.1.2 Factors Affecting Selective Attention

Several factors influence selective attention. They are generally classified as “**external**” and “**internal**” factors.

#### *External factors / Outer / Physical factors*

These factors are determined by the features of stimuli so they are called external factors. Other things held constant, the **size**, **intensity**, and **motion** of stimuli appear to be important determinants of the selection of stimuli to which we attend to.. Large, bright, and moving stimuli easily catch our attention. Stimuli, which are **novel** and moderately **complex**, also easily get into our focus. Studies indicate that **human photographs** are more likely to be attended to than the photographs of inanimate objects. Similarly, **rhythmic auditory stimuli** are more readily attended to than verbal narrations. **Sudden and intense** stimuli have a wonderful capacity to draw attention. These factors pertain to particular aspects of objects which are inherent in objects also called objective factors.

#### **a. Movement**

A moving object draws our attention more easily than a stationary object. For example, flickering lights draw our attention more than non-flickering lights. Ambulance, police cars, fire brigades use flickering and flashing lights to attract attention.

#### **b. Intensity**

More intense light, sound or smell draws our attention easily than the less intense one. For example, a neon sign is noticed more than a normal intensity light, or a very loud sound is noticed more over a normal sound.

#### **c. Novelty**

New kinds of objects draw our attention quickly. Advertising agencies adopt



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this technique very effectively, for example, by adding the latest and new features to a phone, fridge, fan or cooler or air-conditioners.

### d. Size

A bigger or a smaller object draws attention of people very easily than an average sized object. For example, a small advertisement on a full page will draw more attention or a big hoarding or banner.

### e. Change

Any change in our environment draws our attention quickly. For example, regular sound of a moving clock does not draw our attention, but the movement it stops, our attention is drawn to it, a radio playing songs stopping due to electricity failure draws our attention.

### f. Repetition

When a stimulus is presented repeatedly our attention is drawn, for example, repeated horn of a fire brigade or ambulance, jingles in advertisements.

### g. Clarity

An object or sound which can be experienced clearly draws our attention more than the stimuli which are not clear. For example, the shrill sound of a siren on the road always draws our attention.

### h. Colours

Colourful objects draw our attention more easily than black or white objects. Advertisers use this continuously by showcasing bright colours.

### i. Contrast

An object that is strikingly different from its background draws our attention. For example: Stains of curry or ink on a white shirt.

## Internal Factors / Psychological Factors

These are the factors that lie within the individual. They are dependent on the need, interest and emotion of the person.

### a. Need

A need would be related to our biological or psychosocial needs. When we are hungry, we notice even a faint smell of food or when we are hot and thirsty our

attention is drawn towards water or a cold beverage. For example, a student taking an examination is likely to focus on the teacher's instructions more than other students.

### b. Interest

Objects or events, which appear interesting, are readily attended to by individuals. For example, whilst shopping a sportsperson will be attracted towards display windows wherein sports goods are placed, whereas an MS Dhoni fan will immediately pay attention to his match if it is playing on television.

### c. Emotional state

Attention is affected during an emotional state. For example, when a person is highly excited at a jubilant event, he or she is not aware of others in the vicinity; may not listen or understand what others say.



## INTEXT QUESTIONS 6.2

### Complete the sentences given below

1. Internal factors of attention are also called \_\_\_ factors.
2. The internal factors that can draw our attention are: \_\_\_\_, \_\_\_\_ and \_\_\_\_.
3. During festivals the movement of lights on shops is an example of \_\_ factor of attention.
4. If we suddenly pay attention to the electricity when there is a sudden power breakdown, it is an example. of \_\_\_\_\_ factor of attention.



## ACTIVITY

Identify any two settings/events in your surrounding which would qualify as sustained and selective attention.

## 6.2 UNDERSTANDING THE ROLE OF SENSATION IN PERCEPTION

Sensation is the activation of sensory receptors by environmental stimuli.

To consider how psychologists understand the senses, and more broadly, sensation and perception, we need to define the two: sensation is the activation of the sense



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organs by a source of physical energy while perception is the organisation, interpretation, analysis, and integration of stimuli carried out by the sense organs and brain.

