Elements of Conscious Experience

Having defined the subject matter and methodology for his new science of psychology, Wundt outlined his goals as follows:

- Analyze conscious processes into their basic elements.
- Discover how these elements are synthesized or organized.
- Determine the laws of connection governing the organization of the elements.

Sensations Wundt suggested that sensations were one of two elementary forms of experience. Sensations are aroused whenever a sense organ is stimulated and the resulting impulses reach the brain. Sensations can be classified by intensity, duration, and sense modality. Wundt recognized no fundamental difference between sensations and images because images are also associated with excitation of the cerebral cortex.

Feelings: Feelings are the other elementary form of experience. Sensations and feelings are simultaneous aspects of immediate experience. Feelings are the subjective comple- ments of sensations but do not arise directly from a sense organ. Sensations are accompanied by certain feeling qualities; when sensations combine to form a more complex state, a feeling quality will result.

Wundt proposed a tridimensional theory of feelings, based on his personal introspective observations. Working with a metronome (a device that can be programmed to produce audible clicks at regular intervals), he reported that after experiencing a series of clicks, he felt that some rhythmic patterns were more pleasant or agreeable than others. He concluded that part of the experience of any pattern of sound is a subjective feeling of pleasure or displeasure. (Note that the subjective feeling occurred at the same time as the physical sensations associated with the clicks.) Wundt then suggested that this feeling state could be located on a continuum ranging from highly agreeable to highly disagreeable.

Continuing the experiments, Wundt noticed a second kind of feeling while listening to the metronome's clicks: a slight tension in anticipation of each successive sound, fol- lowed by relief after the awaited click had occurred. From this he concluded that in ad- dition to a pleasure/displeasure continuum, feelings had a tension/relaxation dimension. Further, he felt mildly excited when he increased the rate of clicks, and calmer, even somewhat depressed, when he reduced the rate of clicks.

Thus, by varying the speed of the metronome and introspecting and reporting on his immediate conscious experiences (his sensations and feelings), Wundt arrived at three independent dimensions of feeling: pleasure/displeasure, tension/relaxation, and excitement/ depression. Every elementary feeling could be effectively described by determining its location within this three-dimensional space—that is, its position on each of the dimensions.

Because Wundt considered emotions to be complex compounds of elementary feelings, if one could pinpoint the elementary feelings within the three-dimensional grid, then emotions could be reduced to these mental elements. Although the tri-dimensional theory of feelings stimulated a great deal of research at Leipzig and other European lab- oratories of the day, it has not withstood the test of time.

Organizing the Elements of Conscious Experience

Despite his emphasis on the elements of conscious experience, Wundt did recognize that when we look at objects in the real world, our perceptions have a unity or wholeness. When we look out the window we see a tree, for example, not individual sensations or conscious experiences of brightness, color, or shape that trained observers in a laboratory re- port as a result of their introspections. Our visual experience in the real world comprehends the tree as a whole, not as the elementary sensations and feelings that constitute the tree.

How is the unified conscious experience compounded from the elementary parts? Wundt explained the phenomenon through his doctrine of apperception. The process of organizing mental elements into a whole is a creative synthesis (also known as the law of psychic resultants), which creates new properties from the building up or combining of the elements. Wundt wrote, "Every psychic compound has characteristics which are by no means the mere sum of the characteristics of the elements" (Wundt, 1896, p. 375). You have probably heard the saying that the whole is different from the sum of its parts. This is the idea promoted by the Gestalt psychologists. The notion of creative synthesis has its counterpart in chemistry. Combining chemical elements produces compounds or resultants that contain properties not found in the original elements.

To Wundt, apperception is an active process. Our consciousness is not merely acted on by the elemental sensations and feelings we experience. Instead, the mind acts on these elements in a creative way to make up the whole. Thus, Wundt did not conceive of the process of association in the passive, mechanical way favored by most of the British