

Primal, Emotional, and Cognitive Response in Learning

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Following a discussion on behaviourism as a simple method, I would like to elaborate on the two-way causal spectrum from primal to simple (highly integrated, top-down) learning.

Primal Responses: Survival Motivation

Primal forms of learning, that are available across all mammals, are tightly coupled to subcortically mediated emotions. Classical conditioning builds on affective dichotomies. Initially, learning organisms operate on *fear and seeking*, a mechanism already present in the reptilian brain. These premises appear to be enough for classical conditioning (cf. Panksepp, 2016). Not requiring any sense of self, even Lorenz's other-identifying geese are capable of this type of learning and imprinting. Studies of learning based on primal emotions are relevant: they condition reflex-like fast firing responses that are deeply rooted in biology and difficult to overcome by conscious pre-frontal down-regulation. If a deeply conditioned fear exists, mere Freudian becoming aware will be of little help to alter the responses.

Emotional Responses: Hedonic Motivation

In analogy with Freudian drives, secondary-process (upper limbic) learning operates on *pleasant (wanting) and unpleasant (aversion)* experiences via social rewards. Including the social, whether as Superego (Freud, 1949) or internalized oughts (Higgins, 1987, 1997), they modulate behaviour within the current context but do not

break free from hedonic motivation. This type of learning requires conscious memory formation, i.e. hippocampal recognition of a familiar situation or outcome. A substantial part of management literature in the late 20th century focused on this type of learning.

Cognitive Responses: Purpose Motivation

To supersede emotional conditioning requires becoming conscious of and to remember one's own responsiveness. Dogs, for example, may show guilt as a social response when their owner and the object they have torn up is present, but will likely not control their impulses when their owner is not present but act on their habitual conditioning. With the formation of language, emotions are also tied to abstract concepts. At this level of understanding, it becomes possible to override emotions to pursue abstract goals or defer reward to the future. By reframing terms and experiences (managing expectations), one may change their affective connotation and thus intellectually influence one's own affective state. The absence of (*purposeful or unpurposeful*) goals may set people on affective autopilot, and, in an increasingly complicated society, make them prone to depression (Frankl, 1946/2006).

Beyond Desirability

A different path is taken by phenomenologists, e.g. Carl Rogers. Phenomenology requires dis-identification from observed phenomena, whether external or internal, into an observer position (Rogers, 1961, ch. 8). This suggests, that from this highest level of integration, all above-discussed phenomena may be modulated with conscious awareness. This path of learning has long been propagated by Yoga and Buddhism and matches infinite bracketing (phenomenological reduction), Vygotsky's never-ending internal transformation, or Acceptance and Commitment Therapy's principle of self-as-context (Harris, 2009).

Behaviourism: Back to Simplicity

Circumventing this proposed hierarchy, behaviourism occurs simple and highly integrated, as opposed to primitive. Excluding internal factors (how/why), behaviourism focuses on results only (what). Different people must handle unique internal complexities. Being effective for habituation, behaviourism ignores any individual side effects and disruptive associations that may be formed during operant conditioning, based on individual dispositions. Next to ethical concerns about Skinner's authoritarian utopia, people may become better at the conditioned task, but may be worse off in other situations or their general disposition (Russell, 1974).

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