Attitudes as global and local action guides

Alison Ledgerwood
University of California, Davis
Yaacov Trope
New York University

Chapter to appear in J. Forgas, J. Cooper, & W. Crano (Eds.), *The psychology of attitude and attitude change (The 12th annual Sydney symposium on social psychology).*

We often think of our attitudes and beliefs as stable personality characteristics – when asked to describe ourselves, we might cite our love of a particular composer, our support for a long-preferred political party, or perhaps a deep and abiding hatred of Oreo cookies. Echoing this assumption, attitudes have historically been considered relatively stable individual differences that remain consistent across time and contexts, unless or until an overt persuasion attempt is encountered. However, more recently, a far more malleable picture of attitudes has emerged from research suggesting that evaluations can shift quite flexibly in response to the immediate social environment (e.g., Baldwin & Holmes, 1987; Kawakami, Dovidio, & Dijksterhuis, 2003; Ledgerwood & Chaiken, 2007; Lowery, Hardin, & Sinclair, 2001).

In the present chapter, we propose that these competing conceptualizations of attitudes as stable versus shifting may reflect two different roles that attitudes play in regulating evaluative responding. On the one hand, attitudes can function to guide action with respect to the current social context. In order to act effectively and efficiently in the here and now, individuals need quick summaries of pertinent information to guide their interactions with objects and people in the present situation. On the other hand, attitudes can function to guide action at a distance. When planning behavior in the distant future or making decisions about a faraway location, individuals need to be able to efficiently abstract across the particularities of any one experience to extract evaluation-relevant information that is stable across time, contexts, and relationships.

We begin this chapter by providing some background on how attitudes are typically characterized in the literature. Next, we describe in more detail our global-local model of evaluation, which distinguishes between two different forms of evaluations that serve two different regulatory functions. We propose that distance will play a key role in determining which form of evaluation is used to guide behavior, and draw on construal level theory to

delineate the cognitive process by which this could occur. After describing a series of empirical studies that provide support for several of our hypotheses, we discuss points of interface with other attitudinal theories, and highlight some implications of the present perspective for understanding related areas such as attitude-behavior correspondence, ideology, and conformity.

Conceptualizing Attitudes

Attitudes have long been assumed to play a key role in the regulation of behavior. One important function that they serve is to provide a quick summary of whether an attitude object is positive or negative, in order to facilitate approach or avoidance of that object (Eagly & Chaiken, 1998; Fazio, 1986; Greenwald, 1989; Katz, 1960; Shavitt, 1990; Smith, Bruner, & White, 1956; Wilson, Lindsey, & Schooler, 2000). Furthermore, attitudes can function to coordinate social action and interaction by summarizing information from the social environment, such as other people's opinions, that helps individuals create and maintain a shared view of the world with those around them (Hardin & Higgins, 1996; Jost, Ledgerwood, & Hardin, 2008; Smith et al., 1956). Thus, attitudes help to guide both action and interaction by providing efficient, valenced summaries of information that would simply be too overwhelming and complex to consider piece by piece before each behavior we undertake in everyday life.

Although few researchers would dispute that attitudes can be functional, there is far less agreement on what they should look like. Traditionally, attitudes have often been conceptualized as dispositional evaluative tendencies toward a given attitude object that are relatively consistent across situations, unless (or until) a successful persuasion attempt changes the first attitude into a new one (e.g., Ajzen, 1988; Allport, 1935; Campbell, 1950; Krech & Crutchfield, 1948; Tourangeau & Rasinski, 1988). Extensive research on attitude stability has demonstrated that individuals often selectively attend to, think about, and remember information in ways that

support their prior attitudes (e.g., Eagly, Kulesa, Chen, & Chaiken, 2001; Giner-Sorolla & Chaiken, 1997; Lord, Ross, & Lepper, 1979; Pomerantz, Chaiken, & Tordesillas, 1995; Sweeney & Gruber, 1984). Research on attitude structure suggests that substantial attitudinal consistency can be predicted by aspects of intra-attitudinal structure, such as the consistency between an overall evaluation and the evaluative meaning of supporting cognitions or affect, as well as interattitudinal structure, such as an attitude's connectedness to other beliefs and values (see e.g., Chaiken, Pomerantz, & Giner-Sorolla, 1995; Ostrom & Brock, 1968). Consistency pressures can also arise at the interpersonal level: For example, publicly committing to an attitudinal position increases subsequent resistance to change (Hovland, Campbell, & Brock, 1957). Thus, there is good evidence to suggest that attitudes can be consistent across contexts.

In fact, the notion that one can predict a person's behavior from his attitudes rests on the assumption that an attitude measured now will predict a later attitude and subsequent behavior, and research suggests this relationship can sometimes be quite strong (see e.g., Schuman & Johnson, 1976; Wallace, Paulson, Lord, & Bond, 2005). For instance, attitudes toward political candidates are excellent predictors of voting behavior (e.g., Campbell, Converse, Miller, & Stokes, 1960). Evidence of attitudinal stability can even be found in studies of attitude change, when the post-manipulation attitude is measured repeatedly over time and shown to be consistent (e.g., Freedman, 1965; Higgins & Rholes, 1978; Peterson & Thurstone, 1933; Rokeach, 1975; Rokeach & Cochrane, 1972).

Meanwhile, however, other research suggests that attitudes are extremely malleable in response to the immediate social context. Classic research in social influence showed that people's attitudes and judgments conform to the views of others (e.g., Asch, 1955; Deutsch & Gerard, 1955; Sherif, 1935; see Eagly & Chaiken, 1993; Turner, 1991, for reviews). More

recently, research has revealed that attitudes can shift, often outside of awareness, in response to other people in the local social context, including salient social categories, significant others, communication partners, and even complete strangers (Baldwin & Holmes, 1987; Blanchard, Lilly, and Vaughn, 1991; Davis & Rusbult, 2001; Higgins & Rholes, 1978; Kawakami et al., 2003; Ledgerwood & Chaiken, 2007; Lowery et al., 2001). Even implicit attitudes can shift to align with the presumed attitudes of other people in the local social situation (see Blair, 2002, for a review). For example, Lowery et al. (2001) found that when White participants were motivated to get along with an experimenter, implicit racial bias decreased when the experimenter was Black (and therefore presumably possessed more positive attitudes toward Blacks) versus White. Likewise, Sinclair, Lowery, Hardin, & Colangelo (2005) demonstrated that when participants liked an experimenter, their implicit racial attitudes shifted to align with the presumed attitudes of the experimenter.