*The process by which we recognise, interpret or give meaning to the information provided by sense organs is called perception.*

The processes involved in transforming sensation to perception is called 'Transduction'.

In this process the stimulus energy (e.g., light, sound or fragrance) is converted into neural energy.

Perception is a constructive process as we go beyond the stimulus and try to find meaning in it. While interpreting stimuli or events, individuals often construct them in their own ways based on their previous experiences, their needs and emotions. Perception is thus not merely an interpretation of objects or events of the external or internal world as they exist; instead it is also a construction of those objects and events from one's own point of view.



### What Makes Us Perceive Our World In A Meaningful Form?

*The process of organising visual field into meaningful wholes is known as **form perception**.* Several psychologists have tried to answer this question, but the most widely accepted answer has been given by a group of researchers called Gestalt psychologists.

#### 6.2.1 Laws of Perceptual Organization

Some of the most basic perceptual processes can be described by a series of principles that focus on the ways we organize bits and pieces of information into meaningful wholes.

Known as **Gestalt laws of Organization**, these principles were put forth in the early 1900s by a group of German psychologists who studied patterns, or gestalts. Prominent among them are Köhler, Koffka, and Wertheimer. Gestalt means a regular figure or a form. According to Gestalt psychologists, we perceive different stimuli not as discrete elements, but as an organised "whole" that carries a definite form.

The Gestalt psychologists also indicate that the cerebral processes are always oriented



towards the perception of a **good figure or pragnanz**. That is the reason why we perceive everything in an organised form.

The most primitive organisation which takes place in the form of **figure-ground segregations** can be seen in the given pictures.

Apart from Figure and Ground a number of other principles are found to be valid for visual (as well as auditory) stimuli as can be seen in the figure below, namely: closure, proximity, similarity, continuity and symmetry.



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### 6.2.2 Principles of Perceptual Organisation

**Proximity:** Objects that are close together in space or time are perceived as belonging together or as a group.

**Similarity:** Objects that are similar to one another and have similar characteristics are perceived as a group. In the given figure the little circles and squares are placed close together yet we tend to perceive squares and circles independently.

**Continuity:** This principle states that we tend to perceive objects as belonging together if they appear to form a continuous pattern. For instance, we are more likely to view the lines crossing over.

**Symmetry:** This principle suggests that symmetrical areas tend to be seen as figures against asymmetrical backgrounds.

**Closure:** We tend to fill the gaps and perceive the objects as whole rather than their separate parts. The small angles are seen as a triangle due to our tendency to fill the gaps in the object provided.



#### INTEXT QUESTIONS 6.3

#### Match the correct statements:

- |  |              |
|--|--------------|
| 1. We perceive objects as whole rather than their parts.                                     | A. Proximity |
| 2. We are more likely to view the lines crossing over instead of independent subsets.        | B. Closure   |
| 3. Objects similar to one another and have similar characteristics are perceived as a group. | C. Symmetry  |

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- 4. Objects that are close together in space are perceived as belonging together or as a group. D. Continuity
- 5. Symmetrical areas tend to be seen as figures against asymmetrical backgrounds. E. Similarity

