Shaping

A gradual, behavior modification technique in which successive approximations to the desired behavior is rewarded.

Shaping, or behavior-shaping, is a variant of operant conditioning. Instead of waiting for a subject to exhibit a desired behavior, any behavior leading to the target behavior is rewarded. For example, B. F. Skinner (1904-1990) discovered that, in order to train a rat to push a lever, any movement in the direction of the lever had to be rewarded, until finally, the rat was trained to push a lever. Once the target behavior is reached, however, no other behavior is rewarded. In other words, the subject behavior is shaped, or molded, into the desired form.

Although rejected by many orientations within the field of psychology, behavioral techniques, particularly shaping, are widely used as therapeutic tools for the treatment of various disorders, especially those affecting verbal behavior. For example, behavior shaping has been used to treat selective, or elective, mutism, a condition manifested by an otherwise normal child’s refusal to speak in school.

Therapists have also relied on behavior shaping in treating cases of severe autism in children. While autistic children respond to such stimulus objects as toys and musical instruments, it is difficult to elicit speech from them. However, researchers have noted that behavior shaping is more effective when speech attempts are reinforced than when speech production is expected. When unsuccessful efforts to produce speech are rewarded, the child feels inspired to make a greater effort, which may lead to actual speech.

While recognizing the effectiveness of behavior shaping in the laboratory and in therapy, experts, particularly psychologists who do not subscribe to behaviorism, have questioned the long-term validity of induced behavior change. For example, researchers have noted that people have a tendency to revert to old behavior patterns, particularly when the new behavior is not rewarded any more. In many cases, as Alfie Kohn has written, behavior-shaping techniques used in school, instead of motivating a child to succeed, actually create nothing more than a craving for further rewards.

Zoran Minderovic

William Herbert Sheldon

1898-1977

American physician and psychologist who attempted to correlate body type with personality.

William Herbert Sheldon developed “constitutional psychology,” the study of the relationships between physical attributes and personality traits. To describe physical build, Sheldon studied thousands of photographs and developed a rating system for three major components or somatotypes—endomorphy, mesomorphy, and ectomorphy—and three secondary components. Likewise, he developed a rating system for three primary components of temperament. He found a correlation between the physical and temperamental ratings. Sheldon was the first to use standardized photography for studying physical traits.

Born in 1898, Sheldon grew up on a farm in Warwick, Rhode Island, as one of three children of William Herbert and Mary Abby (Greene) Sheldon. Educated at local public schools, Sheldon, whose father was a naturalist, worked as an ornithologist while studying at Brown University. After serving in the army as a second lieutenant during World War I, Sheldon received his A.B. degree in 1919. Subsequently, he worked as an oil field scout, a wolf hunter in New Mexico, and a high school teacher before earning his master’s degree at the University of Colorado and his Ph.D. in psychology from the University of Chicago in 1925. That year he married Louise Steger, although they later divorced. Sheldon taught psychology at the University of Texas in Austin, at the University of Chicago, and at the University of Wisconsin. In 1933 he earned his M.D. from the University of Chicago. Following an internship, he won a fellowship to study psychiatry with Carl Jung in Zurich, Switzerland.

In 1936, Sheldon became a professor of psychology at the University of Chicago. After two years, he moved to Harvard University to collaborate with Smith S. Stevens, an experimental psychologist. After serving in

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the Army as a lieutenant colonel during the Second World War, in 1945, he married Milancie Hill. The following year, Sheldon became Director of the Constitution Clinic and Laboratory at the Columbia University College of Physicians and Surgeons, and he began examining the relationships between physical attributes and disease. In 1959, he became a clinical professor of medicine at the University of Oregon Medical School in Portland. From 1951 until 1977, he directed the Oregon follow-up studies in constitutional medicine. Concurrently, he held positions as the director of research for the Biological Humanics Foundation of Cambridge, Massachusetts, as a research associate at the Institute of Human Development at the University of California at Berkeley, and as attending chief of research at Rockland State Hospital in Orangeburg, New York. Sheldon became emeritus professor at the University of Oregon in 1970.

Sheldon authored several books in the “Human Constitution Series,” as well as two books of essays in which he tried to merge religion with social psychiatry. He believed that the correlations he observed between physique and personality reflected both the rewards based on behavior for a given physical type, and societal expectations based on physical appearance. Sheldon also examined relationships between physique and delinquent behavior and physique and psychopathology. He used three primary components to define psychopathology. In later years, Sheldon replaced his somatotyping scheme with a method called the Trunk Index.

Sheldon’s correlations remain unproven and, in 1995, it was revealed that many of the photographs Sheldon studied were obtained by requiring students at universities to be photographed naked and without informed consent as to how the pictures might be used. Sheldon died of heart disease in Cambridge, Massachusetts, in 1977.

Margaret Alic

Shyness

Uneasiness experienced when confronted by new people and situations.

Most people, from social recluses to the rich and famous, probably have experienced feelings of shyness at various times in their lives. Physiological symptoms may include blushing, increased heart rate, sweating, and shaking. Just as these outward manifestations vary in type and intensity from person to person, so do the inner feelings. Anxious thoughts and worries, low self-esteem, self-criticism, and concern over a lack of social skills, real or imagined, are common. The causes of shyness are not known. Some researchers believe it results from a genetic predisposition. Others theorize that uncommunicative parents restrict a child’s development of the so-

**Milicent W. Shinn**

1858-1940

American child psychologist best known for her seminal systematic observational study of a child.

As the first woman to earn a Ph.D. from the University of California, Milicent Shinn is credited today for her outstanding early American study, “Notes on the Development of a Child.” First published in 1898 as a doctoral dissertation, this work is still hailed as a masterpiece and a classic in its field.

A native Californian, Shinn was born in 1858 to parents who emigrated from the East and established a farming homestead in Niles, California, where she lived her entire life. In 1879, at the age of 25, she became editor of the Overland Monthly, a literary magazine that had fallen on hard times in post-Civil War California. Dividing her time between the family ranch and the journal, Shinn cared for her aging parents, ran the ranch with her brother and his wife, and helped care for their daughter, Ruth, who was born in 1890. Inspired by personal interest in her niece, Shinn applied her writer’s skills to create a carefully recorded and minutely detailed two-year account of her niece’s physical growth and emotional development. Delivered as a paper entitled “The First Two Years of the Child” at the World’s Columbian Exposition in Chicago in 1893, Shinn’s observational study was hailed as the first of its kind in America. Convinced by others that her work represented a significant contribution to child psychology, Shinn resigned from the Overland Monthly in 1894 and enrolled as a doctoral candidate at the University of California at Berkeley, completing the degree with the publication of her dissertation in 1898.

Compelling family needs and pressures led Shinn to abandon her scholarly pursuits and return to the family ranch to care for her invalid mother and aging father. By 1913, in her mid-fifties and in ill-health herself, Shinn undertook the education of her younger brother’s four children, devoting the rest of her life to her family until her death in 1940.

**Further Reading**