The growing literature on attitude malleability in response to the presumed attitudes of others reflects an overall shift in the field of social psychology, as researchers move beyond classic assumptions of stable, schematic representations to recognize malleability in a wide range of phenomena (see Blair, 2002; Smith & Semin, 2004, 2007, for reviews). For instance, stereotypes have historically been conceptualized as stable knowledge structures that are inevitably activated when a person encounters a relevant group or group member (e.g., Devine, 1989; Hamilton & Trolier, 1986; Katz & Braly, 1935; Kunda & Oleson, 1995). However, recent research increasingly suggests that stereotypes are far more malleable and context-dependent than once assumed (e.g., Blair, Ma, & Lenton, 2001; Garcia-Marques, Santos, & Mackie, 2006; Stangor, Sechrist, & Jost, 2001; Sechrist & Stangor, 2001; Sinclair & Kunda, 1999). Likewise, research on self-worth, attributional tendencies, self stereotyping, and even nonsocial concepts

such as pianos and kites indicates that a host of psychological constructs may be far more flexible and context-dependent than previously believed (e.g., Crocker, Karpinsky, Quinn, & Chase, 2003; Norenzayan & Schwarz, 1999; Sinclair, Huntsinger, Skorinko, & Hardin, 2005; Yeh & Barsalou, 2006).

Global and Local Action Guides

Former assumptions of attitude stability are thus called into question by a sizeable body of recent evidence emerging from both within and beyond the attitude domain. Nonetheless, the extensive literature on attitude stability summarized above empirically documents that attitudes can also at least appear to be fairly stable and resistant to momentary contextual influences. We propose that these seemingly contradictory characterizations reflect two different forms that evaluations may take.¹

The first form is a local evaluation. Such an attitude could provide a relatively malleable guide for action by incorporating information that is unique to a specific situation. It would therefore be shaped by details of the current context, including the presumed attitudes of another person who just happens to be in the present situation, as well as other (social or nonsocial) aspects of the context itself, short-term concerns, and unique details of a particular instantiation of the attitude object.

The second form is a global evaluation. This type of attitude could provide a relatively stable summary guide for engaging with an attitude object by taking into account general information from multiple contexts. It would therefore be shaped by what is consistently relevant

¹ Ours is of course not the first attempt to integrate these competing conceptualizations. For instance, Wilson's dual attitudes model suggested that individuals can possess both a stable and habitual implicit attitude, as well as one or more context-dependent, actively constructed, explicit attitudes (Wilson, Lindsey, & Schooler, 2000). However, in light of accumulating evidence suggesting that implicit attitudes are at least as malleable and context-dependent as their explicit cousins (Dasgupta & Greenwald, 2001; Lowery et al., 2001; Richeson & Ambady, 2001; Wittenbrink, Judd, & Park, 2001; see Blair, 2002; Ferguson & Bargh, 2007; Gawronski, LeBel, & Peters, 2007, for reviews), the implicit-explicit distinction seems unlikely to successfully reconcile evidence of stability and malleability.

for action toward an attitude object across different situations, including broad principles and values, long-term goals, the views and values of important relationship partners or groups, normative societal standards, and central and enduring features of the attitude object.

From a functional perspective, both forms of evaluation could be useful for guiding action. On the one hand, one can argue that a malleable evaluative response that allows a person to flexibly adapt to the demands of his current social environment should be helpful in facilitating approach or avoidance of an attitude object (see e.g., Schwarz, 2007). Different contexts call for different responses (if someone needs to slice an apple, for example, he might approach a paring knife if it is sitting peacefully on the counter, but jump away if it slides off and clatters to the floor). Moreover, malleable evaluative responses facilitate the creation of socially shared viewpoints, which are a necessary basis of communication, relationships, and the regulation of social action (see e.g., Brennan & Clark, 1996; Clark, 1996; Festinger, 1950; Hardin & Higgins, 1996; Isaacs & Clark, 1987; Rokeach & Mezei, 1966; Turner, 1991). From this perspective, local evaluations that flexibly tune to the current situation might be optimal for guiding action.

On the other hand, local information often seems irrelevant for evaluative responding. If someone is voting for the next president, for instance, it does not seem particularly functional for variations in the weather, or who happens to be standing outside the polling station that day, to influence her evaluative responses toward the candidates. Furthermore, stable evaluative responses could serve an important social function by facilitating the maintenance of existing shared perspectives with important relationship partners or groups (see e.g., Asch, 1952; Hardin & Conley, 2001; Hardin & Higgins, 1996; McGuire, 1969). For example, if a group of friends all prefer a particular political candidate, stability in their evaluative responses across contexts will

help protect the shared view of reality that has been formed within the group. From this perspective, action would ideally be based on a summary guide of whether a person, object, or event tends to be positive or negative across situations. Thus, a global evaluative response that remains stable in the face of contextual fluctuation would seem particularly functional in some cases.

We suggest that both forms of evaluation exist, but that they serve different functions. In the here and now, people must be able to flexibly adapt their actions to serve their immediate goals, coordinate with others around them, and interact effectively with their present surroundings. Local evaluations can facilitate approach/avoidance responding within the current situation, because they are sensitive to specific contextual information. However, humans are also able to transcend their immediate situation to plan for the future, coordinate action at a distance, predict other people's behavior, and generate counterfactual alternatives. Thus, they must be able to regulate their behavior not only for the here and now, but also for the there and then. Global evaluations can serve to guide action outside of the immediate situation by drawing on evaluation-relevant information that is consistent across contexts.

This functional analysis suggests that the proximity of an attitude object will play a critical role in determining which form of evaluation is used to guide responding. More specifically, we suspect that information about distance sets into motion a self-regulatory evaluative system geared toward guiding action either within the current context or outside of it. Whereas proximal objects should trigger local evaluations, tuned to the present context, distal objects should trigger more global evaluations, tuned to what is invariant across contexts.

How exactly could this process work? In order to better delineate both the construct of distance as well as the cognitive process by which it might influence evaluative responding, we

turned to construal level theory (Liberman & Trope, 2008; Trope & Liberman, 2003), described below.

Construal Level Theory

Construal level theory (Liberman, Trope, & Stephan, 2007; Trope & Liberman, 2003; Trope, Liberman, & Wakslak, 2007) suggests that psychological distance plays a critical role in how we mentally construe the world around us. The concept of psychological distance refers to any dimension along which an object or event can be removed from me, here, and now, and thus dovetails nicely with the current perspective. Psychological distance is defined as perceived or experienced (rather than actual) distance, and can include various dimensions (e.g., time, space, social distance, and hypotheticality).

According to construal level theory, we think about objects or events that are psychologically removed from us in terms of their high-level, abstract, and enduring characteristics. Thus, as psychological distance increases, our mental representations become more coherent and structured; they extract gist information and screen out irrelevant details. When the same objects or events are psychologically closer to us, we think about them in terms of low-level, detailed, and contextualized features. That is, with proximity, our mental representations become more concrete and lose the structure that separates important from peripheral and irrelevant features.

