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Autokinetic Effect

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AUTOKINETIC EFFECT

The autokinetic effect is an optical illusion. It occurs when a perceiver staring at a stationary pinpoint of light in an otherwise completely dark visual field believes that the light moves from its fixed position. This "self-motion" (auto-kinetic) is caused, in part, by the nearly imperceptible movements of the eye known as saccades. Ordinarily the visual system compensates for these naturally occurring motions of the eye, but when only a single light is visible with no frame of reference, the light appears to wander in unpredictable directions and at variable speeds. This illusion was first noted by astronomers when viewing a single star on a very dark night.

Muzafer Sherif made use of the autokinetic effect in his 1936 studies of the development of social norms. Norms provide individuals with frames of reference that guide their thoughts, emotions, and actions in social situ-

ations. Individuals sometimes conform to others' responses deliberately, but norms also emerge spontaneously in ambiguous settings as people gradually align their behaviors until consensus in actions emerges. Sherif examined this process by asking men seated in an otherwise completely dark room to state aloud their estimates of the distance a tiny dot of light moved. Individuals who made judgments alone came to fix their estimates within a specific range, which varied from one to ten inches. When people made their judgments with other people, however, their personal estimates converged with those of other group members until a consensus was reached. The men eventually accepted a socially shared estimate in place of their own idiosyncratic standard. Moreover, in subsequent individual sessions subjects still relied on the group's standard, suggesting that they had internalized the norm. Sherif, by capitalizing on the natural ambiguity of the autokinetic situation, succeeded in creating a social norm in an experimental setting.

Sherif's procedures provided a paradigm for subsequent studies of social influence, such as Solomon Asch's (1907–1996) 1955 discovery that individuals sometimes conform to a group's decision even when they know that others' judgments are biased or in error. Subsequent studies also confirmed that once norms develop they become stable frames of reference that resist change. When an individual with extreme judgments joined the group, other group members' judgments shifted so that a more extreme norm formed. Once this arbitrary standard was created a new member took the place of the source of the norm. The group continued to base its judgments on the group norm, however, and the newest member gradually adapted to the higher standard. As members were replaced with naive subjects, the new initiates continued to shift their estimates to match the group norm. The arbitrary norm eventually disappeared, but not before the group's composition changed many times. This finding shows how norms, once they are established, can become part of the group's social structure. Even when individuals who fostered the norm are no longer present, their normative innovations remain a part of the organization's traditions, and newcomers change to adopt that tradition.

SEE ALSO *Asch, Solomon; Norms; Sherif, Muzafer; Social Psychology*

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