

Levels of category

Basic Level Category:

Subordinate Category:

Superordinate Category:

Stages of development of Piaget

- 1. Sensorimotor stage 0-2**
- 2. Preoperational stage 2-7**
- 3. Concrete operational stage 7-11**
- 4. Formal operational stage 11 onwards**

Write the names of three groups of psychologists who did experiments on road accidents according to automaticity?

Accident prone drivers: 2 or more severe accidents in one year

Accident-free drivers: no accidents in the same period

Intermediate drivers: in-between the two groups

Name of 2 eidetic imagery scientist

Anees A. Shaikh & Dr. Akhtar Ahsan

Memory inferences scientist

Brewer & Treyens

Automatic influence where people change their attention

Enduring Disposition

Who discovered ganglion cells?

Kuffler in 1953

Sperling conducted experiments on

An experiment was conducted by Sperling in the field of visual sensory memory.

We are living in past, not in passive term. We receive auditory information that is how much seconds old?

Receive visual information that is one second old, auditory information that is 5 seconds old.

Two undergraduate Gray and Wedderburn conducted experiments on where?

At Oxford in 1960

Definition of Good form

It is a type of closure. We fill in the gaps perceive form rather than disconnected lines.

Which is advantage of automaticity?

☐ Helps us make decisions with little effort ☐Protects us from information overload

Who gave object perception?

Marr & Nishihara (1978)

Gestalts are the basically principal of?

Gestalt principles are basically principles of perception.

What brain imaging technique is better?

Functional magnetic resonance imaging or fMRI is better imaging technique

Difference between recognition and recall

The first process is recognition the second involves recall.

Recognition refers to our ability to recognize, while recall gets back the related details from memory.

Schema n house example (long)

Schemas represent the structure of an object, on various attributes. In House, it is Building. Building has walls, roof, it is built on the ground etc

Jean Piaget's theory and assumption about child (long)

Theory: Piaget proposed his cognitive development theory in that Piaget focused on the biological maturation of cognitive abilities.

Assumption: Child is naturally curious. Child wants to explore things.

Visual pathways (long)

The visual pathway can be simply described as starting from the retina where the image is formed to the optic nerve.

Pq4r method

This is also an important technique it is consisted on these phases. Preview, Questions, Read, Reflect, Recall, Review

Enlist 3 names of any attention theories

Early Selection vs. Late Selection,, Capacity & Stage of Selection,, Multimode Theory

Difference in short term memory and long term memory with accuracy and capability

Memory that we use to function is called short term memory. Long Term Memory is an infinite storehouse. Short Term Memory is limited in capacity.

Diff between automatic and controlled process in task int

Automatic processes complete themselves without conscious control by the subject. Controlled processing requires conscious control

Question about task interference which is programmed in that scenario

Automatic processes should not interfere with each other because they require little or no capacity. Effortful processes should interfere with each other because they require considerable capacity.

Similarity

This law says that same things are considered one thing. Similar items tend to be organized together.

Hasher and Zacks proposed how much criterion for automaticity?

Hasher & Zacks (1979) proposed five criteria to distinguish between automatic and controlled or effortful processes

Explain multimode theory?

A theory that proposes the people's intentions and demands of the task determine at information processing stage.

What is grammar and kinds of violations?

A set of structure rules for language.

Kinds of violations: Reject semantic violations

Reject phonological violations

Available capacity will allocated to attention depending on the state of?

Available capacity of attention will be allocated depending on the state of arousals. So there is allocation policy. Then there are some possible activities.

Waugh n Norman's experiment (long)

They varied the number of interfering items. They varied the rate as 1 digit or 4 digits per second. The purpose of varying the rate of presentation was that they thought when we vary the presentation then we can capture time factor.

Subsidiary task

A task that typically measures how quickly people can react to target stimulus in order to evaluate the capacity demands of the primary task.

Write about gestalt principles proximity, similarity and good continuation?

Proximity: The law of proximity says that items which are close together in space or time tend to be perceived as belonging together or forming an organized group.

Similarity: This law says that same things are considered one thing. Similar items tend to be organized together.

Good continuation: The tendency to perceive a line that starts in one way as continuation in the same way.

