USE OF THE PREMACK PRINCIPLE IN CONTROLLING THE BEHAVIOR OF NURSERY SCHOOL CHILDREN

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Premack's principle (Premack, 1959) can be stated: if behavior B is of higher probability than behavior A, then behavior A can be made more probable by making behavior B contingent upon it.

In a preliminary exploration of nursery school procedures, three 3-yr-old subjects (Ss) were available three hours a day, five days a week, for about one month. On the first day, in the absence of any aversive control, verbal instructions usually had little effect on the Ss' behavior. When they were instructed to sit in their chairs, Ss would often continue what they were doing—running around the room, screaming, pushing chairs, or quietly working jigsaw puzzles. Taking Premack seriously, such behaviors were labeled as high probability behaviors and used in combination with the signals for them as reinforcers. These high probability behaviors were then made contingent on desired behaviors. For example, sitting quietly in a chair and looking at the blackboard would be intermittently followed by the sound of the bell, with the instruction: "Run and scream." The Ss would then leap to their feet and run around the room screaming. At another signal they would stop. At this time they would get another signal and an instruction to engage in some other behavior which, on a quasi-random schedule, might be one of high or low probability. At a later stage, Ss earned tokens for low probability behaviors which could later be used to "buy" the opportunity for high probability activities.

With this kind of procedure, control was virtually perfect after a few days. For example, when Ss were requested to "sit and look at the blackboard" (an activity which in the past had intermittently been interrupted by the signal for some higher probability behavior), they were under such good control that an observer, new on the scene, almost certainly would have assumed extensive aversive control was being used.

An examination of high probability behaviors quickly showed that many, if not most of them, were behaviors which ordinarily would be suppressed through punishment. Extrapolating from this we were able to predict the reinforcing properties of some behaviors which had never been emitted. For example, throwing a plastic cup across the room and kicking a waste basket had never been observed but proved to be highly reinforcing activities after they had once been evoked by instructions. (Some unpredicted behaviors proved to be highly reinforcing, *e.g.*, pushing the experimenter around the room in his caster-equipped chair.)

In summary, even in this preliminary, unsystematic application, the Premack hypothesis proved to be an exceptionally practical principle for controlling the behavior of nursery school Ss.

REFERENCE

- Premack, D. Toward empirical behavior laws: I. positive reinforcement. *Psychol. Rev.*, 1959, **66**, 219-233.