

C. Rules of Organization

Structuralists Versus Gestalt Psychologists

What was the great debate?

In the early 1900s, two groups of psychologists engaged in a heated debate over how perceptions are formed. One group, called the structuralists, strongly believed that we added together thousands of sensations to form a perception. Another group, called the Gestalt psychologists, just as strongly believed that sensations were not added but rather combined according to a set of innate rules to form a perception (D. J. Murray et al., 2000). One group won the debate and you might guess which one before you read further.

Structuralists

As you look at the scene in the middle of this page, you perceive a fountain at the bottom with shrubs and palm trees on the sides, all topped by a large dome of glass windows. Is it possible that your brain combined many thousands of individual sensations to produce this complex perception? If you answer yes, you agree with the structuralists.

The *structuralists* believed that you add together hundreds of basic elements to form complex perceptions. They also believed that you can work backward to break down perceptions into smaller and smaller units, or elements.

Structuralists spent hundreds of hours analyzing how perceptions, such as a falling ball, might be broken down into basic units or elements. They believed that once they understood the process of breaking down perceptions, they would know how basic units are recombined to form perceptions. Thus, structuralists believed that you add together basic units to form perceptions, much as you would add a column of numbers to get a total.

For example, structuralists would say that you add together hundreds of basic units, such as colors, bricks, leaves, branches, tiles, pieces of glass, and bits of steel, to form the perception of the scene above. However, the structuralists' explanation of adding bits to form a perception was hotly denied by Gestalt psychologists.



Do you add together basic elements to form perceptions or does your brain have rules for forming perceptions?

Gestalt Psychologists

The Gestalt psychologists said that perceptions were much too complex to be formed by simply adding sensations together; instead, they believed that perceptions were formed according to a set of rules.

Gestalt psychologists believed that our brains follow a set of rules that specify how individual elements are to be organized into a meaningful pattern, or perception.

Unlike the structuralists, the Gestalt psychologists said that perceptions do not result from adding sensations. Rather, perceptions result from our brain's ability to organize sensations according to a set of rules, much as our brain follows a set of rules for organizing words into meaningful sentences (Donderi, 2006).

So how would Gestalt psychologists explain your perception of the scene on the left? They would say that your perception was not formed by simply adding bits of tile, steel, and foliage into a whole image. Rather, your brain automatically used a set of

rules to combine these elements to form a unified whole. To emphasize their point, Gestalt psychologists came up with a catchy phrase, "The whole is more than the sum of its parts," to mean that perceptions are not merely combined sensations. The Gestalt psychologists went one step further; they came up with a list of organizational rules.

Evidence for Rules

Who won the debate?

Gestalt psychologists won their debate with the structuralists for two reasons. The first reason comes from our own personal perceptual experiences. For example, as you look again at the beautiful scene above, we must reveal that it is entirely fake. The scene, which looks so realistic and three-dimensional, is actually painted on a flat wall. It seems impossible that we could have such a complex, three-dimensional perceptual experience from simply combining bits and pieces of bricks, branches, leaves, and steel. This fake but truly realistic scene makes the Gestalt motto come to life: "The whole is more than the sum of its parts."

Equally convincing evidence that the whole is greater than the sum of its parts came from a remarkably detailed series of studies in which Gestalt psychologists presented stimuli to subjects and then asked them to describe what they perceived (Rock & Palmer, 1990). On the basis of subjects' reports, researchers discovered that forming perceptions involved more than simply adding and combining individual elements. Modern research has generally supported the early Gestalt conclusion that our brains actually do follow a set of rules for organizing and forming perceptions (Palmer et al., 2003). We'll explain these rules for organizing perceptions next.

Perception: Step 2 – Organization

Name: _____

What did the structuralists believe?

Summarize below

What did the Gestalt psychologists believe?

Summarize below

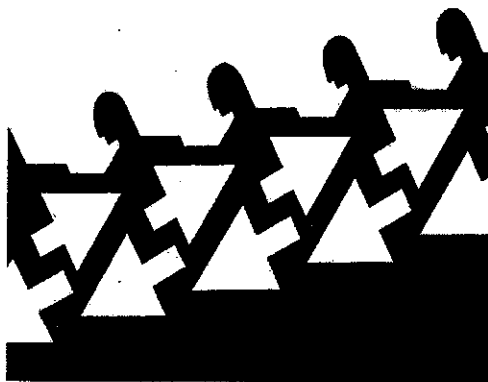
How do structuralists believe one forms perceptions?

How do Gestalt psychologists believe one forms perceptions?

How would structuralists explain your perception of the fountain scene?

How would Gestalt psychologists explain your Perception of the fountain scene?

What is meant by the phrase "The whole is more than the sum of its parts"? *IN YOUR OWN WORDS*



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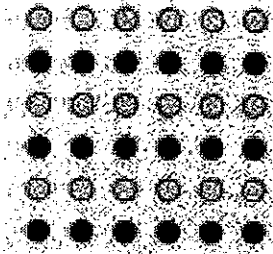
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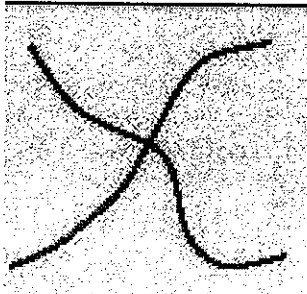
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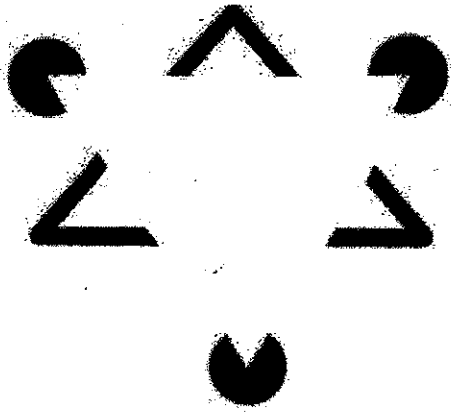


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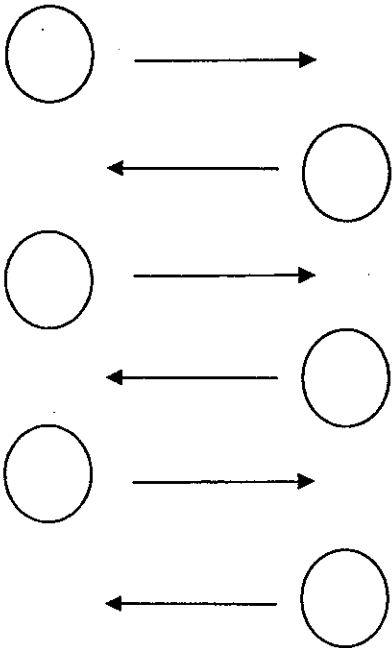
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