Describe and evaluate the gestalt laws of perceptual essay

Gestalt theory emerged as a result of three German psychologists, who did not agree with the idea of introspection, and analyzing perception to items it into individual sensations. They argued that, rather than separate sensations, we perceive objects as organized wholes. Gross (1987) attempted to explain this using the analogy of water; as a whole, it has different chemical properties to its components, hydrogen and oxygen. We organize and remember the arrangement of objects using a set of heuristics, and these help us to understand and survive In a constantly evolving oral.

Firstly, the key aspects of Gestalt theory will be outlined, and then the strengths and criticisms of the model will be discussed with regards to relevant studies. One of the heuristics the Gestalt theory proposes is that we group elements together based on proximity, meaning that objects that are close together In space are often perceived together. This does not occur with Just auditory sensations, for Instance, a melody is just a series of notes played after each other, and we group them together due to their proximity. Another is the idea of closure.

The brain tends to fill in parts of an object if they are missing, in order to complete its shape. This is because it is much easier to perceive a closed image, rather than an incomplete one.

There are often cases where people see pictures of celebrities in unexpected places, such as on a piece of toast, and this can be due to their perception, ignoring gaps and perceiving a full or closed Image. The principle of similarity is another important concept within the Gestalt theory. Elements that are similar will be grouped together, and follow the same pattern.

The military could be in how they are orientated, or the shape of the element. The theory also mentions common fate, which Is when a set of elements all move in the same direction at the same speed, and so are perceived as to move as one.

This Is shown when flocks of birds migrate at the same time, or when schools of small flash swim together. As well as this, there is the law of continuity or good continuations. Our perceptual organization usually follows the smoothest path continually, rather than breaking it up into smaller, irregular patterns.

Perception finds the trend of action of the element, or the direction it is traveling, so elements that are on the same motion track are following the same smooth pathway.

The penultimate cognitive method is named the figure-ground principle. When we look at an object, the object itself is known as the figure, and this stands out against a background, called the ground. Often the smaller of the two areas becomes the figure, but it can be altered by the orientation of the object or image. Interestingly, this perception can be reversed when we switch our attention, demonstrated by the ammos Rubin vase.

All of these heuristics are categories of the Law of Pregnant, are simple and consistent. For example, a seemingly complex image may be easily perceived as a number of different shapes that have been combined. One of the more disputed claims of the Gestalt theory is their ‘ Doctrine of Isomorphism’, which is their attempt to explain the mechanisms behind perception. They state that when we perceive an object, the structure of that

object is replicated inside the brain as electrical activity. So if someone perceives a square, supposedly a square shaped trace of electrical activity should appear somewhere in the brain.

However, there is no evidence to support this neural aspect of the theory, as it is Just speculative, so it has no validity. Many studies have researched different features of this model of perceptual organization. Naval (1977) decided to test the idea of the whole being perceived rather than its components, by presenting participants with large (global') letters made up of many small (local') letters. He found that subjects perceived the global letters much quicker and easier than the local letters.

This shows that perception egging with global processing, before any perceptual detail is seen, supporting the Gestalt's view.

On the other hand, Chinchilla and Wolf (1977) found conflicting evidence, using much bigger images, concluding that rather than a top-down approach, perception involves a ' middle-out' effect, where firstly intermediate structure is established, before both the overall structure and detail appeared. This suggests that the Gestalt theory of perceptual organization does not always occur, and so cannot be generalized to all situations. Palmer (1977) tries to account for this variation in perception.

His views fall somewhere in between the Gestalt approach and the concept of analyzing everything into separate sensations.

The model he proposes states that there is a hierarchical analysis of the visual form. This begins with the overall structure, before filling in the

individual features and finer detail. Palmer found that at every stage of construction, different Gestalt principles are used to group the elements together in order to complete the final object. This lends support to the Gestalts, proving that in certain circumstances, the principles are used to create our perception.

There are many real life examples supporting this theory of perceptual organization. Animals have various types of camouflage that makes it difficult to be seen.

One form of camouflage is disruptive acculturation, as seen in zebras. It involves two or more contrasting colors, meaning there are fewer ‘ edge pieces’ to construct the entire animal. It is then more difficult to perceive, and therefore harder to distinguish, thus increasing its chances of survival and reproduction.

Military vehicle designers also use this technique to avoid detection, or make it difficult to perceive the size of the icicle. Cuticle et al. (2005) investigated these effects, conducting an experiment using moth-like targets with different colored wings.

They found that those with disruptive acculturation wing patterns were a lot less likely to be eaten by birds when left outside compared to those with background pattern matching, which is where predators use categories of the Law of Pregnant when searching for prey, and using the principles can aid camouflage, giving support to the theory.

One problem with this study is that the moth targets were not really designed to copy real moths, so mom types of predator may have ignored them, which could have influenced the results and thus lowered the reliability of the research.