Considerable evidence for the impact of psychological distance on construal level exists. For example, research on temporal distance has shown that participants place greater importance on an object or event's central features (e.g., the sound quality of a radio) versus peripheral features (e.g., the clarity of the radio's clock display) when considering a decision for the distant future rather than the near future (Trope & Liberman, 2000, Study 3). Likewise, people tend to

describe distant future activities in terms of abstract ends and near future activities in terms of concrete means (Liberman & Trope, 1998, Study 1; see also Vallacher & Wegner, 1985, 1989). Temporal distance has also been shown to influence individuals' judgments about other people: In one study, participants predicted that a target person would behave more consistently across different situations when imagining the person in the distant (vs. near) future (Nussbaum, Trope, and Liberman, 2003, Study 2). In other words, in the distant future, the target's behaviors were construed more abstractly than in the near future, and were thus seen as less contextualized and more stable.

Recent research suggests that various dimensions of psychological distance, including spatial distance, social distance, and hypotheticality, all have a similar impact on mental representation (e.g., Fujita, Henderson, Eng, Trope, & Liberman, 2006; Henderson, Fujita, Trope, & Liberman, 2006; Libby & Eibach, 2002; Todorov, Goren, & Trope, 2007; Wakslak, Trope, Liberman, & Alony, 2006; see Liberman & Trope, 2008, for a review). For example, participants who viewed a cartoon film depicting a scene at a summer camp located in a spatially distant (vs. near) location perceived the film as being composed of a few large behavioral chunks, rather than many small ones, presumably because they formed more abstract representations of the behaviors rather than focusing on each specific action (Henderson et al., 2006, Study 1). Similarly, research on hypotheticality as a dimension of psychological distance showed that participants gave relatively greater weight to abstract desirability (vs. concrete feasibility) concerns when choosing to enter lotteries that involved low probabilities (i.e., distant chances) versus high probabilities (i.e., near certainties; Todorov et al., 2007, Study 2).

Furthermore, the impact of psychological distance on mental representation tends to generalize beyond the specific object or event whose proximity is manipulated. In one study,

participants who imagined their lives a year from now (distant future) versus tomorrow (near future) showed a heightened ability to creatively generate abstract solutions on a subsequent and unrelated task (Forster, Friedman, & Liberman, 2004, Study 5). In fact, simply priming words associated with distance (vs. closeness) can impact construal: For example, this task can increase participants' relative preferences for describing activities in terms of abstract ends rather than concrete means (Smith & Trope, 2006, Study 2; Wakslak et al., 2006, Study 7). Moreover, research using the Implicit Association Test has suggested that an automatic association exists between various dimensions of psychological distance and words related to high- or low-level construals (Bar-Anan, Liberman, & Trope, 2006).

Construing the Attitude Object

The impact of psychological distance on level of construal suggests a key mechanism by which distance could influence evaluative action guides. By focusing attention on the central and defining features of an attitude object, high-level construals enable global evaluations that draw on what is consistent about the object across contexts. Thus, evaluations of distal attitude objects can be based on information relevant for evaluating the object's enduring, core features, and will appear relatively stable in the face of contextual fluctuation. In contrast, by including the concrete, contextual aspects of an attitude object, low-level construals enable local evaluations that draw on the unique particularities of the present situation. Attitudinal responses toward such objects can therefore incorporate evaluative information from specific contextual details, and will therefore appear relatively malleable.

Thus, we postulate that distance directs the self-regulatory system via its impact on the mental representation of an attitude object, which determines the basis or form of an evaluative response. This pattern should therefore generalize beyond any one particular dimension of

distance. Any variable that influences the level at which an attitude object is construed should be sufficient to trigger these self-regulatory effects.

Empirical Support

Conceptualizing evaluations as local and global action guides suggests a number of predictions about how psychological distance should influence evaluative responding. We chose to begin to test our model by focusing on two in particular. First, we thought our perspective could help elucidate when people will be susceptible versus resistant to incidental social influences. As guides to action (and interaction) in the current situation, local evaluations should flexibly adapt to the immediate social context. Therefore, evaluations of psychologically proximal (vs. distal) attitude objects should show greater malleability in response to the incidental attitudes of a stranger.

Second, we suspected that our model could help shed light on an ongoing debate in the political psychology literature and beyond as to whether ideology can be meaningfully said to exist, or whether ideological values are instead relatively useless as predictors of evaluative responding (see e.g., Converse, 1964; Jost, 2006; McGuire, 1999). As guides to action (and interaction) that must transcend the present situation, global evaluations should reflect a person's core ideological values: i.e., those broad principles that relate to judgments and actions across situations (Rokeach, 1968, p. 160), and that tend to be shared within important and long-term dyadic and group relationships (Conover & Feldman, 1981; Kitt & Gleicher, 1950; Jost et al., 2008; Stillman, Guthrie, & Becher, 1960). Thus, our perspective suggests that responses to distant (vs. near) attitude objects might be more "ideological" in that they could more strongly reflecthttp://www.homeless.co.il/upload/sale/200812/116887.asp a person's basic values.

Here, we highlight three of the studies we conducted to test these predictions. The first study focused on temporal distance, and examined whether attitude alignment with an incidental stranger would be greater when a policy was to be implemented in the near (vs. distant) future. In Study 2, we used a more direct manipulation of level of construal in order to determine whether our hypothesized mechanism was really responsible for the differential malleability observed in Study 1. Our third study sought to shed additional light on the lack of malleability observed in the previous studies' distant or high-level construal conditions, given that the absence of a partner effect on evaluative responding could reflect either attitudinal stability or simple apathy. We therefore examined whether inducing participants to adopt a high (vs. low) level of construal would decrease the extent to which contextual factors predicted evaluative responding, while leaving unchanged – or even increasing – the extent to which participants' evaluations were consistent with their previously-reported ideological values.

Temporal Distance and Social Alignment

Our first study was designed to test the basic notion that evaluative responses toward psychologically near objects would indeed show greater context dependence than evaluative responses toward psychologically distant objects. Based on our theoretical perspective, we hypothesized that participants would align their attitudes with those of an incidental stranger when contemplating an attitude object that was temporally close, but not one that was temporally distant. Participants took part in an anticipated interaction paradigm (Chen, Schechter, & Chaiken, 1996), in which they expected to discuss a proposed policy on deporting illegal immigrants with another student in the study. They learned that the policy would be implemented either next week (near future condition) or next year (distant future condition), and that their discussion partner was either in favor of or against deporting illegal immigrants.

Distance to the partner, as well as time until the ostensible conversation, was always held constant; thus, the only difference between conditions was whether the attitude object was close or distant in time. Participants then reported how likely they would be to vote for the described policy, as part of a set of pre-discussion questions that they answered privately (rather than expecting their responses to be shared with their partner). In actuality, this attitude measure was our variable of interest, and no discussion took place. The experimenter provided a full debriefing after carefully probing participants for suspicion.

