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258

## **Foreword**

The matter of anticipation is, as the editors of this volume state in their preface, a rather new topic. Given the almost constant use we make of anticipation in our daily living, it seems odd that the bulk of psychologists have persistently ignored it. However, the reason for this disregard is not difficult to find. The dogma of the scientific revolution had from the outset laid down the principle that future conditions and events could not influence the present. The law of causation clearly demands that causes should precede their effects and, therefore, concepts such as purpose, anticipation, and even intention were taboo because they were thought to involve things and happenings that lay ahead in time.

An analysis of the three concepts — purpose, anticipation, and intention — shows that they are rooted in the past and transcend the present only insofar as they contain mental representations of things to be striven for or avoided. Purposive or goal-directed action could be circumscribed as action carried out to attain something desirable. In each case, the particular action is chosen because, in the past, it has more or less reliably led to the desired end. The only way the future is involved in this procedure is through the belief that the experiential world manifests some regularity and allows the living organism to anticipate that what has worked in the past will continue to work in the future. This belief does not have to be conscious. Skinner's rats continued to turn left in a maze where the left arm had been baited. They did so because the meat pellet they found the first time had "reinforced" them to repeat the turn to the left. But positive and negative reinforcement can work only with organisms that have evolved to act as though actions could be relied on to have constant results. The anticipation is implicit.

On the conceptual level, to anticipate means to project into what lies ahead a mental representation abstracted from past experience. In many cases we might not call such a projection an anticipation although, in principle, it is. If, for instance, you are about to go for a walk, take a look at the sky, and pick up your umbrella, you do this because you have learned from experience that the kind of clouds you saw through the window *forebode* rain. You are not anticipating an event but merely its possibility.

Tools are another example. The material and shape of a hammer have been developed and refined in the course of many generations' experiences and you trust the tool you now hold in your hand to drive in future nails just as it drove in nails in

the past. You may not actually anticipate its action, you simply believe that it will work.

If you have ever had the appalling driving experience of your foot going all the way to the floor board when you needed to brake, you will know just how unquestioningly you anticipated the brake pedal to do what it is supposed to do.

In one form or another anticipation pervades the fabric of our experience. As living organisms we constantly rely on a great deal of regularity in the world as we perceive it. It may not always work out, but apparently it works often enough for us to survive. To the examples I gave, many others could be added as illustration of the variety of the term's applications. The contributions to this volume spring from very different sources and are likely to provide a welcome starting ground for the classification and modeling of different kinds of anticipation.

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