Throughout the history of scientific, psychological, and philosophical research numerous theories and approaches have been posited about how human beings interact with and interpret objects and their forms. Some approaches are completely contradictory while others support each other or differ slightly.

Gestalt Approaches

The Gestalt psychological school of thought was applied to perceptual attitudes about objects and form by subscribers like Max Wertheimer and Kurt Koffka in the 1930s and 40s. These gestalt laws of perceptual organization studied how humans have a tendency to observe parts of an object and fill in the rest of the parts, creating a conceptually whole object in their minds.

Gestalt Laws

One principle is the law of proximity, which states that when we see several objects near each other, we tend to associate them as a group. The law of Pragnanz, or figure-ground, states that when someone is witnessing a visual field, the field will be separated into objects that appear prominent and those that appear to be part of the background. The law goes on to suggest that when the observer shifts his focus, so also shift which objects are in the background and foreground. The law of symmetry works on the basis that objects can be divided into two essentially symmetrical halves. When people see two unconnected components, they tend to combine the two into one object in a coherent form. The law of closure states that we unconsciously complete the form of an object that is actually not complete. One prominent real-world example of this is the logo of the IBM corporation, which is comprised of a series of unconnected lines forming the shape of the "I," "B" and "M" that is filled in by people looking at it.

Viewer and Object Centered Representation

Two contrasting approaches to objects and forms are the viewer-centered and object-centered representation. The viewer-centered representation holds that the observer will view an object in a way that is significant to him, and that this is the only consideration for their perception. The object-centered representation holds that a person sees a form of an object independent of how they perceive it. Both theories explain how a person can process an object's appearance, but the difference is whether they are using themselves or the object as the measure of what they will perceive.

Aristotle and Perception

A similar approach is found in the writings of Aristotle on sense perception. He believed that each sense we use requires a medium to complete an object perception. In the case of sight, it is light, which he called "the transparent," that helps our eyes to see objects directly. Aristotle believed that we do not interact with any objects directly and that the eye literally becomes like the form of a given object being witnessed. Before we focus our eyes on an object, the medium enables us to see it; he believed we have the potentiality to see a chair as a chair, for example. Once the medium intervenes between the chair and the eye, we see the chair in its actuality.

Key Concepts

- approaches object form
- object form perception

• approach object perception

References

- <u>Interaction Design: Principles of Form Perception</u> [http://www.interactiondesign.org/encyclopedia/gestalt_principles_of_form_perception.html]
- <u>Perusus: Aristotle on Sence Projection</u> [http://perseus.mpiwgberlin.mpg.de/GreekScience/Students/Tom/Anima.html#sec3]