

# VISUAL PERSPECTIVE IN MENTAL IMAGERY: A REPRESENTATIONAL TOOL THAT FUNCTIONS IN JUDGMENT, EMOTION, AND SELF-INSIGHT

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## Abstract

Visual imagery plays a prominent role in mental simulations of past and future events: people tend to “see” events in their mind’s eye when they think about them. When picturing events people often use their own first-person perspective, looking out at the situation through their own eyes. However, other times people use a third-person perspective, so that they see themselves in the image from the visual perspective an observer would have. This chapter presents a theoretical model proposing that imagery perspective functions to determine whether people understand events bottom-up, in terms of the phenomenology evoked by concrete features of the pictured situation (first-person), or top-down, in terms of abstractions that integrate the pictured event with its broader context (third-person). This model integrates existing findings and generates novel predictions that challenge widespread assumptions about the function that imagery perspective serves. We review a program of research that supports these predictions, demonstrating the role of imagery perspective in defining the experiential and conceptual facets of the self, determining emotional responses to recalled and imagined life events, and shaping forecasts of future behavior and emotion. We conclude by discussing how the proposed model helps to distinguish the visual dimension of perspective from other dimensions on which perspective may vary. We consider how this model connects with other theories concerning the self and event representation, and we explore the implications for classic and contemporary areas of social psychological inquiry including attribution, social perspective-taking, culture, emotional coping, and top-down versus bottom-up processing.

## 1. INTRODUCTION

One of the remarkable features of the human mind is that it allows us to transcend the present moment to experience events in the past, future, and alternative realities (Schacter, Addis, & Buckner, 2007; Tulving, 2002). This ability is referred to as mental simulation, and it plays a role in supporting many of the processes and phenomena that capture social psychologists’ interest. Mental simulation of past events, or episodic memory, comprises a defining feature of the self (Conway & Pleydell-Pearce, 2000; Wilson & Ross, 2003). Mental simulation of future events, or episodic future thinking, is crucial for planning and goal-directed behavior

(Atance & O'Neill, 2001; Buehler, Griffin, & Ross, 1994). And, mental simulations of hypothetical events enable people to consider and reason about events that did not and may never occur, a process called counterfactual thinking (Roese & Olson, 1997). Further, these mental simulations have the power to influence our thoughts, feelings, and behavior in ways that compare with the effects of present situations. Manipulating memories of past events can change our present views of ourselves and even our behavior (Libby, Eibach, & Gilovich, 2005a). Memories of emotional events can impact our present well-being for better (Zhou, Sedikides, Wildschut, & Gao, 2008) and for worse (Reynolds & Brewin, 1999). Imagined future events have the potential to promote or to inhibit motivation to pursue goals (Fishbach, Dhar, & Zhang, 2006; Taylor, Pham, Rivkin, & Armor, 1998). Thoughts about events that never occurred can change our judgments of events that did occur and influence our present feelings (Gilovich & Medvec, 1995; Roese & Olson, 1997).

Mental simulations are not merely propositional thoughts; they can be rich subjective experiences in which one imaginatively projects one's self into an alternate reality and plays through the details of events as they unfold (Taylor et al., 1998; Tulving, 2002). A hallmark characteristic of these subjective experiences is visual imagery (Brewer, 1996; Conway, Meares, & Standart, 2004). When people mentally simulate events they "see" them in their mind's eye. An intriguing fact about this imagery has to do with the visual perspective from which it is constructed (Nigro & Neisser, 1983). Often people visualize an event from a *first-person perspective*, using the vantage point they would have if they were actually experiencing the event. Other times, people visualize an event from a *third-person perspective*, using an observer's vantage point so that they see themselves as an object in the scene. Most people experience images from both perspectives, and can shift perspective at will (Nigro & Neisser, 1983; Robinson & Swanson, 1993). References to this phenomenon appear in philosophy (Wollheim, 1984), literature (Oe, 1974), and folk psychology (Schacter, 1996). Academic psychologists have remarked on it since the beginning of the discipline (Freud, 1907/1960; Galton, 1883; Henri & Henri, 1897). And, currently this phenomenon is being studied across areas of psychology from neuroscience (Jackson, Meltzoff, & Decety, 2006) to clinical (Kenny & Bryant, 2007) to social (Libby & Eibach, 2009).

Evidence from across these investigations demonstrates that the visual perspective in mental images is more than a phenomenological curiosity. As we will review, imagery perspective both influences and is influenced by the information people recall about events (Abelson, 1975; Nigro & Neisser, 1983), the emotions and physical sensations they experience as they picture them (Robinson & Swanson, 1993), and the behaviors in which they subsequently engage (Libby, Shaeffer, Eibach, & Slemmer, 2007a).

