

Imagination

Imagination is more important than knowledge. For knowledge is limited to all we now know and understand, while imagination embraces the entire world, and all there ever will be to know and understand.

Albert Einstein

[DEFINITION] Merriam-Webster Dictionary

Imagination - an act or process of forming a conscious idea or mental image of something never before wholly perceived in reality by the one forming the images (as through a synthesis of remembered elements of previous sensory experiences or ideas as modified by unconscious defense mechanisms).

How It Works

Mental Synthesis Theory

5 The neurons of prefrontal cortex and posterior cortex are connected by the neural fibers. Prefrontal cortex sends electrical signals to the posterior cortex in order to activate multiple neuronal ensembles. As a result, we "imagine" complex yet unrealistic imagery.

4 Prefrontal cortex, which is involved in all complex cognitive functions, is most likely to be involved in the coordination of the simultaneous firing of neurons.

3 If the neuronal ensemble for different objects are activated at the same time, it becomes possible to perceive two separate objects as a single image.

1 When we look at an object, the neurons in posterior cortex fire in order to encode the characteristics of the object, such as colour, shape, texture.

2 As the neurons fire in synchronicity, they are strengthening their connections between a set of neurons. This process creates a neuronal ensemble for a particular object.

[THE HEBBIAN PRINCIPLE] neurons that fire together wire together.

Types of Imagination

Most often imagination is perceived as a part of creative thinking; however, there are several types of imagination.

[Passive Imagination]

Images come to mind by themselves and are automatically combined. While daydreaming, we use our passive imagination.

[Active Imagination]

It takes an effort to combine imagery and create new patterns. The mind selects certain past experiences and rejects others. Writing an essay is an example of this type of imagination.

[Creative Imagination]

While using this type of imagination, we take information from within in order to rearrange it and create a completely new concepts and imagery. Writing a novel would be a good example of creative imagination.

[Intellective Imagination]

Also known as cognitive imagination, it is used for creation of the new intellectual concepts such as mathematical of physical theories.

[Receptive Imagination]

The mind is influenced from without to picture described scenes. Reading requires receptive imagination.

[Image Imagination]

We have an ability to retrieve imagery of the past experiences from our memory. While imagining a places we visited years ago or the faces of people we know, we use our image or reproductive imagination.

[Esthetic Imagination]

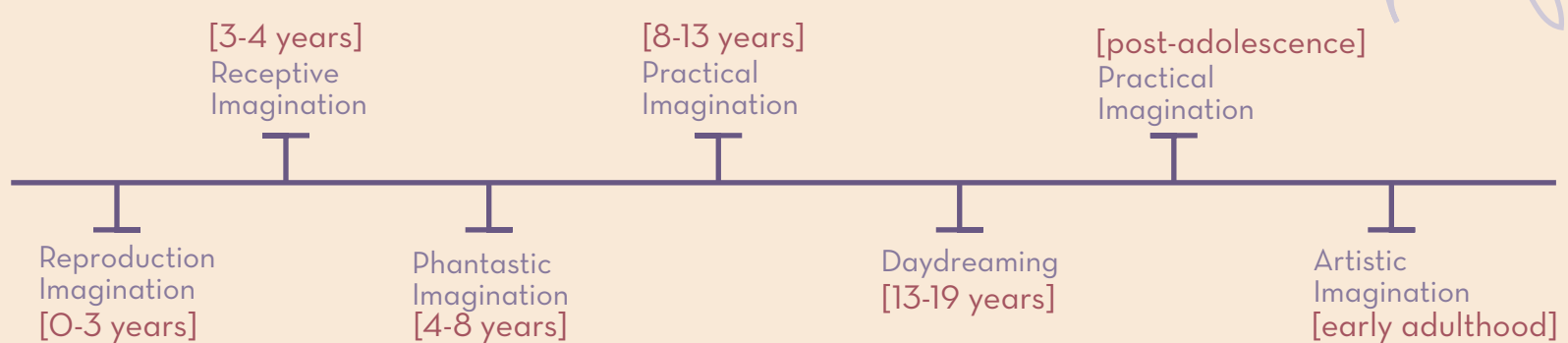
Beauty creates a sense of pleasure, and we can use our imagination to satisfy this need. May be phantastic or artistic. Phantastic is a play of imagination (as in daydreaming). Artistic can create new concepts and ideas.

[Practical Imagination]

Practical imagination is controlled by the conditions from within. When planning an event or a journey, we resort to this type of imagination.

Development of Imagination

Imagination depends on our memory which, in it's turn, depends on our perception of events. During the course of our lives we develop different types of imagination.



Imagination & Mental Health

Enjoyment

imagination allows to relive past experiences;
helps to enjoy descriptions of different things;
opens up a possibility to admire beauty;
helps with establishing social connections through humor, metaphors, and other means of expressive language.

Sympathy

imagination allows to put oneself in the place of others;
helps us to enjoy the narrative by identifying with the characters.

Creative Work

enables our creative abilities in almost every area of life.

References

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