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Title: PAVLOVIAN CONSEQUENCES

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PAVLOVIAN CONSEQUENCES

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My title an error? Definitely not! Pavlov expertly applied behavioral consequences to himself and his staff in order to generate the terms used to describe Classical Conditioning.

The following four paragraphs taken from Pavlov's Lectures on Conditioned Reflexes, pages 263 and 264, make this clear. Note the fifth and sixth sentences from the end of the excerpt.

"When aiming at a complete investigation, it becomes necessary to consider all the possible conditions over and above those I have mentioned. Substances entering the mouth act on the salivary glands — but do they act in the same way when they happen to be in front of the animal, i.e., are they effective when separated from the animal by a certain distance?

We know very well that when we are hungry and want to eat, saliva flows if we see food. Hence the expression "the mouth waters." The investigation should extend to this phenomenon. What does it mean? There is, however, no kind of contact here. Concerning these facts, physiology used to say that besides the ordinary stimuli, there is a psychical stimulation of the salivary glands. Very well. But what does this mean, how is it to be understood, how must we physiologists approach it? Neglect it we cannot, once it plays a part in the action of the glands. What cause have we to exclude this function? First, let us consider the bare fact of psychical stimulation. It appears that psychical stimulation, i.e., the action of a substance at a distance, is absolutely the same as when it is in the mouth. In every way it is the same. Judging by what kind of food is placed before the dog, if it is dry or moist, edible or inedible, the salivary glands function identically, whether the substance is in the mouth or at a distance. In the psychical stimulation we observe exactly the same relations, though the reaction is smaller.

But how is this to be studied? Taking the dog when he eats rapidly, snatches something in his mouth, chews for a long time, it

seems clear that at such a time the animal strongly desires to eat, and so he rushes to the food, seizes it, and falls to eating. He longs to eat. Another time the movements are slower, less avid, and therefore we say the dog does not want so strongly to eat. When he eats, you see the work of the muscles alone, striving in every way to seize the food in the mouth, to chew and to swallow it. From all this we can say that he derives pleasure from it. When on the contrary an inedible substance happens to get into the mouth, and the dog ejects it, spews it out with the tongue, shakes his head, then we involuntarily want to say that this is unpleasant for the animal. Now when we proceeded to explain and analyse this, we readily adopted this trite point of view. We had to deal with the feelings, wishes, conceptions, etc., of our animal. The results were astounding, extraordinary; I and one of my collaborators came to irreconcilable opinions. We could not agree, could not prove to one another which was right. For some decades before, and also afterwards, we could settle all our questions, we were able to decide one way or another, and the dissension ended.

After this we had to deliberate carefully. It seemed probable that we were not on the right track. The more we thought about the matter, the greater grew our conviction that it was necessary to choose another exit. The first steps were very difficult, but along the way of persistent, tense and concentrated thinking I finally reached the firm ground of pure objectivity. We absolutely prohibited ourselves (in the laboratory there was an actual fine imposed) the use of such psychological expressions as the dog guessed, wanted, wished, etc. Finally we came to look in another light upon all the phenomena with which we were concerned. What then is our view? What is that which the physiologist called the psychological stimulation of the salivary glands? Is not this a form of nervous activity which was established long ago by physiology, and to which the physiologists are accustomed? Is it not a reflex?"

In closing, if anyone ever asks you, "which came first, the Conditional Stimulus or the Response"? Be sure to answer, "the Consequence, of course"!

REFERENCES

Pavlov, Ivan P. Lectures on conditional reflexes. Vol. 1. W. Horsley Gantt, (Ed.), New York: International Publishers, 1928.