

## QUOTATIONS

### SKINNER ON STIMULUS-SAMPLING THEORY<sup>1</sup>

We are concerned with all those responses of the rat that produce the required movement of the lever. Let us suppose that the stimuli corresponding to these responses are composed of a number of elements A, B, C, . . . N (the actual number being very great). The rat cannot be acted upon at a given moment by more than a part—let us say four—of these elements. And let us suppose that upon the first occurrence of the  $S' - R' \rightarrow S - R$  sequence the  $S'$  is actually composed of elements A, C, D, J. These, and no others, will share in the conditioning. If, after the pellet is eaten, the rat again falls under the action of A, C, D, J, the response will be immediately repeated (assuming the conditioning to have been complete and disregarding the effect of incidental stimulation). But we cannot completely control the stimulus in such a situation, and it is more probable that some other group, say B, D, E, G, will be met with. Part of this group (the element D) has now been conditioned. After some delay but aided by the element D, the second response is evoked, and the elements B, E, and G become conditioned also. Such a system has, roughly speaking, the following properties: (1) The complete set of elements will eventually become conditioned stimuli. We may then deal with the behavior of the rat as if there were *one* response to the lever. (2) As this state is approached, any selected group will tend to contain more of the conditioned elements. Consequently the rate of elicitation will show a positive acceleration. (3) Although any single interval between two responses will be determined by factors not under control, any deviation from the expected rate will compensate for itself. If, for example, the second group possesses most of its elements in common with the first, the response will be elicited without much delay, but the conditioning of the remaining members of the whole set will not be advanced very far. On the other hand, if the second group is composed mainly of unconditioned elements, the response will be retarded, but the conditioning of the set will be greatly furthered.

<sup>1</sup>Skinner, B. F. On the rate of formation of a conditioned reflex. *Journal of General Psychology*, 1932, 7, 274-285.