Close Encounters of Two Kinds: False Alarms and Dashed Hopes

Haipeng (Allan) Chen • Akshay R. Rao
Marketing Department, School of Business, University of Miami, Coral Gables, FL 33124
Carlson School of Management, University of Minnesota, Minneapolis, Minnesota 55455
hchen@exchange.sba.miami.edu • arao@csom.umn.edu

Abstract
People are frequently exposed to potentially attractive events that are subsequently and unexpectedly reversed and to potentially painful events, which are also unexpectedly reversed. In the process of being returned to the initial asset position, does the sequence in which the positive and negative events occur matter? This issue of the combined effect of pleasurable and painful stimuli has received scant theoretical or empirical attention. We attempt to fill this lacuna in the literature by studying the retrospective evaluation of surprises that return individuals to their original economic state. Although such surprises do not change an individual’s original economic state, we argue that the individual’s psychological state changes, and the final affective state is, among other things, a function of the sequence in which the events occur.

From a theoretical standpoint, several perspectives can be brought to bear on the issue. For instance, one reading of mental accounting, based on prospect theory’s value function, would predict that losses should dominate gains, and therefore, regardless of sequence, people should be unhappy when exposed to two economically equivalent outcomes of different signs. Conversely, the literature on intertemporal choice would suggest that a series that ends on an up note is preferred to a series that ends on a down note, because people like to defer gratification so that they may savor positive outcomes. Similarly, people apparently have a preference for “happy endings.” Finally, the extant literature on “recency effects” would predict that the last event in a series should have a disproportionate influence on overall effect.

Our model relies on a shift in the reference point to explain how a surprising reversal of an event will lead to a nonzero evaluation of the sequence. We suggest that people’s reference points shift immediately but imperfectly after a stimulus is presented. Intuitively, this implies that the first stimulus will shift the reference point in its direction, as a result of which the evaluation of a sequence of events in which an initial event is unexpectedly reversed will be more favorable if the first event is a loss than if it is a gain. This model captures the unanticipated nature of the second event (i.e., the surprise element) by allowing the first event to move the reference point. Consequently, by the time the next event occurs the reference point has been updated, as a result of which the zero economic outcome of the sequence yields nonzero utility. We further posit that the magnitude of the reference point shift should be affected by the time elapsed between the two stimuli. Specifically, the reference point shifts gradually with time, until it is fully updated.

The main predictions of the model were empirically supported first in a survey using a mall-intercept sample. Subsequently, we conducted a study of student subjects involving a coin-tossing game in which real money was at stake and in which subjects in one condition experienced the second outcome after a two-day delay. Our results from this second study supported the model’s prediction regarding the impact of the elapsed time between the events. The experimental tasks involved surprising reversals of initial outcomes, thus ensuring that “savoring/dread” types of explanations (which require that subjects anticipate the second event) could not be operating. Finally, in a series of three follow-up studies, we tested the claim that the magnitude of outcomes would have an impact on observed affect, and consistent with our theory and contrary to recency predictions, we observed similar results across different magnitudes.

While theoretically interesting, we should also note that our research is of potential pragmatic significance. People’s reactions to a series of events is of considerable interest to marketers desirous of generating enhanced attitude, affect, purchase intention, and the like without offering economic inducements such as rebates, coupons, or other costly discounts. Additionally, public policy officials may be interested in protecting people from being manipulated into purchasing a product simply because of changes in the sequence in which a series of offers is made by the merchant.

(Sequences; Surprises; Judgment and Decision Making)