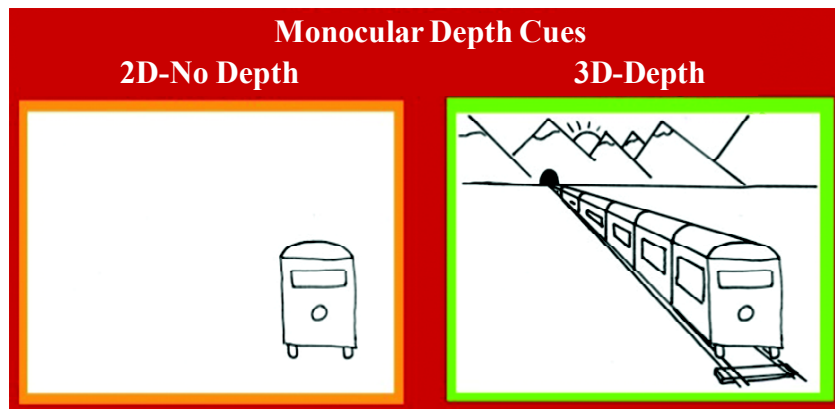
**6.2.3 Depth Perception**

The visual field or surface where things exist is called space. The space in which we live is organised in three dimensions. We perceive not only the spatial attributes (e.g., size, shape, direction) of various objects, but also the distance between the objects found in this space. While the images of objects projected on to our retina are flat and two dimensional (left, right, up, down), we still perceive three dimensions in the space. Why does it happen so?

The process of viewing the world in three dimensions is called **distance or depth perception**. Depth perception is important in our daily life. In perceiving depth, we depend on two main sources of information, called cues. One is called **binocular cues** because they require both eyes. Another is called **monocular cues**, because they allow us to perceive depth with just one eye.

**Monocular Cues (Psychological Cues)**

Monocular cues of depth perception are effective when the objects are viewed with only one eye. These cues are often used by artists to induce depth in two dimensional paintings. Hence, they are also known as pictorial cues.

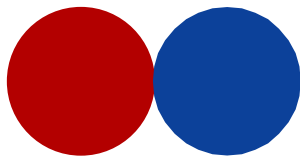


**Relative Size:** The size of retinal image allows us to judge distance based on our past and present experience with similar objects. As the objects get away, the retinal image

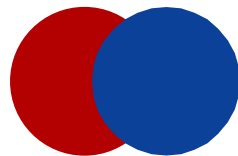
becomes smaller and smaller. We tend to perceive an object farther away when it appears small, and closer when it appears bigger.



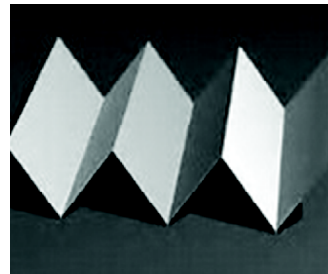
**Interposition Or Overlapping:** These cues occur when some portion of the object is covered by another object. The overlapped object is considered farther away, while the object that covers it appears closer.



Two objects side by side have no depth



Two objects that overlap add depth even though the objects represented here are in fact two-dimensional



**Linear Perspective:** This reflects a phenomenon by which distant objects appear to be closer together than the nearer objects. For example, parallel lines, such as rail tracks, appear to converge with increasing distance with a vanishing point at the horizon. The more the lines converge, the farther away they appear.



**Aerial Perspective:** The air contains microscopic particles of dust and moisture that make distant objects look hazy or blurry. This effect is called aerial perspective. For example, distant mountains appear blue due to the scattering of blue light in the

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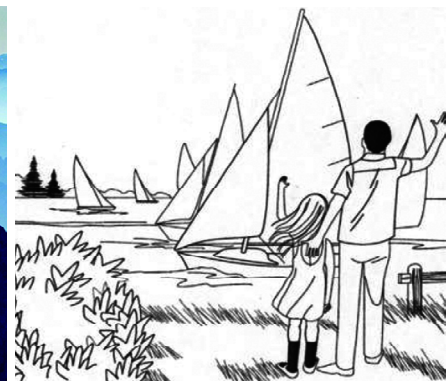
atmosphere, whereas the same mountains are perceived to be closer when the atmosphere is clear.



**Light and Shade:** In the light some parts of the object get highlighted, whereas some parts become darker. Highlights and shadows provide us with information about an object’s distance and depth.

**Relative Height:** Larger objects are perceived as being closer to the viewer and smaller objects as being farther away. When we expect two objects to be the same size and they are not, the larger of the two will appear closer and the smaller will appear farther away.

**Texture Gradient:** It represents a phenomenon by which the visual field having more density of elements is seen farther away.



**Motion Parallax:** It is a kinetic monocular cue, and hence not considered as a pictorial cue. It occurs when objects at different distances move at a different relative speed. The distant objects appear to move slowly than the objects nearby. The rate of an object’s movement provides a cue to its distance. For example-while traveling in a

bus, objects that are closer move “against” the direction of the bus, whereas objects that are further away move in the same direction as the bus.