Consistent with our hypothesis, results showed that participants' voting intentions aligned with those of their discussion partner when the policy was going to be implemented in the near future. When the partner supported deporting illegal immigrants, participants were slightly in favor of the policy; when the partner was anti-deportation, participants were against the policy. In contrast, participants were unaffected by their partners' views when the policy was going to be implemented in the distant future. Moreover, these findings obtained despite participants in the two conditions reporting equal motivation to get along with their discussion partner, suggesting that the distance manipulation was not simply changing participants' affiliative goals. These findings thus support the idea that responses to near attitude objects are guided by a local evaluative summary that incorporates information from the current social context, whereas responses to distant attitude objects are guided by a global summary that is less context-dependent.

Construal Level and Social Alignment

A global-local model of attitudes suggests that this pattern of results is not an effect of time *per se*, but rather a more general process that has to do with how an attitude object is mentally construed. In other words, the results of our first study presumably reflected a process

in which increasing psychological distance led participants to mentally represent an attitude object in terms of its central and enduring features, which in turn caused them to rely on global, context-independent guides for action. Our next study zeroed in on this hypothesized process to directly manipulate level of construal. We predicted that individuals would be more influenced by an incidental stranger's attitudes when they construed an attitude object concretely than when they construed an attitude object abstractly.

One key aspect of construal is whether one focuses on the superordinate, goal-related aspects of activities, or rather the more subordinate, concrete means. Adapting a mindset prime developed by Freitas, Gollwitzer, & Trope (2004), we induced participants to either adopt an abstract focus by asking them a series of "Why" questions (e.g., Why would you do well in school?), or a concrete focus by asking them a series of "How" questions (e.g., How would you do well in school?). After completing the mindset prime, participants learned that an anticipated interaction partner was either in favor of or against doctor-assisted suicide. Finally, they completed a 7-item measure of their attitudes toward euthanasia.

The results again supported our model. Consistent with the notion that individuals rely on local action guides when responding to a concretely-construed attitude object, but on global action guides when responding to an abstractly-construed attitude object, social alignment was moderated by level of construal. Participants shifted their attitudes to align with those of their partner when they had been led to think concretely, but not when they had been led to think abstractly.

Construal Level and Ideological Values

Importantly, our perspective predicts not only that local action guides will tune to a particular situation, but also that global action guides will show stability across time and

contexts. Although the studies reported thus far provide important support for the global-local model, it is unclear whether the lack of a social alignment effect in the distant-future or abstract construal condition truly reflects attitude stability. For example, it is possible that this apparent "stability" resulted from apathy engendered by time discounting or the priming of superordinate goals (which could perhaps make certain political issues seem relatively unimportant). If evaluative responding at a distance is truly directed by global action guides that summarize context-independent information, then responses to distant attitude objects should be predicted by people's overarching, decontextualized ideological values. Follow-up analyses on a subset of our initial study's participants provided preliminary support for this prediction, demonstrating that a measure of individuals' ideological values assessed at the beginning of the semester predicted their voting intentions toward the distant future (but not near future) policy.

A subsequent study extended these findings to a more general manipulation of construal level. Participants reported their ideological support for the status quo (one of the two key components of left-right ideologies; see Jost, Banaji, & Nosek, 2004; Jost, Glaser, Kruglanski, & Sulloway, 2003; Jost, Nosek, & Gosling, 2007) at the beginning of the semester in a mass-testing session, and were brought into the lab several weeks later as part of an ostensibly unrelated study. Once there, they were assigned to either the "Why" or the "How" mindset prime used in our second study to lead participants to adopt a distal (abstract) or proximal (concrete) point of view. Next, they took part in the same anticipated interaction paradigm, learning their partner's attitude toward universal healthcare and then privately reporting their own.

The results showed that when participants were led to think concretely, their attitudes were predicted by their partner's attitude and not by their previously reported ideological values. Individuals' evaluative responses toward changing the healthcare system were more positive

when their partner was in favor of rather than against universal healthcare, regardless of their previously-reported ideological values. However, after being led to think abstractly, participants' attitudes were predicted by their ideological values rather than by their partners' opinions. The greater their support for preserving the societal status quo at Time 1, the more they opposed radically revamping the healthcare system at Time 2, regardless of an incidental stranger's views. These results suggest that when people have been led to focus on concrete, low-level means and therefore construe an attitude object concretely, their evaluative response toward an attitude object is context-dependent. However, when they construe the same attitude object abstractly because they have been led to focus on high-level, superordinate goals, responding is based on global, decontextualized action guides that reflect previously-reported ideological values.

Connections and Implications

The notion that attitudes can be either stable or malleable depending on a person's subjective construal of the attitude object may help to shed light on the frequently observed tension between these two characterizations of evaluative responding across multiple domains. In this section, we discuss several ways in which the global-local model of evaluation proposed here builds on existing theory and research in a number of areas, including attitude-behavior correspondence, political ideology, conformity, and connectionist models of attitude representation.

Attitude Behavior Correspondence

The current model's distinction between global and local evaluations both complements and extends prior work on the relationship between attitudes and behavior, which was spurred by criticism of attitudes research in the 1960s over low correlations between attitudes and action

(e.g., DeFleur & Westie, 1958; McGuire, 1969; Wicker, 1969). In an attempt to shed light on issues of measurement that could be obscuring a stronger relationship between attitudes and behavior, Fishbein and Ajzen (1974, 1975; Ajzen & Fishbein, 1977) took a psychometric perspective, suggesting that attitudes and behaviors can be more or less strongly correlated depending on the extent to which an attitude object is specified during measurement. According to Fishbein and Ajzen, an attitude object can be specified (or not) with regard to action, target, context, and time. Low correlations between attitudes and behavior frequently arises because an attitude toward a general (i.e., relatively unspecified) object is used to predict a highly specified behavior. For example, a person's attitude toward recycling (unspecified in terms of target, context, and time) might be used to predict a highly specified behavior, such as whether she recycles (action) her water bottle (target) in the lunch room (context) today (time). Fishbein and Ajzen suggest that such a highly specified behavior is best predicted by measuring a person's attitude toward an equally specified attitude object, whereas an attitude toward a more general attitude object will better predict an index comprised of many different specific behaviors.

This *compatibility principle* (Ajzen, 1988) provided key insight into the problem of how to increase attitude-behavior correlations by highlighting the importance of measurement techniques and mapping out when different attitude or behavior criteria would be most appropriate. In this sense, it represents an important theory of measurement, rather than a theory of psychological process: It does not speak to how or why a more specified attitude now better predicts a highly specified behavior later (see Eagly & Chaiken, 1993, pp. 165-166, for a similar observation). The global-local model of evaluation proposed here *is* concerned with process, and can therefore potentially help to refine and extend the principle of compatibility in multiple ways.

First, a global-local model suggests that an attitude object is not only objectively defined by the researcher, but subjectively construed by the participant (see also Lord & Lepper, 1999). Thus, even the same, equally-specified attitude object can be mentally represented in different ways, and the level of this *subjective* mental construal enables either a local or global evaluation of the attitude object. To return to our previous example, a person might represent the highly specified attitude object "recycling a water bottle in the lunchroom today" in terms of its abstract ends and value-related qualities (e.g., promoting environmentalism) or in terms of its concrete means (e.g., walking across the lunchroom to the recycling bin), and this subjective representation should determine whether the individual uses a global or local evaluation to guide behavior.