Theory of Palmer

Palmer found that subjects could recognize the parts most rapidly when they were the segments predicted by the Gestalt principles

Sperling's partial report procedure

In Sperling's experiment the same array of letter was presented to the subjects but the subjects were asked to report the letters according to the cue. After the array was turned off, a tune was sounded high, medium or low. High tone cue for top row, Medium tone cue for middle row, Low tone cue for Bottom row

Why Penfield experiment discounted by scientists

Unfortunately, it is hard to know whether the patient's memory reports were accurate, since going back in time to check on whether the events reported actually occurred was nearly impossible. Therefore, although suggestive, the Penfield experiments are generally discounted by memory researchers. Even so, the question of forgotten memories and its importance remains the same.

Template matching

The template-matching theory of perception assumes that a retinal image of an object is faithfully transmitted to the brain. An attempt is made to compare it directly to various stored patterns. These patterns are called templates. So, the basic is that the perceptual system tries to compare the letter to templates it has for each letter and reports the template that gives the best match

Depression and Arousal effects on automatic process and control processes

Emotional states such as depression or high emotional arousal can reduce the effectiveness of effortful processes. If we are in sad mood and someone give us a difficult and demanding task we cannot concentrate on that task and cannot learn well. We are not able to learn and pay attention in class room when we are in sad mood.

Automatic processes should not be affected by emotional states. Like, if we have to brush our teeth we can do it even if we are in sad mood

Features of feature analysis and how it is better than template model

The features for alphabets may consist of horizontal lines _ vertical lines | Lines at approx. 45 degree angle / And curves (

The feature model has a number of advantages over the template models

Subsidiary task and reaction time with the help of an experiment

A task that typically measures how quickly people can react to target stimulus in order to evaluate the capacity demands of the primary task

A series of 5 experiments was conducted to measure the amount of capacity required to perform a task and they record how quickly a person responds to a subsidiary task (reaction time). Main task was a selective listening task. In selective listening task there are different voices in both ears. And subjects are asked to attend only one voice or one list and repeat it.

The Subsidiary task was to a randomly appearing light signal by pressing a button.

Pattern recognition

In psychology and cognitive neuroscience, pattern recognition describes a cognitive process that matches information from a stimulus with information retrieved from memory.

Segmentation is a major problem in speech recognition explain with the help of an example

Segmentation is a major problem because speech is not clearly demarcated the way written text is.

Native speakers always mix words together in their speeches. They do it unconsciously. It seems there are clear gaps between words but that is an illusion. For example in Urdu;

“Kya haal hay and kya ho raha hay” The person who does not know Urdu he understands these words as kyaalay and kyaoray. The speech appears to be continuous stream of sounds with no obvious word boundaries Fluid bridge between neurons

Speech recognition and (or) auditory recognition

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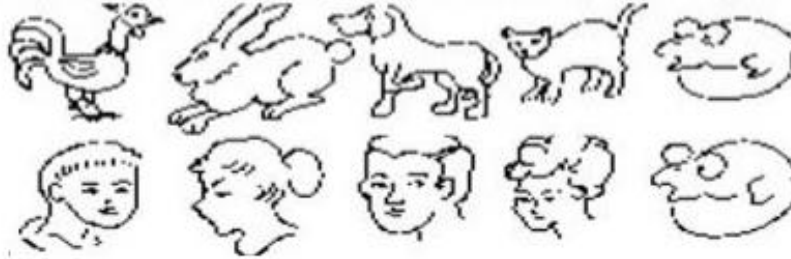
kyaoray. The speech appears to be continuous stream of sounds with no obvious word boundaries.

It is our familiarity with our own language that leads to the illusion of word boundaries.

Why do we perceive things differently though the things have same parts? Explain it with real life example? Pg67 lesson 20

Context & Pattern Recognition

Look at the top line you see a hen, a rabbit, after the rabbit there is dog and cat. After that there is an animal even it is not clear. In bottom line you can see a picture of man, woman, child and girl. We perceive the last picture as a picture of human. Even this picture is same like the above picture. Because of the context we perceive things. Same picture when is included in animals picture we perceive it as animal and when this is in human pictures we perceive it as human.



Palmer experience on subject Pg. 40, lesson13

Palmer (1977) studied subjects' recognition of figures such as the ones in following figure. He first showed subjects stimuli such as (a) and then asked them to decide whether fragments (b)-(e) were part of the original figure. Stimuli (a) tends to organize itself into a triangle and a bent letter n. Palmer found that subjects could recognize the parts most rapidly when they were the segments predicted by the Gestalt principles. Thus we see that recognition depends critically on the initial segmentation of the figure. The figure is;



FIGURE 2.11: Examples of stimuli used by Palmer (1977) for studying segmentation of novel figures: (a) the original stimulus that subjects saw; (b to e) the subparts of the stimulus presented for recognition. Stimuli shown in (b and c) display good subparts; (d and e) give bad subparts.