Thus, as visual imagery has been shown to function in the mental representation and manipulation of concrete objects (Kosslyn, Thompson, & Ganis, 2006), these findings establish that imagery perspective serves a function in the mental representation of social events. However, despite the fact that most researchers studying imagery perspective would agree on this point, there is less consensus about the nature of the function that imagery perspective serves. In this chapter, we propose a model that integrates existing evidence and provides the basis for novel predictions about the role of imagery perspective in social psychological processes.

According to this model, imagery perspective functions to determine whether people understand events bottom-up, in terms of the phenomenology evoked by concrete features of the pictured situation (first-person), or top-down, in terms of abstractions that integrate the pictured event with its broader context (third-person). We consider the significance of this function for defining the self as a dual-faceted structure and shaping judgment, emotion, and behavior. We review a program of research conducted in collaboration with our colleagues that supports this model and distinguishes it from alternative models. We conclude by discussing how our model of imagery perspective connects with models of the self and event representation, and we explore the implications for classic and contemporary areas of social psychological inquiry.

## 2. IMAGERY PERSPECTIVE DEFINED

“Perspective” is a commonly used term, among lay people and researchers alike. However, the term can have multiple meanings, and it is important not to confuse them when it comes to evaluating the empirical evidence we will present. Thus, before going any further, we would like to take a moment to clarify what we mean when we refer to “imagery perspective” or simply “perspective” in this chapter. Unless we note otherwise, we mean visual viewpoint. The evidence we review to support our model involves measures or manipulations of perspective that target this visual dimension in particular.

In studies that measure visual perspective, participants are typically asked first to visualize an event and then to read a description of the two perspectives. A sample description from our own research on remembered events reads as follows:

Some images you may see from the first-person perspective, which means you see the event from the visual perspective you had when the event was originally occurring; in other words, in your memory you are looking out at your surroundings through your own eyes.

Some images you may see from the third-person perspective, which means you see the event from the visual perspective an observer would have had when the event was originally occurring; in other words, in your memory you can actually see yourself, as well as your surroundings.

If participants were asked to hold a specific image of the event in mind, they are asked to select which description best captures their perspective. If participants were given some period of time to picture the event they can be asked to indicate which perspective they predominantly used or to indicate on a scale the proportion of images they experienced from each perspective.

In studies that manipulate visual perspective, participants receive either first-person or third-person instructions. Sample manipulations from our own research on remembered events read as follows. In the first-person condition, participants are instructed:

You should picture the event from a first-person visual perspective. With the first-person visual perspective you see the event from the visual perspective you had when the event was originally occurring. In other words, you can see your surroundings in the event looking through your own eyes.

In the third-person condition, participants are instructed:

You should picture the event from a third-person visual perspective. With the third-person visual perspective you see the event from the visual perspective an observer would have had when the event was originally occurring. In other words, you can see yourself in the event as well as your surroundings.

These measures and manipulations can be modified to refer to perspective for future or hypothetical events. And, similar measures and manipulations can be used to explore variability in visual perspective when imagining another person's actions—using that actor's first-person visual perspective or a third-person visual perspective that includes an image of the actor.

The point we wish to make here is that these measures and manipulations target the visual dimension of perspective in particular. And, we use the terms “first-person” and “third-person” to refer specifically to the visual point of view from which images are constructed, not to narrative voice or psychological ownership (self vs. other) of pictured events. As we will note throughout the chapter, evidence supports the idea that effects involving variation in visual point of view are not equivalent to effects involving variation along other dimensions that may also be commonly referred to as “perspective,” such as empathy (e.g., Davis, 1983), psychological perspective-taking (e.g., Galinsky, Ku, & Wang, 2005), or self-distancing (Ayduk & Kross, 2008). We will return to this point in greater detail later on, but now we present the evidence supporting our model, beginning with findings that demonstrate the powerful role that visual perspective plays in defining the meaning of events depicted in imagery.