This analysis suggests that measuring attitudes toward a highly specified attitude object tends to improve prediction of later specific behaviors because a specified attitude object will often include dimensions of distance that influence level of construal, as well as important contextual features that can be incorporated into a local evaluation. Consider a researcher who measures participants' attitudes toward recycling a water bottle in the lunch room today. The specified near point in time (today) should lead participants to construe the attitude object in a low-level, concrete way, and their response should therefore reflect a local evaluation that incorporates available contextual information (such as the attitude of a coworker who often eats lunch at the same time). Because people often focus on the here-and-now, they are likely to also construe the attitude object concretely later that day when they actually enter the lunch room, and thus will also use a local evaluation (which draws on the same contextual details that influenced the previously-measured attitude) to guide their recycling behavior.

However, a global-local model of evaluation also suggests situations in which the principle of compatibility might not apply. For instance, a researcher might measure participants' attitudes toward voting for a particular presidential candidate in next year's election. The specified distant point in time (next year) should lead participants to construe the attitude object in a high-level, abstract way, and their response should therefore reflect a global evaluation of the political candidate. When people are actually voting in the here-and-now, however, they may construe the political candidate concretely and vote based on a local, contextualized evaluation that does not match their previously-reported global evaluation. Conversely, a researcher might measure participants' attitudes in a way that elicits a low-level construal and local evaluation of the candidate (e.g., by specifying a context: participants will vote in the nearby polling station down the street), but aspects of the actual voting situation may elicit a high-level construal and global evaluation (perhaps the individual has a conversation with a friend on the way to the voting booth about why they prefer a particular candidate, or perhaps it is particularly salient that the next president will not be sworn in until the following year, which may seem relatively distant in time). Here again, an incongruity between measurement time points in the level at which an attitude object is *subjectively* construed, rather than the extent to which an attitude object is objectively specified, could lead to inconsistencies between the measured attitudes and behaviors.

A global-local model of evaluation also suggests that instability in attitudinal responding is not simply an issue of compatibility (in objective specification of the attitude object, or even subjective level of construal). According to the present perspective, local evaluations of an attitude object tend to shift in response to incidental details of the current social context. This approach therefore makes predictions about susceptibility to incidental social influence that lie

beyond the scope of even a broadly-interpreted compatibility principle. An evaluation of a highly specified and concretely-construed attitude object in one situation may differ substantially from an evaluation of the same specific and concretely-construed object in another situation. For example, participants' evaluations of the same presidential candidate in two different contexts might differ even when the measures are compatible in degree of specificity and when the participants adopt the same low level of construal, if their local evaluations in the two contexts incorporate incidental details with different evaluative implications.

Ideology

The studies described here may also help to shed light on questions of whether and when ideological values can be expected to guide evaluative responding – a question that has caused considerable controversy in the literature (see Eagly & Chaiken, 1993; Feldman, 2003; Jost, 2006; McGuire, 1985, for reviews). Whereas some researchers have argued that ideological principles often guide evaluative responses to social and political issues, and can display considerable stability across time and contexts (e.g., Jost, 2006; Judd, Krosnick, & Milburn, 1981; Judd & Milburn, 1980; Kerlinger, 1984; Stern, Dietz, Kalof, & Guagnano, 1995), others question whether ideologies can be meaningfully said to exist for the majority of the population, citing evidence suggesting that most people's attitudes toward specific policy issues show considerable fluctuation over time and rarely seem to consistently reflect core ideological values (Campbell, Converse, Miller, & Stokes, 1960; Converse, 1964; Tedin, 1987; Zaller, 1992).

The present studies suggest that ideology may be more likely to predict evaluative responding when an issue or policy is construed abstractly rather than concretely. Thus, voting behavior may tend to more strongly reflect people's ideological values when a policy or issue is psychologically distant (e.g., when a policy will be implemented next year rather than next week,

or when someone is voting by absentee ballot from a spatially distant location, rather than in person at the voting booth). Such a notion would be consistent with past research (e.g., Converse, 1964) suggesting that individuals' here-and-now evaluations of particular political policies may often bear little relation to their ideological values. On the other hand, it would suggest that in the distance (or more generally, when a person is thinking abstractly), ideology may guide evaluative responding in a predictable and meaningful way.

Interestingly, such a link between abstraction and ideological consistency to some extent echoes Converse's (1964) classification of voters into five categories reflecting their "level of conceptualization" of politics, ranging from those at lowest level who reported no knowledge of issue content or policy significance, to those at the highest level whose political attitudes reflected "a relatively abstract and far reaching conceptual dimension" (p. 216). While Converse viewed differences in abstraction as a between-persons variable, the present perspective in some ways simply extends his analysis to consider the possibility that the same individual may view a given issue at varying levels of abstraction. Thus, ideological consistency may vary not only from person to person, but also for the same person across different situations, depending on the level at which he or she construes an attitude object at that particular moment.

Conformity

Although information about normative behavior can inform global evaluations because it extends across time and contexts (as is the case with longstanding social norms), it can also be an aspect of the local social situation. For instance, if one were judging the physical length of a line and happened to be in a room with some strangers, the strangers' perceptions of the line's length would be a local (and objectively irrelevant) concern for one's own judgment. Thus, we would predict that conformity to an incorrect and incidental majority (as in the Asch line paradigm;

Asch, 1955) would decrease as psychological distance increases (for instance, when the lines were projected on a spatially near versus distant wall).

Of course, this prediction is somewhat counterintuitive: When an object of judgment is close rather than faraway, one should if anything be more certain that one is seeing it clearly, and thus more confident in the accuracy of one's own judgment. However, at the same time, the proximity of the judged object should lead people to construe it more concretely. In turn, this should lead them to rely on local (vs. global) guides, which will be more susceptible to the incidental social influence of the incorrect majority in the present situation.

Distributed Connectionist Network Models

Although our global-local perspective does not necessarily rely on a specific cognitive model of memory, it is worth noting its particular congruence with a distributed connectionist network model of attitude representation (Conrey & Smith, 2007; Ferguson & Bargh, 2007; Smith & Conrey, 2007). Distributed connectionist systems view mental representation as patterns of activation that occur across large numbers of processing units in response to a range of inputs (rather than as discrete "files" of information that are stored, static, in the mind until they are retrieved). Such models suggest that malleability in evaluative responding naturally arises from variability in pattern activation in response to attitude objects in various contexts. However, distributed connectionist networks can also easily account for evaluative stability, which should occur when the same pattern is activated in multiple situations. According to Conrey and Smith (2007), this can explain why domain expertise is associated with attitudinal stability:

given sufficient experience with a domain, someone may learn to activate roughly the same pattern in many different contexts. This is accomplished by focusing on the key inputs that trigger that particular attractor [i.e., pattern of activation]...while ignoring other inputs, even highly salient ones, as

irrelevant...and this ability to focus is precisely what constitutes domain expertise (p. 721).