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### Binocular Cues (Physiological Cues)

Some important cues to depth perception in three dimensional spaces are provided by both the eyes. Three of these are:

**Retinal Or Binocular Disparity:** Retinal disparity occurs because the two eyes have different locations in our head. They are separated from each other horizontally by a distance of about 6.5 centimetres. Because of this distance, the image formed on the retina of each eye of the same object is slightly different. This difference between the two images is called retinal disparity. The brain interprets a large retinal disparity to mean a close object and a small retinal disparity to mean a distant object, as the disparity is less for distant objects and more for the near objects.

**Convergence:** When we see a nearby object our eyes converge inward in order to bring the image on the fovea of each eye. A group of muscles send messages to the brain regarding the degree to which eyes are turning inward, and these messages are interpreted as cues to the perception of depth. The degree of convergence decreases as the object moves further away from the observer. You can experience convergence by holding a finger in front of your nose and slowly bringing it closer. The more your eyes turn inward or converge, the nearer the object appears in space.

**Accommodation:** Accommodation refers to a process by which we focus the image on the retina with the help of ciliary muscle. These muscles change the thickness of the lens of the eye. If the object gets away (more than 2 meters), the muscle is relaxed but as the object moves nearer, the muscle contracts and the thickness of the lens increases. The degree of contraction of the muscle is sent to the brain, which provides the cue for distance.

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## INTEXT QUESTIONS 6.4

Answer true or false:-

1. Depth perception is the ability to see the world in three dimensions.
2. There are two types of cues for depth perception: overt and covert.
3. Other names for the two types of cues are physiological and psychological cues.
4. We perceive the world in three dimensions even though the sensation is in two dimensions.



## ACTIVITY

Draw a scenery to show at least three cues of depth perception.

## 6.3 PERCEPTUAL CONSTANCY

What happens as you say bye to a friend and the person begins to walk away from you. As you watch the person, the image on your retina becomes smaller and smaller. Do you wonder why the individual is shrinking? No never. Despite the change in the size of the retinal image, perceptual constancy allows you to think that your friend is moving farther away from you. Perceptual constancy is a phenomenon in which physical objects are perceived as unvarying and consistent despite changes in their appearance or in the physical environment. Perceptual constancy leads us to view objects as having an unvarying size, shape, color, and brightness, even if the image on our retina varies. For example, despite the varying images on the retina as aircraft approaches, flies overhead, and disappears, we do not perceive the airplane as changing in shape.

Perception of the objects as relatively stable in spite of changes in the stimulation of sensory receptors is called perceptual constancy.

## 1. Size Constancy

The size of an image on our retina changes with the change in the distance of the object from the eye. The further away it is, the smaller the image is. On the other hand, our experience shows that within limits the object appears to be about the same size irrespective of its distance. For example, when you approach your

friend from a distance, your perception of the friend's size does not change much despite the fact that the retinal image (image on retina) becomes larger. This tendency for the perceived size of objects to remain relatively unchanged with changes in their distance from the observer and the size of the retinal image is called size constancy.



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## 2. Shape Constancy

In our perceptions the shapes of familiar objects remain unchanged despite changes in the pattern of retinal image resulting from differences in their orientation. For example, a dinner plate looks the same shape whether the image that it casts on the retina is a circle, or an ellipse, or roughly a short line (if the plate is viewed from edge). It is also called form constancy.



## 3. Brightness Constancy

Visual objects not only appear constant in their shape and size, they also appear constant in their degree of whiteness, greyness, or blackness even though the amount of physical energy reflected from them changes considerably. In other words, our experience of brightness does not change in spite of the changes in the amount of reflected light reaching our eyes. The tendency to maintain apparent brightness constant under different amount of illumination is called brightness constancy. For example, surface of a paper which appears white in the sunlight, is still perceived as white in the room light. Similarly, coal that looks black in the sun also looks black in room light.

