

Introduction to Human Sciences (HS8.102)

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19 Apr, Tuesday (Lecture 4)

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Experimental Analysis

At the psychological level, what happens when we attempt to perform some tasks without the perceptual cues (for instance, with eyes closed) we are used to?

The initial stage shows impairment in task performance because of the lack of cues (*e.g.* visual feedback). This may manifest as disorientation, loss of balance, and so on.

Thereafter, the participant realises and develops alternative cues to help in the task. It is difficult initially but the participant devises a way to handle it eventually.

Perception

Perception is an organisation, identification, and interpretation of the sensory input. The image is sent from the eye to the brain through a *retinotopic mapping*.

We follow a gestalt approach to perception; the whole image is more than the sum of its parts. We organise our perception on the basis of similarity, proximity, continuity and closure.

Searching is a common perceptual task that we perform on a daily basis. There are two types of search – terminative (which ends as soon as the target is found) and exhaustive (which ends when all possibilities are processed).

Attention is another phenomenon related to perception. It involves selection, filter and focus. It enables us to focus on relevant information selectively while ignoring irrelevant information.

Attention may even influence perception: we may fail to perceive objects that are not the centre of attention, or to detect changes to the visual details.

It has been theorised that attention works as a kind of glue, allowing us to integrate the features of an object.

Attention also influences memory.