For example, whereas someone who knows little about computers might evaluate a given laptop differently depending on a range of superficial inputs (e.g., the color, the case, the opinion of another customer), a computer expert would be likely to focus on the most important and essential characteristics of the computer (inputs that would not vary with the context). In a similar manner, level of construal may influence the range of inputs to which people attend, so that abstract construals screen out incidental information and facilitate stability in evaluative responding, whereas concrete construals include these inputs and facilitate evaluative flexibility in response to the immediate context. Integrating a distributed connectionist approach with a global-local model of evaluation therefore has the potential to unite a number of predictors of attitude stability (including expertise, abstraction, and perhaps also attitude importance) via their common impact on the extent to which incidental inputs are included in or screened out of one's subjective construal of an attitude object.

Conclusion

In summary, we have suggested that individuals must be able to regulate their behavior both within and outside the present context. To do so, they draw on two forms of evaluative action guides. Local evaluations serve to guide behavior in the here and now by incorporating specific details of the present context; they can therefore shift flexibly to align with the views of incidental others and tend to look relatively malleable. Global evaluations, meanwhile, enable individuals to transcend the here and now to act on the "there and then." They draw on what is invariant about an attitude object across contexts, and therefore tend to reflect people's core values and ideals and appear relatively stable in the face of changing contextual details.

References

- Ajzen, I. (1988). *Attitudes, personality, and behavior*. Buckingham, England: Open University Press.
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84, 888-918.
- Allport, G. W. (1935). Attitudes. In C. Murchison (Ed.), *A handbook of social psychology* (pp. 798-844). Worcester: Clark University Press.
- Asch, S. E. (1955). Opinions and social pressure. Scientific American, 193, 31-35.
- Baldwin, M. W., & Holmes, J. G. (1987). Salient private audiences and awareness of the self. *Journal of Personality and Social Psychology*, 52, 1087-1098.
- Bar-Anan, Y., Liberman, N., Trope, Y., & Algom, D. (2007). Automatic processing of psychological distance: Evidence from a stroop task. *Journal of Experimental Psychology: General*, *136*, 610-622.
- Blair, I. V. (2002). The malleability of automatic stereotypes and prejudice. *Personality & Social Psychology Review*, 6, 242-261.
- Blair, I. V., Ma, J. E., & Lenton, A. P. (2001). Imagining stereotypes away: The moderation of implicit stereotypes through mental imagery. *Journal of Personality & Social Psychology*, 81, 828–841.
- Blanchard, F. A., Lilly, T. & Vaughn, L. A. (1991). Reducing the expression of racial prejudice.

 *Psychological Science, 2, 101-105.
- Campbell, D. T. (1950). The indirect assessment of social attitudes. *Psychological Bulletin*, 47, 15-38.

- Campbell, A., Converse, P.E., Miller, W.E., & Stokes, D.E. (1960). *The American voter*. Oxford, England: Wiley.
- Chaiken, S., Pomerantz, E. M., & Giner-Sorolla, R. (1995). Structural consistency and attitude strength. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 387-412). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Chen, S., Shechter, D. & Chaiken, S. (1996). Getting at the truth or getting along: Accuracy-versus impression-motivated heuristic and systematic processing. *Journal of Personality* & *Social Psychology*, 71, 262-275.
- Conover, P.J., & Feldman, S. (1981). The origins and meaning of liberal/conservative self identification. *American Journal of Political Science*, 25, 617-645.
- Conrey, F.R., & Smith, E.R. (2007). Attitude representation: Attitudes as patterns in a distributed, connectionist representational system. *Social Cognition*, *25*, 718-735.
- Converse P.E. (1964). The nature of belief systems in mass publics. In D. E. Apter (Ed.), *Ideology and discontent*. New York: Free Press.
- Crocker, J., Karpinski, A., Quinn, D. M. & Chase, S. (2003). When grades determine self-worth:

 Consequences of contingent self-worth for male and female engineering and psychology
 majors. *Journal of Personality & Social Psychology*, 85, 507-516.
- Davis, J. L. & Rusbult, C. E. (2001). Attitude alignment in close relationships. *Journal of Personality and Social Psychology*, 18, 65-84.
- DeFleur, M. L., & Westie, F. R. (1958) Verbal attitudes and overt acts: An experiment on the salience of attitudes. *American Sociological Review*, 23, 667-673.
- Deutsch, M., & Gerard, H. B. (1955). A study of normative and informational social influences upon individual judgment. *Journal of Abnormal & Social Psychology*, *51*, 629-636.

- Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology*, 56, 5-18.
- Eagly, A. H., & Chaiken, S. C. (1993). The psychology of attitudes. Belmont, CA: Wadsworth.
- Eagly, A. H., Kulesa, P., Chen, S., & Chaiken, S. (2001). Do attitudes affect memory? Tests of the congeniality hypothesis. *Current Directions in Psychological Science*, *10*, 5-9.
- Fazio, R. H. (1986). How do attitudes guide behavior? In R. M. Sorrentino & E. T. Higgins (Eds.), *The Handbook of motivation and cognition: Foundations of social behavior* (pp. 204-243). New York: Guilford Press.
- Fazio, R. H. (1989). On the power and functionality of attitudes: The role of attitude accessibility. In A. R. Pratkanis, S. J. Breckler, A. G. Greenwald (Eds.), *Attitude structure and function* (pp.153-179). Hillsdale, N.J.: Erlbaum.
- Feldman, S. (2003). Values, ideology, and the structure of political attitudes. In D. O. Sears, L. Huddy, & R. Jervis (Eds.), *Oxford handbook of political psychology* (pp. 477-508). New York: Oxford University Press.
- Ferguson, M. J., & Bargh, J.A. (2007). Beyond the attitude object: Implicit attitudes spring from object-centered contexts. In B. Wittenbrink & N. Schwarz (Eds.), *Implicit measures of attitudes: Progress and controversies* (pp. 216-246). New York: Guilford.
- Festinger, L. (1950). Informal social communication. *Psychological Review*, 57, 271-282.
- Fishbein, M., & Ajzen, I. (1974). Attitudes toward objects as predictors of single and multiple behavioral criteria. *Psychological Review*, 81, 59-74.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research.* Reading, MA: Addison-Wesley.