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## INTEXT QUESTIONS 6.5

Answer with one- two words:-

1. Why does our experience of brightness not change despite changes in the amount of reflected light reaching our eyes?
2. The image of a coin looks different from every angle, yet we perceive it as flat and round. Why does it happen? Give reasons.
3. A red apple looks the same bright red even if it is in a dark room; what is the psychological phenomenon behind it?

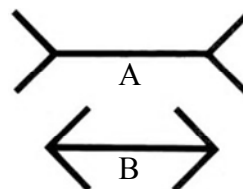
## 6.4 ILLUSIONS

Sometime we are unable to interpret the sensory information correctly. This results in a mismatch between the physical stimulus and its perception. **These misperceptions resulting from misinterpretation of information received by our sensory organs are generally known as illusions.** Illusions can be experienced by the stimulation of any of our senses. Psychologists have studied visual illusions more commonly than other sense modalities. Some perceptual illusions are *universal* and found in all individuals. For example, the rail tracks appear to be converging to all of us. These illusions are called universal illusions or permanent illusions as they do not change with experience or practice.

Some other illusions seem to vary from individual to individual; these are called *personal illusions*.

## 1. The Muller-Lyer Illusion

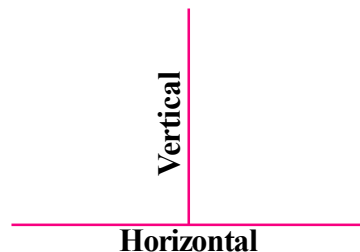
Line A is perceived as shorter than line B, although both the lines are equal. This illusion is experienced even by children and some studies suggest that even animals experience this.



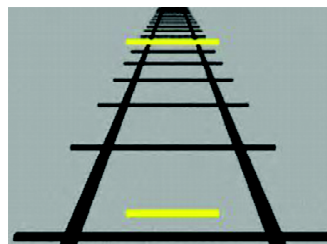


**2. Illusion Of Vertical and Horizontal Lines**

Although both the lines are equal, we perceive the vertical line as longer than the horizontal line.

**3. Ponzo Illusion**

The Ponzo illusion is a geometrical-optical illusion that was first demonstrated by the Italian psychologist Mario Ponzo in 1911. He suggested that the human mind judges an object's size based on its background. He showed this by drawing two identical lines across a pair of converging lines, similar to railway tracks. The upper line looks longer because we interpret the converging sides according to linear perspective as parallel lines receding into the distance. In this context, we interpret the upper line as though it were farther away, so we see it as longer – a farther object would have to be longer than a nearer one for both to produce retinal images of the same size.

**4. The Zöllner Illusion**

The Zöllner Illusion was created by Johann Karl Friedrich Zöllner (1834 - 1882), a German astrophysicist with a keen interest in optical illusions. Zöllner was inspired by a cloth pattern that he observed in his father's factory, and first published the illusion in the journal *Annalen der Physik* 1860. The Zöllner Illusion is one among a number of illusions where a central aspect of a simple line image – e.g. the length, straightness, or parallelism of lines – appears distorted in virtue of other aspects of the image – e.g. other background/foreground lines, or other intersecting shapes. These are sometimes called 'geometrical-optical illusions'



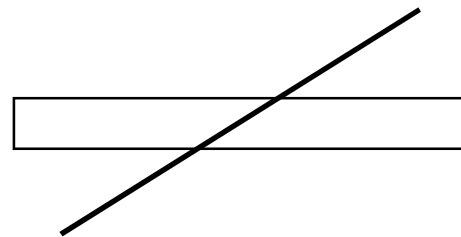
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**5. The Poggendorff Illusion**

It is named after Johann Poggendorff (1796-1877), a German physicist who first described it in 1860. Poggendorff noted that the diagonal lines in the pattern of fabric appeared to be misaligned.



**6. Apparent Movement Illusion**

This illusion is experienced when some motionless pictures are projected one after another at an appropriate rate. This illusion is referred to as “phi-phenomenon”. When we see moving pictures in a cinema show, we are influenced by this kind of illusion. The succession of flickering electrical lights also generates this illusion. For the experience of this illusion, Max Wertheimer had reported the presence of appropriate level of brightness, size, spatial gap, and temporal contiguity of different lights.



