The Promotive: A Verbal Operant Related to Production

Jerome D. Ulman
Ball State University

Labor, characterized as the activity of consciously transforming nature in order to produce useful things which satisfy human needs, has long been considered a fundamental aspect of human activity (Marx, 1867/1977). Through labor, humans profoundly transform their social environment and consequently their very social being. If labor is such a basic dimension of human existence, then, the social relations within which this productive activity takes place would constitute a critical feature of the social structure of any society at any given point in history. The purpose of this article is to initiate an operant analysis of these basic social relations of production. Specifically, the promotive will be explicated as a verbal operant which plays a pivotal role within a much larger chain of productive human activity.

The *promotive* is a verbal operant that exhibits features of both the mand and the tact. It may be described as an impure (multiply controlled) but relatively undistorted tact. Alternately, it may be characterized as a particular kind of mand, a request or command for productive behavior. The function of the promotive was suggested by Skinner's (1957) comment that "it is possible that all mands which are reinforced by the production of objects or other states of affairs may be interpreted as manding the behavior of the listener and tacting the object or state of affairs to be produced" (p. 189).

I thank Drs. B. F. Skinner and Frank J. Sparzo for their helpful comments. This article is based on a paper presented at the meeting of the Association for Behavior Analysis, Nashville, May, 1984. Requests for reprints should be sent to Jerome D. Ulman, Department of Special Education, Ball State University, Muncie, Indiana 47306.

CONTINGENCIES OF PRODUCTION

The controlling relations of the promotive can perhaps be best understood within the context of a *contingency of production*. The response terms of a contingency of production consist of two functionally different but related response classes: *productive responses*, any activity that produces a useful product, and *promotive behavior*, any activity that promotes (i.e., conditions or evokes) productive behavior. Useful products can be defined in relation to the verbal community of consumers. The consumer community, in using a given product, functionally defines the product's utility. That is, the stimulus properties which make a product useful are the properties upon which reinforcements supplied by the consumer community are contingent. For example, a teacher instructs a student to complete a worksheet. The instruction is a promotive; the student's academic performance is productive behavior; and the completed worksheet is a useful product, a product valued by the community of teachers and parents. The distinguishing characteristic of a useful product is discovered by identifying the actual contingencies of reinforcement operating within the community with respect to that product.

PRODUCTIVE BEHAVIOR

As defined within the context of the contingency of production, productive behavior differs from other practical but nonproductive behavior on the basis of its results—useful products. That is, the outcome of productive behavior is an environmental change which is a useful product. However, the nature of the practical use the consumer community makes of a product limits the extension of its utility and therefore the extension of the tact component of the promotive. Regardless of what other use may be

made of, for example, a paper clip, its usual tacted properties are those of a bent wire which holds papers together.

In sum, a useful product is a product which, when received by the consumer community, evokes from that community (directly or indirectly) reinforcement of the behavior apparently responsible for promoting the activities necessary for the manufacture of the product. Thus, promotive behavior is defined in relation to productive behavior which, in turn, is defined in relation to the product's utility. By the same token, if a product becomes devoid of utility the consumer community has no obvious reason to continue to reinforce the promotive that encouraged the productive behavior in the first place. For example, the development of solid-state electronics has virtually nullified the promotion of behavior involved in the manufacture of vacuum tubes. Hence, defined in terms of the promoter vis-a-vis the consumer community, product usefulness is a functional concept. Following from this definition, if we consider useful products to be the distinguishing effects of productive behavior, then we may regard productive behavior as a functional response class.

THE NECESSARY CONDITIONS FOR PRODUCTION

In any culture, the production of useful products requires a capable producer, the necessary instruments of production, and the object of production (Marx, 1867/1977). Obviously, nothing will be produced unless the producer is in some way induced to produce. According to the present analysis of the contingencies of production, promotive behavior is also required as a condition for production. This requirement does not imply that producers must have a promoter overseeing or directing their work if they are to produce useful products or even that producers and promoters are necessarily different individuals. It is entirely possible for an individual working alone to produce a useful product and thereby function as his or her own promoter. We commonly state instructions to ourselves when we are in the process of making something. In so doing, the producer and the promoter are "in the same skin." Further, production is often a collective activity in which the roles of pro-

ducer and promoter frequently alternate from one member of the productive group to another. As a result, both productive and promotive skills become part of the behavioral repertoire of the same individual. Whether these two kinds of behavior are exhibited by one or many individuals in a contingency of production, both productive and promotive behaviors—together with the requisite instruments and objects of production—constitute the necessary conditions for production.