- Förster, J., Friedman, R. S., & Liberman, N. (2004). Temporal construal effects on abstract and concrete thinking: Consequences for insight and creative cognition. *Journal of Personality and Social Psychology*, 87, 177–189.
- Freedman, J. (1965). Long-term behavioral effects of cognitive dissonance. *Journal of Experimental Social Psychology*, 1, 145-155.
- Freitas, A. L., Gollwitzer, P. M., & Trope, Y. (2004). The influence of abstract and concrete mindsets on anticipating and guiding others' self regulatory efforts. *Journal of Experimental Social Psychology*, 40, 739–752.
- Fujita, K., Henderson, M., Eng, J., Trope, Y., & Liberman, N. (2006). Spatial distance and mental construal of social events. *Psychological Science*, *17*, 278-282.
- Fujita, K., Trope, Y., & Liberman, N. (2006). The role of mental construal in self-control. In D.DeCremer, M. Zeelenberg, & J. K. Murnighan (Eds.), *Social psychology and economics*(pp. 193-211). New York: Sage Publications.
- Garcia-Marques, L., Santos, A. S. C., & Mackie, D. M. (2006). Stereotypes: Static abstractions or dynamic knowledge structures? *Journal of Personality and Social Psychology*, 91, 814-831.
- Giner-Sorolla, R. & Chaiken, S. (1997). Selective use of heuristic and systematic processing under defense motivation. *Personality & Social Psychology Bulletin*, 23, 84-97.
- Greenwald, A. G. (1989). Why attitudes are important: Defining attitude and attitude theory 20 years later. In A. R. Pratkanis, S. J. Breckler, and A. G. Greenwald (Eds.), *Attitude structure and function* (pp. 429-440). Hillsdale, NJ: Erlbaum.

- Hamilton, D. L., & Trolier, T. K. (1986). Stereotypes and stereotyping: An overview of the cognitive approach. In J. Dovidio, & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 127–163). New York: Academic Press.
- Hardin, C. D. & Higgins, E. T. (1996). Shared reality: How social verification makes the subjective objective. In R.M. Sorrentino & E. T. Higgins (Eds.), *Handbook of motivation* and cognition, Vol. 3: The interpersonal context (pp. 28-84). New York, NY, US: Guilford Press.
- Hardin, C. D., & Higgins, E. T. (1996). Shared reality: How social verification makes the subjective objective. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation* and cognition: The interpersonal context (Vol. 3). New York: Guilford.
- Henderson, M. D., Fujita, K., Trope, Y., & Liberman, N. (2006). Transcending the "here": The effect of spatial distance on social judgment. *Journal of Personality and Social Psychology*, *91*, 845-856.
- Higgins, E. T. & Rholes, W. S. (1978). "Saying is believing": Effects of message modification on memory and liking for the person described. *Journal of Experimental Social Psychology*, *14*, 363-378.
- Hovland, C. I., Campbell, E. H., & Brock, T. (1957). The effects of "commitment" on opinion change following communication. In C. I. Hovland et al. (Eds.), *The order of presentation in persuasion*. New Haven: Yale Univ. Press.
- Jost, J. T. (2006). The end of the end of ideology. American Psychologist, 61, 651-670.
- Jost, J.T., Banaji, M.R., & Nosek, B.A. (2004). A decade of system justification theory:

 Accumulated evidence of conscious and unconscious bolstering of the status quo.

 Political Psychology, 25, 881-919.

- Jost, J. T., Ledgerwood, A., & Hardin, C. D. (2008). Shared reality, system justification, and the relational basis of ideological beliefs. *Social and Personality Psychology Compass*, *2*, 171-186.
- Jost, J.T., Glaser, J., Kruglanski, A.W., & Sulloway, F. (2003). Exceptions that prove the rule:

 Using a theory of motivated social cognition to account for ideological incongruities and political anomalies. *Psychological Bulletin*, 129, 383-393.
- Jost, J.T., Nosek, B.A. & Gosling, S.D. (in press). Ideology: Its resurgence in social, personality, and political psychology. *Perspectives on Psychological Science*.
- Judd, C.M., Krosnick, J.A., & Milburn, M.A. (1981). Political involvement in attitude structure in the general public. *American Sociological Review*, 46, 660-669.
- Judd, C. M., & Milburn, M. A. (1980). The structure of attitude systems in the general public:Comparisons of a structural equation model. *American Sociological Review*, 45, 627-643.
- Kawakami, K., Dovidio, J. F., & Dijksterhuis, A. (2003). Effect of social category priming on personal attitudes. *Psychological Science*, *14*, 315-319.
- Katz, D. (1960). The functional approach to the study of attitudes. *Public Opinion Quarterly*, 24, 163-204.
- Katz, D., & Braly, K. (1933). Racial stereotypes of one hundred college students. *Journal of Abnormal Psychology*, *3*, 175-193.
- Kerlinger, F. N. (1984). *Liberalism and conservatism: The nature and structure of social attitudes*. Hillsdale, NJ: Erlbaum.
- Kitt, A.S., & Gleicher, D.B. (1950). Determinants of voting behavior. *Public Opinion Quarterly*, 14, 393-412

- Krech, D., & Crutchfield, R. S. (1948). *Theory and problems of social psychology*. New York: McGraw-Hill.
- Kunda, Z. & Oleson, K. C. (1995). Maintaining stereotypes in the face of disconfirmation:Constructing grounds for subtyping deviants. *Journal of Personality & Social Psychology*, 68, 565-579.
- Ledgerwood, A. & Chaiken S. (2007). Priming us and them: Automatic assimilation and contrast in group attitudes. *Journal of Personality and Social Psychology*, *93*, 940-56.
- Liberman, N. & Trope, Y. (2008). The psychology of transcending the here and now. *Science*, 322, 1201-1205.
- Liberman, N., & Trope, Y. (1998). The role of feasibility and desirability considerations in near and distant future decisions: A test of temporal construal theory. *Journal of Personality and Social Psychology*, 75, 5-18.
- Liberman, N., Trope, Y., & Stephan, E. (2007). Psychological distance. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles, Vol.* 2 (pp. 353-383). New York: Guilford Press.
- Libby, L. K. & Eibach, R. P. (2002). Looking back in time: Self-concept change affects visual perspective in autobiographical memory. *Journal of Personality and Social Psychology*, 82, 167-179.
- Lord, C. G., & Lepper, M. (1999). Attitude representation theory. In M. Zanna (Ed.), *Advances in experimental social psychology* (pp. 265-343). San Diego, CA: Academic Press.
- Lord, C. G., Ross, L. & Lepper, M. R. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology*, *37*, 2098-2109.

- Lowery, B. S., Hardin, C. D. & Sinclair, S. (2001). Social influence effects on automatic racial prejudice. *Journal of Personality and Social Psychology*, 81, 842-855.
- McGuire, W.J. (1999). The vicissitudes of attitudes in social psychology. In W. J. McGuire (Ed.), *Constructing social psychology: Creative and critical processes* (pp. 325-347). Cambridge, UK: Cambridge University Press. (Original work published 1986).
- McGuire, W. J. (1969). The nature of attitudes and attitude change. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology, Vol. 3* (pp. 136-314). Reading, Mass: Addison-Wesley.
- McGuire, W. J. (1985). Attitudes and attitude change. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology*, *3rd edition* (Vol. 2, pp. 233-346). New York: McGraw-Hill.
- Norenzayan, A., & Schwarz, N. (1999). Telling what they want to know: Participants tailor causal attributions to researchers' interests. *European Journal of Social Psychology*, 29, 1011-1020.
- Nussbaum, S., Trope, Y., & Liberman, N. (2003). Creeping dispositionism: The temporal dynamics of behavior prediction. *Journal of Personality and Social Psychology*, 84, 485-497.
- Ostrom, T. M., & Brock, T. C. (1968). A cognitive model of attitudinal involvement. In R. P. Abelson, E. Aronson, W. J. McGuire, T. M. Newcombe, M. J. Rosenberg, & P. H. Tannenbaum (Eds.), *Theories of cognitive consistency: A sourcebook* (pp. 373-383). Chicago: Rand McNally.
- Peterson, R. C., & Thurstone, L. L. (1933). *The Effect of Motion Pictures on the Social Attitudes* of High School Children. Oxford, England: University of Chicago Book-Store.