**INTEXT QUESTIONS 6.6**

**Fill in the gaps:**

1. Some perceptual illusions are \_\_\_\_\_ and found in all individuals. For example, the rail tracks appear to be converging to all of us.
2. Some other illusions seem to vary from individual to individual; these are called \_\_\_\_\_ *illusions*.

3. When we see moving pictures in a cinema show, we are influenced by this kind of illusion. This is called the \_\_\_ - \_\_\_\_.



**ACTIVITY**

Draw two parallel lines of exactly the same length. Put an arrowhead on one and a feather head on the other. Show to people around you and find out which line appears bigger/ longer.

**Is There Perception Without Sensation? Extrasensory Perception**

Extra Sensory Perception (ESP) refers to such abilities of people which do not include the usual sensory organs, but an abstract sixth sense. Such abilities include knowing something ordinary people cannot know, communicating with people who are not in the immediate surroundings, knowing about events happening in distant places or about the future events that are going to take place. There are three types of ESPs. They are telepathy (connecting to people which are not around at that point of time), clairvoyance (being aware of such things which most of the others are not), and precognition (awareness of future events). For example, have you heard of Baba Vanga, a mystic who was famous for predicting the future events, or do you know about Lorraine Warren, the famous demonologist, was a gifted clairvoyant too. Like them, many people have such abilities to see, predict or feel things without any direct input from the usual sensory organs. Psychologists are particularly sceptical of reports of extrasensory perception. However, due to the difficulty of observing this procedure objectively, researchers feel that this concept cannot be studied using the traditional scientific methods and that the experimental findings in this area are unreliable and inaccurate. Most psychologists reject the existence of ESP. Thus, this topic usually gets slipped into the area of pseudo-psychology and still remains on the periphery of the mainstream of Psychology.