What happen during pronunciation b & p?

The voice timing difference between b and p, and the difference is 60 ms. P has long interval between release and voicing and b has short interval

Automaticity: Another Perspective

Shiffrin & Schneider (1977) argue that it is best to think of Automaticity as a matter of degree rather than a distinct category.

Attention and Effort in Kahneman's Capacity Model

"Attention and Effort" was a major work of Kahneman (Kahneman, 1973). He shifted the focus from bottleneck to capacity. There is flexibility in attention, like we can change our attention from one thing to other thing.

Schneider & Shiffrin experience

Shiffrin & Schneider (1977) performed a series of experiments contrasting controlled vs. automatic processing.

They said automatic processes complete themselves without conscious control by the subject. In the visual and auditory report tasks reviewed earlier, the registering of the stimuli in sensory memory is an automatic process.

Kahneman's Capacity Model

In this model there are many miscellaneous determinants that impact sensory system. Something happens that trigger arousal.

Factors that have impact on allocation policy

The factors that have impact on allocation policy are:

Arousal: A physiological state that influences the distribution of mental capacity in the various tasks.

Enduring Disposition: An automatic influence where people direct their attention

Monetary Intentions: A conscious decision to allocate attention to certain tasks or aspects of the environment.

1) According to Sperling's experiments on memory decay, how much time over visual memory take to lose most of the information?

1 second

4 second

5 second

3 second

2) Which field view computers like humans so can solve problems and learn new things?

Thinking machines

Artificial intelligence

Artificial intellect

Artificial thinking

3) which part of our brain receives information coming from auditory organs?

Frontal lobe

Occipital lobe

Parietal lobe

Temporal lobe

4) Identify the famous Muslim scholar who discovered the structure and function of nearly a thousand years ago?

Ibn-al-Haitham

Aristotle

Ibne sena

Plato

5) At what level most of the information is declared in a few seconds?

Short term memory

Episodic memory

Sensory memory

Semantic memory

6) human brain is mostly divided into _____ lobes

Four

Six

Three

Two

7) Two solid neurons are connected with each other by a fluid Bridge known as which of the following?

Axon

Ganglia

Synapse

Neurotransmitters

8) which of the following was among the first applied behavioral mods do the treatment of mental illness and also use the term reciprocal inhibitions?

Joseph Wolpse

B.F Skinner

J.B Watson

Ivan Pavlov

9) If someone tries to study that which part of the brain is related to the vision of sight what will be the type of his/her description?

Hardware-level

Software level

Chemical level

Neural level

10) which animal was used by Hubel & Wiesel buy in their experiments to study the visual cortex?

Cats

Aps

Rat

Monkey

Quiz NO.2

1)

Which of the following is the disadvantage of template matching model

Human perceptual system more Complex and flexible

Most patterns were encounter undergo no and change

Letters have no different font sizes and styles

It is not easier model to interpret words

2)

Which of the following language is subcontinent uses the tone to generate different meaning?

Punjabi

Persian

Hindi

Marathi

3)

Template matching model has been studied mainly for what?

Letters and words

Phrases and Phonics

Similar words in meaning

Perceptual organisation

4)

Which of the following metaphor explain the attention as a narrow Lane having not enough space to flow?

Bottle neck

Spotlight

Traffic

Electricity wires

5)

Voice is actually what?

Human sound

Animal sound

Any sound

Language

6)

VOT is an abbreviation of what?

Voice onset time

Voice of Tonga Wala

Vision on terror

View of Tibet

7)

Native speakers of a language always_____ a words together in their speeches.

Mix

Generalize

Differentiate

Speak

8)

The template matching is a model developed to account for which of the following?

Sensation

Auditory function

Language development

Perception

9) The benefits of automatic skill may include which of the followings?

It allows us to perform routine activities without much concentration or mental effort

We may make silly mistakes

We may fail to remember what we did

We are not able to show others how we do a task

10) Marr & Nishihara proposed that similar objects can be seen as configuration of simple _____

Pine-like

Pen-Like

Pain-Like

Pipe-Like