- Pomerantz, E. M., Chaiken, S. & Tordesillas, R. S. (1995). Attitude strength and resistance processes. *Journal of Personality and Social Psychology*, 69, 408-419.
- Rokeach, M. (1968). *Beliefs, attitudes, and values: A theory of organization and change.* San Francisco: Jossey-Bass.
- Rokeach, M. (1975). Long-term value changes initiated by computer feedback. *Journal of Personality and Social Psychology*, 32, 467-476.
- Rokeach, M. & Cochrane, R. (1972). Self-confrontation and confrontation with another as determinants of long-term value change. *Journal of Applied Social Psychology*, 2, 283-292.
- Schuman, H. & Johnson, M. P. (1976). Attitudes and behavior. *Annual Review of Sociology*, 2, 161-207.
- Sechrist, G. B., & Stangor, C. (2001). Perceived consensus influences intergroup behavior and stereotype accessibility. *Journal of Personality & Social Psychology*, 80, 645–654.
- Shavitt, S. (1990). The role of attitude objects in attitude functions. *Journal of Experimental Social Psychology*, 26, 124-148.
- Sherif, M. (1935). A study of some social factors in perception. Archives of Psychology, No. 187.
- Sinclair, L., & Kunda, Z. (1999). Reactions to a Black professional: Motivated inhibition and activation of conflicting stereotypes. *Journal of Personality and Social Psychology*, 77, 885–904.
- Sinclair, S., Huntsinger, J., Skorinko, J., & Hardin, C. D. (2005). Social tuning of the self:

 Consequences for the self-evaluations of stereotype targets. *Journal of Personality and Social Psychology*, 89, 160-175.

- Sinclair, S., Lowery, B. S., Hardin, C. D., & Colangelo, A. (2005). Social tuning of automatic racial attitudes: The role of affiliative motivation. *Journal of Personality and Social Psychology*, 89, 583-592.
- Smith, E. R., & Conrey, F. R. (2007). Mental representations as states not things: Implications for implicit and explicit measurement. In B. Wittenbrink & N. Schwarz (Eds.), *Implicit measures of attitudes* (pp. 247-264). New York: Guilford.
- Smith, E. R. & Semin, G. R. (2004). Socially situated cognition: Cognition in its social context.In M. P. Zanna (Ed.), *Advances in experimental social psychology, Vol 36* (pp. 53-117).San Diego, CA: Elsevier Academic Press.
- Smith, E. R. & Semin, G. R. (2007). Situated social cognition. *Current Directions in Psychological Science*, 16, 132-135.
- Smith, M. B., Bruner, J. S, & White, R. W. (1956). Opinions and personality. New York: Wiley.
- Smith, P. K., & Trope, Y. (2006). You focus on the forest when you're in charge of the trees:

 Power priming and abstract information processing. *Journal of Personality and Social Psychology*, 90, 578-596.
- Stangor, C., Sechrist, G.B., & Jost, J.T. (2001). Changing racial beliefs by providing consensus information. *Personality and Social Psychology Bulletin*, 27, 486-496.
- Stern, P. C., Dietz, T., Kalof, L. & Guagnano, G. A. (1995). Values, beliefs, and proenvironmental action: Attitude formation toward emergent attitude objects. *Journal of Applied Social Psychology*, 26, 1611-1636.
- Stillman, J.G. Guthrie, G.M., & Becker, S.W. (1960). Determinants of political party preference.

 **Journal of Social Psychology, 51, 165-171

- Sweeney, P. D., & Gruber, K. L. (1984). Selective exposure: Voter information preferences and the Watergate affair. *Journal of Personality and Social Psychology*, 46, 1208-1221.
- Tedin, K.L. (1987). Political ideology and the vote. Research in Micropolitics, 2, 63-94.
- Todorov, A., Goren, A., & Trope, Y. (2007). Probability as a psychological distance: Construal and preference. *Journal of Experimental Social Psychology*, 43, 473-482.
- Tourangeau, R., & Rasinski, K. A. (1988). Cognitive Processes Underlying Context Effects in Attitude Measurement. *Psychological Bulletin*, *103*, 299-314.
- Trope, Y., & Liberman N. (2000). Temporal construal and time-dependent changes in preference. *Journal of Personality and Social Psychology*, 79, 876-889.
- Trope, Y., & Liberman, N. (2003). Temporal construal. Psychological Review, 110, 403-421.
- Trope, Y., Liberman, N., & Wakslak, C. (2007). Construal levels and psychological distance: Effects on representation, prediction, evaluation, and behavior. *Journal of Consumer Psychology*, 17, 83-95.
- Turner, J. C. (1991). *Social influence. Mapping social psychology series*. Belmont, CA: Brooks/Cole Publishing Company.
- Vallacher, R. R., & Wegner, D. M. (1985). *A theory of action identification*. Hillsdale, NJ: Erlbaum.
- Vallacher, R. R. & Wegner, D. M. (1989). Levels of personal agency: Individual variations in action identification. *Journal of Personality & Social Psychology*, *57*, 660-671.
- Wakslak, C. J., Trope, Y., Liberman, N., & Aloni, R. (2006). Seeing the Forest When Entry is Unlikely: Probability and the Mental Representation of Events. *Journal of Experimental Psychology: General*, *135*, 641-653.

- Wallace, D. S., Paulson, R. M., Lord, C. G., & Bond, C. F. (2005). Which behaviors do attitudes predict? Meta–analyzing the effects of social pressure and perceived difficulty. *Review of General Psychology*, *9*, 214–227.
- Wicker, A. W. (1969). Attitudes versus actions: The relationship of verbal and overt behavioral responses to altitude objects. *Journal of Social Issues*, 25, 41-78.
- Wilson, T. D., Lindsey, S., Schooler, T. Y. (2000). A model of dual attitudes. *Psychological Review*, 107, 101-126.
- Yeh, W., & Barsalou, L. W. (2006). The situated nature of concepts. *American Journal of Psychology*, 119, 349-384.
- Zaller, J. R. (1992). *The nature and origins of mass opinion*. Cambridge: Cambridge University Press.