
COMMENTARIES

Dual-Mode Processing in the Pursuit of Insight Is No Vice

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In their interesting and provocative target article, Kruglanski and Thompson (see also Kruglanski, Thompson, & Spiegel, 1999) take issue with dual-mode processing models in persuasion and, by implication, with all such models in social psychology. These models have become increasingly popular in the past two decades and are now used to explain such diverse phenomena as stereotyping, impression formation, maintenance of relationships, social identity, and persuasion (see Chaiken & Trope, 1999). If the analysis and conclusions offered by Kruglanski and Thompson were accepted, they would profoundly alter our hard-gained understanding of the persuasion process and force us to reexamine much of the work that has been performed in this domain in the past 25 or 30 years. Until the emergence of the dual-mode processing theories in the 1980s, persuasion research was characterized by an embarrassing amount of inconsistent findings and an almost complete lack of generalizable conclusions (cf. Eagly & Himmelfarb, 1974). The distinction between processing of peripheral cues external to the message and processing of message-relevant arguments has done much to illuminate the persuasion process and to account for the inconsistent findings in prior work. Kruglanski and Thompson would have us do away with this distinction and replace the dual-mode processing models with a unimode model of reasoning based on Kruglanski's (1989) theory of lay epistemics. In my opinion, this suggestion is ill advised; it would lead us in the wrong direction and jeopardize progress in the field.

A Valid Methodological Critique

Although I disagree with their general conclusions, I greatly admire Kruglanski and Thompson's incisive analysis that helps to uncover some very important problems in past tests of dual-process models in the persuasion context. Particularly striking is their criticism that prior work has tended to confound source- and message-relevant information with the complexity

and positioning of that information. Work on the Elaboration Likelihood Model (ELM; Petty & Cacioppo, 1986) and on the Heuristic Systematic Model (HSM; Chaiken, 1980; Chaiken, Liberman, & Eagly, 1989) has implicitly assumed that peripheral cues are relatively simple and easy to process, whereas message arguments are more complex and difficult to process. Kruglanski and Thompson make it clear that this is not necessarily the case.

The experiments reported by Kruglanski and Thompson, although suggestive, do not conclusively prove that variations in complexity are responsible for the observed effects of peripheral versus central information. In past research, manipulations of positive versus negative peripheral cues and strong versus weak arguments have been found to interact in predictable ways with motivation and ability to process message-relevant information. Kruglanski and Thompson criticize some of this research as dealing with "inferred interactions" because only one type of information (valence of peripheral cue or arguments quality) was manipulated. Other past studies, examining "manifest interactions," are considered to be better, more complete tests of the dual-mode processing models. However, the four experiments described in the target article also deal with inferred interactions; they manipulate only one type of information: a source cue (expertise) in Experiments 1, 2, and 3; and two sets of message-relevant information in Experiment 4.

More important, the ELM and HSM posit that source cues such as expertise will be relatively less important—and argument strength will be relatively more important—when motivation and ability to process the message are high rather than low. The models do not claim that the valence of peripheral cues will have no effect under conditions of high motivation and ability to process. The findings of Kruglanski and Thompson's first two experiments, that expertise influenced persuasion under high involvement and under no distraction conditions, are thus not inconsistent with the dual-mode processing models. Experiments 3 and 4 are more thought-provoking, showing that the com-

plexity of source cues and the complexity of message arguments can have effects similar to those generally attributed to the distinction between source and message information. Kruglanski and Thompson's methodological critique and the data of Experiments 3 and 4, in particular, pose a serious challenge to persuasion researchers who will have to demonstrate that the findings of past research cannot be accounted for by mere differences in complexity or positioning of cue and message information.

Dual-Mode Processing

More serious than their methodological concerns, however, is Kruglanski and Thompson's challenge to the validity and utility of the basic distinction between two substantively different modes or routes to persuasion. The dual-mode processing models deal, on one hand, with information to which receivers are exposed and, on the other, with the ways in which this information is processed. On the information side they distinguish between source or other peripheral cues versus message arguments, and on the process side between the central or systematic mode versus the peripheral or heuristic mode. It is assumed that, as a general rule, peripheral cues are processed in a heuristic manner, whereas message arguments are processed systematically. In their discussion, Kruglanski and Thompson make it clear, however, that peripheral cues can be processed systematically, not only heuristically, and that message arguments can be processed heuristically, not only systematically. And whether the heuristic or systematic mode is employed depends, in each case, on the same kinds of factors, primarily motivation and ability to process. In some ways, the ELM and HSM recognize this, but Kruglanski and Thompson provide a valuable service by bringing to light the essential equivalence of peripheral cues and message arguments as sources of information in the persuasion process. Furthermore, the theory of lay epistemics offers a useful way of describing the ways in which the two types of information are processed. Based on these considerations, Kruglanski and Thompson argue convincingly that claims to the effect that the ELM and HSM deal with two qualitatively different processes lack much substance.