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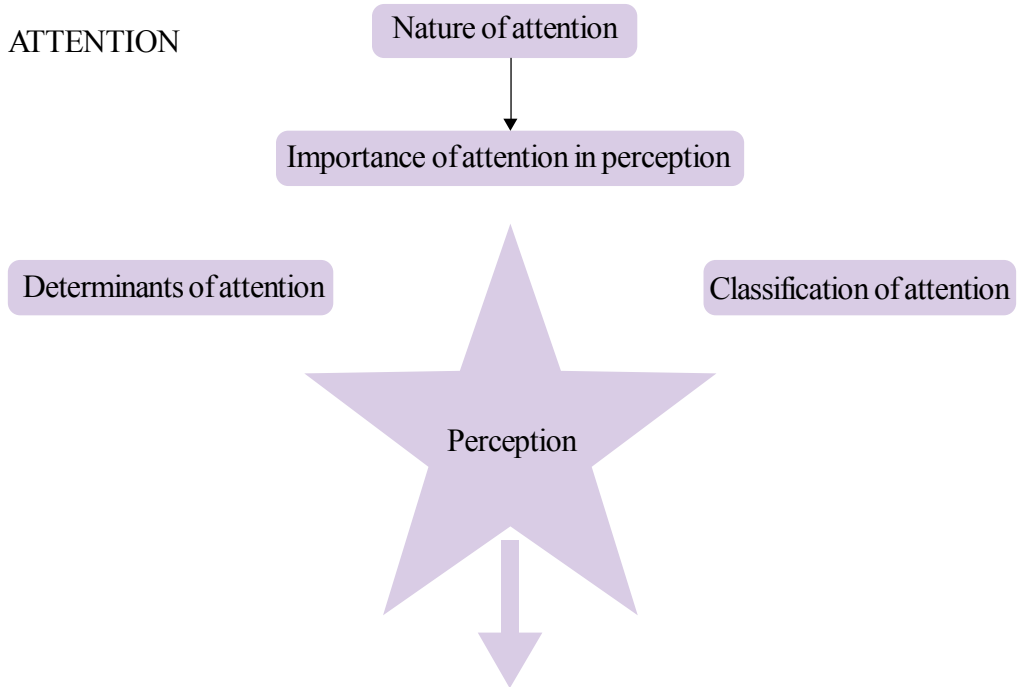
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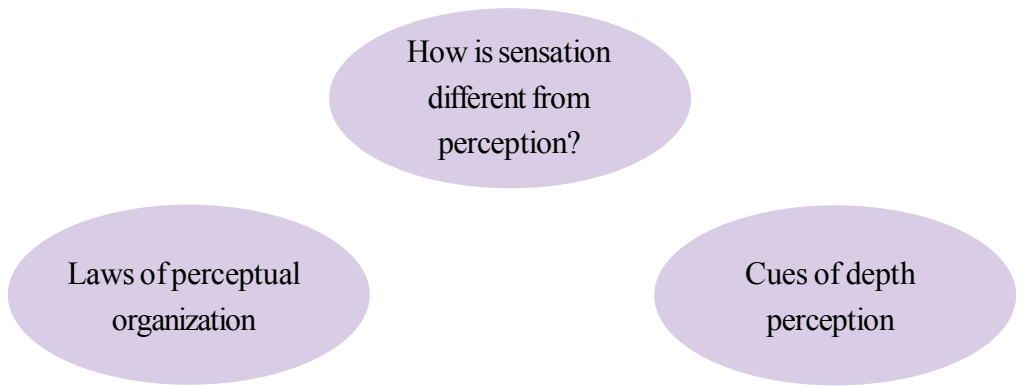
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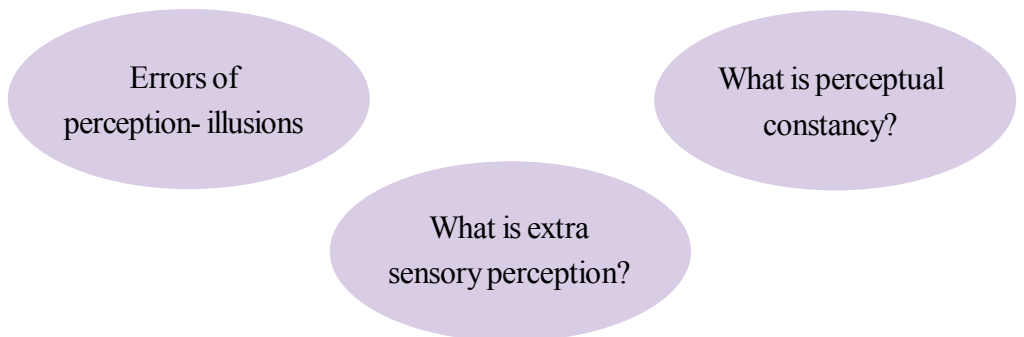
**WHAT YOU HAVE LEARNT**



**SENSATION AND PERCEPTION**



**ERRORS IN PERCEPTION**





**TERMINAL QUESTIONS**

1. Distinguish between selective and sustained attention.
2. Enumerate the laws of perceptual organization.
3. The retinal image of the world is only two dimensional- yet why do we perceive the world in three dimensions? Explain.
4. What is perceptual constancy? Explain with your own examples.
5. Describe any three illusions.
6. Differentiate between sensation and perception.
7. What are the different internal and external factors affecting selective attention
8. What were the contributions of the Gestalt psychologists?
9. Explain ESP. Why many psychologists reject the existence of ESP?
10. While perceiving depth what are the two main sources of information we depend upon?



Notes



**ANSWERS TO INTEXT QUESTIONS**

**5.1**

1. Attention
2. Alerting function
3. Fringe and focus
4. Sustained and selective
5. Cocktail party effect

**5.2**

1. Physical
2. Need, interest and emotional state.
3. Movement

**Basic Psychological Processes**



**Notes**

4. Change

**5.3**

1. B

2. D

3. E

4. A

5. C

**5.4**

1. True

2. False

3. True

4. True

**5.5**

1. Brightness constancy

2. Shape constancy

3. Brightness constancy

**5.6**

1. Universal

2. Personal

3. Phi Phenomena