MOTIVATING PROMOTIVE BEHAVIOR

What, then, motivates promotive behavior? Ultimately, the occurrence of promotive behavior depends upon reinforcements from the consumer community. With respect to the more immediate controlling variables, however, the presence of the object of production functions as a motivating or establishing stimulus (or stimulus complex) for the promotive. According to Michael (1982):

the circumstances for an establishing stimulus involve a stimulus change, S_1 , which functions as a discriminative stimulus for a response, R_1 , but under circumstances where that response cannot be executed or cannot be reinforced until another stimulus change, S_2 , takes place. This second stimulus change, then, becomes effective as conditioned reinforcement (p. 152).

To illustrate, Michael describes a situation in which an electrician is given the job of removing a piece of equipment from a wall, the ultimate reinforcement for which is payment for the completed job. When a face plate is removed it is discovered that the equipment is fastened to the wall with a slotted screw. The electrician then turns to the assistant and says "Screwdriver." In Michael's example the sight of the screw (the object of production) is S_1 and removing the screw, R_1 , can only be accomplished by means of a screwdriver (an instrument of production), S_2 . The mand "screwdriver" is of course R_2 . Thus, the screw acquires two stimulus functions: that of (a) a discriminative stimulus for the unscrewing response (R_1), and (b) an establishing stimulus for the mand "screwdriver" (R_2). Consequently, the screwdriver becomes effective as conditioned reinforcement.

PRODUCTIVE UNIT

Suppose that instead of asking for a screwdriver, the electrician said to the assistant, "Remove that screw." Now the situation is radically altered. The electrician becomes the promoter, the assistant—the producer, and removal of the screw (a necessary step in completing the job)—a useful product. Although the establishing stimulus (the screw, S_1) is the same as in Michael's example, S_2 is now the screwdriver *plus* the capable producer which, together, we may call the *productive unit*. "Remove this screw" is more than a simple mand; it is a promotive. It mands productive behavior and tacts the useful outcome of that behavior, that is, the successful removal of the screw. In this situation R_1 is not the same as in Michael's example (i.e., the screw removing response) but the electrician's behavior involved in procuring payment for the completed job. Finally, the productive unit itself—the productive instrument plus the productive response—becomes effective as conditioned reinforcement with respect to the behavior of the electrician.

SUMMARY

The promotive, as a component of the contingency of production, is offered as a conceptual tool for analyzing verbal behavior involved in the production of useful things. The promotive is not simply a verbal operant multiply controlled by both mand and tact relations. The promotive is defined as a verbal operant in relation to its effect on productive behavior, behavior that produces useful products. Concomitantly, useful products are defined by the verbal community of consumers. So, ultimate reinforcement for pro-

motive behavior resides in the consumer community's demand for the product.

The promotive, however, is *evoked* by the more immediate controlling stimuli of the *productive unit*, a capable producer plus the necessary instruments of production, and the *object of production*, things that become transformed into useful products by the application of a productive unit. The presentation of an object of production thus has two stimulus functions: (a) as a discriminative stimulus for the act of procuring reinforcements from the consumer community, and (b) as an establishing (motivating) stimulus for promoting, not merely manding, productive behavior from the productive unit. In this chain of events, the productive unit itself becomes effective as conditioned reinforcement for the promoter.

Whether the promotive is a useful concept for the operant analysis of production will be decided on the basis of how well it helps us understand and deal with the behavioral phenomena involved in the production of any useful thing within any given culture. Much more work remains to be done at both the micro (individual) and macro (sociological) levels of analysis, however, before we will have available a complete conceptual framework for understanding productive relations within all modes of production.

REFERENCES

- Marx, K. (1977). *Capital: A critique of political economy* (Vol. 1) (B. Fowkes, Trans.). New York: Vintage Books. (Original work published in 1867.)
- Michael, J. (1982). Distinguishing between discriminative and motivational functions of stimuli. *Journal of the Experimental Analysis of Behavior*, 37, 149-155.
- Skinner, B. F. (1957). *Verbal behavior*. New York: Appleton-Century-Crofts.