

H. E. Cole's Text -

Experience produces an organism with expectancies, memories
CRs stemming from early studies of Baerens & Pavlov
learning - CRs, trial & error, insightful

In Kiddell's sheep - get cond'd foreleg & resping R's by
the 11th trial.

CS precedes UCS by at least .25 sec

H.E.C. speaks of auditory R's spreading into foreleg of sheep after e.g.

Some reversal of innate R's is possible - in tastes,

" Any sensory cue can be linked with any possible R!"

[No, any neutral S, but can't reverse hind reflexes]

A single trial CR usually sluggish & weak - repetition
strengthens

CRs built under conditions of hunger do not have same
strength when animal is just fed.

Consequences of an act determine whether the act persists,
becomes dominant, or is gradually eliminated.

Extinction w/out reinforcing S - despite fact that impulses
continue to travel new pathways

[This, & all phenomena of cond., are understandable in terms of
the cerebral cortex, preparatory set, expectancy.]

Habits should be pretty fluid & changing, no deep worn
grooves in CNS, changes induced by conditioning
are reversible. a kind of rationality in simplest
of our habits, if supported by real (reinforcing) world,
they persist, if not, are dropped.

In human subjects, extinction by 15th unreinforced trial,
in 1/2 of them by the 6th unreinf'd. CRs estab'd in
50 & in 25 orig. trials.

" Rapidly established, the CR is also rapidly extinguished"
After extinction (if don't reinforce extinction) get spontaneous recovery
in 24 hrs - but not to full strength shown in last reinforced trial

Case - cont. - 2 -

If the conditioning & extinction processes are alternated, it is found that both phases require fewer trials with each succeeding cycle until a point is reached at which a single conditioning trial is sufficient to reinstate or extinguish the CR.

Thus the former training is not entirely forgotten. The changes in behavior = cumulative. Brody, Hymowitz, Celler

Find CRs in man on 1st presentation of a light when subject informed shock would off. Get \approx effects with cycled conditioning - both for condg & extinction of CRs. HEC says when we instruct our verbal S mobilize old CRs of the subject.

Subjects' understanding of the procedures affects both condg & extinction. The pairing (training trials) are in this sense "for information". [The expectancy counts] of reinforcement is irregular during training, then extinction takes a long time. Skinner & Humphreys speed training trials count more than crowded. Can speed up extinction by forcing it with punishment.

Takes long training to break in dogs & sheep to the conditioning stand (unethical)

The learner carries away residual states that provide a substratum for all his activities & which are revised w. special force in the learning situation.

Maserman's cats that were set into frantic flight by a flash of light which showed food was coming (to which they jumped much faster air blast) if they were hungry, but if fed just before, they lay quietly w. only a slight startle or blinking at light & bell signals.

No hungry cat light is terrifying; to satiated cat, a matter of indifference. It is at the change in organic state had thrown a set of switches or disengaged a set of gears; the reaction potentialities are totally altered. The CRs require the support of these general "priming" sets if they are to function.

Cond'd salivary reflex waxes and wanes with the hunger cycle.

Mere contiguity of CS + UCS is not enough to guarantee linkage of responses - the old idea

a) needs & motivating tensions set a direction for process & determine efficacy of reinforcement.

b) CRs lose their strength when motivating condition is removed.

Subjects understanding of the ^{learning} field will determine rate of d_1 , extinction etc.

Perceptive Learning:

The maze, the Skinner box, the multiple choice apparatus can be looked upon as complex conditioning situations in which not one, but 100's of S bombard the learner. - But such a chaining of R's lacks something. [insight] Kohler's insight insight of animals - even of apes - is far below that of man. [+ into CS-UCS relation thus comes slower].

Difference between insight and CR = a continuum not a contrast.

"Conditioning establishes expectancies"; + the term belongs to language of introspection - "an awareness of a stimulus-to-come and may even include imagery of hallucinatory vividness" mentions "spinal cord rigidity" in CR of decorticate animals we set up "meaningless tasks" for animals to learn

in mirror drawing, a split between "cognitive maps" & active execution

James - an object = a ^{variable} overlapping of qualities - see it depending on how we are reacting, what

Cole —

-4-

coincidental learning in pigeon. Skinner.
in tachistoscopic work when get to minimum
limits for ppv, suggest & set plays a large role