However, even if peripheral cues and message arguments can be processed in essentially the same manner, this does not invalidate the distinction between the heuristic and systematic modes of processing. It may be true that these two processing modes do not differ in kind, and that they may better be viewed as endpoints on a continuum of processing depth, from shallow or heuristic on one end to deep or systematic on the other (Ajzen & Sexton, 1999). Quantitative distinctions along a continuum are commonplace and have done much to further our understanding of various phenom-

ena. Indeed, as Kruglanski and Thompson recognize, the history of persuasion research has amply justified the distinction between heuristic and systematic processing. Whether the distinction should be considered one of kind or degree would seem to be of only secondary concern.

Distinctions of Quality

Furthermore, the fact that the distinction between heuristic and systematic processing modes may be more of degree than kind does not necessarily imply that there are no meaningful qualitative distinctions to be drawn. Qualitative distinctions of importance relate precisely to the domain that Kruglanski and Thompson dismiss as of no theoretical significance, namely, the contents of the information provided and, more important, the contents of the beliefs that are affected by this information. In one instance, the information and corresponding beliefs have to do with the source or other nonmessage features of the context, whereas in the other case they have to do with the conclusion or action advocated in the message. These are fundamentally different concerns that can have profoundly different effects on persuasion and its consequences.

That this is so can be seen most clearly in the extreme case where a position on an issue is advocated by a known source, without any supporting message, or a message is said to consist of arguments frequently voiced on the issue, without attribution to any particular source. Consider, for example, attitude toward giving away your money to help the poor. Some people may come to form a positive attitude and behave accordingly because they are members of a cult whose prophet claims to have received a message from God instructing the members to give away their money. No other supportive evidence is needed. As Kruglanski and Thompson point out, no amount of reasoning would persuade true believers to change their minds. On the other hand, if the prophet were to "receive another message from God" contradicting the first, the followers would likely be persuaded. Compare this with people who hold a positive attitude toward giving away their money because of a set of supportive arguments in favor of this behavior, without association to any known source. These individuals might very well be persuaded by exposure to new arguments contrary to their favorable attitudes. Information regarding the source and information relevant to the advocated position act in very different ways because different types of beliefs have to be changed for members of a cult who rely on the trustworthiness of their prophet and for receivers who rely on their own reasoning and beliefs regarding the issue.

Kruglanski and Thompson might counter this argument by saying that the distinction between source and

message is no more significant than various distinctions that can be drawn within each of these categories. I agree, and I would add that such distinctions are in fact legitimate to the extent that they can be shown to possess some degree of generality and to make a useful contribution to our understanding of the persuasion process. In research on communicator credibility, for example, it is a long-standing tradition to distinguish between expertise and trustworthiness. This is a useful distinction because different factors influence each, and they can have different effects on attitude change (e.g., McGinnies & Ward, 1980). Nothing is to be gained by equating expertise and trustworthiness.

A similar case can be made for the importance of distinguishing between different kinds of message arguments and corresponding beliefs. Message arguments address beliefs about the advocated position on an issue, or about a recommended course of action. In the latter case, distinctions between different types of beliefs can be drawn on the basis of the theories of reasoned action (Fishbein & Ajzen, 1975) and planned behavior (Ajzen, 1991)—even though Kruglanski and Thompson cite these theories as consistent with their unimodel. In the theory of planned behavior, intentions and corresponding actions are assumed ultimately to derive from three different types of beliefs: beliefs about the consequences of the action that, in aggregation, determine attitude toward the behavior; beliefs about the expectations of important referent individual or groups, combining to produce a subjective norm; and beliefs about the ease or difficulty of performing the behavior, resulting in perceived behavioral control. By the logic of Kruglanski and Thompson's analysis, the distinctions between these different types of belief should be abolished because the psychological processes whereby they form and change are presumably the same. However, as has been found in numerous investigations, attitudes, subjective norms, and perceptions of behavioral control affect intentions and behaviors in predictably different ways. The qualitative distinctions between different types of beliefs serve the function of providing insight into the forces that guide human behavior, a function that would be lost if they were treated as essentially the same.

Conclusion

Kruglanski and Thompson's target article demonstrates how useful and informative it can be to examine the similarities and commonalities among different aspects of persuasion. Their analysis raises important methodological concerns about the ways in which source and message information have been manipulated in the past. In addition, they make a convincing case for the essential equivalence of the processes whereby peripheral cues and message arguments influence the attitudes of receivers, calling into question the

idea that heuristic and systematic information processing are qualitatively different. Yet, in their zeal to demonstrate uniformity of process, they risk throwing out the baby with the bath water. I have tried to show that even if they differ only in degree, heuristic and systematic information processing have profoundly different implications, and further, that important qualitative distinctions can be made in terms of the contents of information to which receivers of a message are exposed and the contents of corresponding beliefs. The distinction between information and beliefs related to the source of a message versus information and beliefs relevant to its conclusion has proved to be an extremely useful insight that has greatly advanced our understanding of the persuasion process. Little is to be gained, and much could be lost, if we were to abandon this distinction. Paraphrasing Barry Goldwater, I would argue that, in this case at least, unimode processing in the pursuit of parsimony is no virtue.

Note

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