### 3. MECHANISMS BY WHICH IMAGERY PERSPECTIVE SHAPES EVENT REPRESENTATIONS

#### 3.1. Perspective and the information incorporated into event representations

Different visual perspectives on a scene afford access to different information about that scene, so an obvious question is whether the perspective people use to mentally image a scene is related to the information they incorporate into their mental representation of it. Early investigations addressed this question by manipulating the visual perspective participants used to mentally image events involving a character in a story (i.e., the first-person perspective of the character vs. the third-person perspective of an observer watching that character) (Abelson, 1975; Fiske, Taylor, Etkoff, & Laufer, 1979). Later work manipulated the visual perspective people used to mentally image their own actions from a previous laboratory session (i.e., the first-person perspective they had while performing the actions vs. the third-person perspective an observer would have had) (McIsaac & Eich, 2002). In both cases, researchers were interested in whether the perspective manipulation influenced the information that participants recalled about the pictured events. And, in both cases a similar pattern emerged.

Regardless of whether the actor in the event was a story character or the self, participants recalled more information about the actor's bodily sensations, affective reactions, and psychological states when they pictured the events from the first-person than from the third-person perspective. They recalled more information about details that could be seen from an observer's visual perspective (e.g., the actor's appearance, other visual details in the scene) when they pictured the event from the third-person than from the first-person perspective. Further, these differences were more pronounced among those with better visualization skills (Abelson, 1975). And, while reliably replicated with manipulations of visual perspective, the effects do not emerge with manipulations of empathic perspective (Fiske et al., 1979). Thus, the effects of visual perspective manipulations on memory for the content of events appear to depend on visual imagery *per se*, and not other forms of perspective-taking.

Much of the research assessing the effect of perspective on the content of event representations has focused on differences in the inclusion of details that are part of the event itself: actions on and reactions to the environment (first-person) as well as externally observable information (third-person). However, emerging evidence suggests that imagery perspective also has the power to influence the extent to which people incorporate relevant information beyond that which emerges bottom-up from the pictured incident.

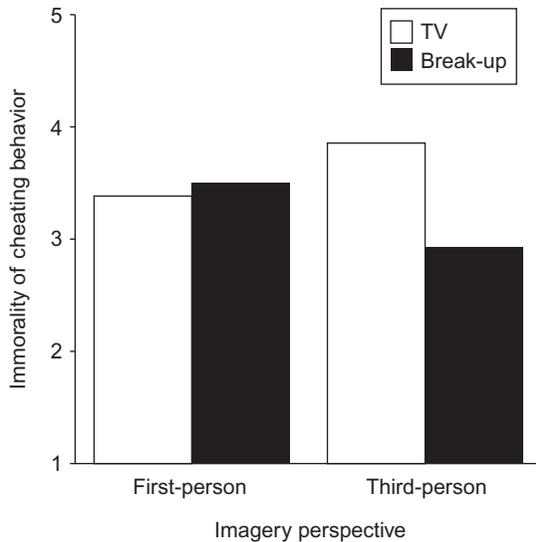
This appears to be more likely when individuals picture an event from the third-person than from the first-person perspective.

For example, in one study (Valenti & MacGregor, 2011), undergraduate participants were either instructed to use the first-person or third-person visual perspective to imagine themselves allowing a friend to copy off of their paper during an exam. In addition to manipulating imagery perspective, the researchers orthogonally manipulated information that “set the stage” for the cheating incident participants pictured. In one condition, the scenario specified that the friend had experienced a devastating relationship break-up in the days before the exam, whereas in the other condition the scenario specified that the friend had gotten a new TV. Thus, in the break-up condition, there was a potentially justifiable reason why the friend was not prepared for the exam, whereas in the TV condition no such justification existed. However, across both conditions, participants pictured the exact same behavior—showing their friend answers on an exam—either from the first-person or third-person perspective. As they pictured that behavior, they were asked how immoral they considered it to be. Whereas third-person participants judged their behavior as less immoral in the break-up than in the TV condition, first-person participants demonstrated no sensitivity to this external circumstance, rating the behavior as equally immoral (see Fig. 4.1). In other words, picturing the incident from the third-person perspective caused participants to incorporate information about events beyond the incident itself, whereas first-person imagery did not.

### 3.2. Perspective and the subjective experience of mental simulations

In addition to influencing the information people incorporate into their mental representation of events, perspective also influences the subjective experience that characterizes the mental simulation. People report greater subjective experiences of “reliving” when they picture past events from the first-person as opposed to third-person perspective (Libby & Eibach, 2002; Nigro & Neisser, 1983; Robinson & Swanson, 1993). If these perspective differences in self-report reflect real differences in phenomenological experience, neuroimaging should reveal converging evidence. Indeed, it does.

The most convincing evidence comes from studies that manipulate visual perspective directly through use of video images (e.g., Jackson et al., 2006). These studies rely on the fact that internally generated mental images employ much of the same mental machinery used in the processing of externally generated images (e.g., Kosslyn et al., 2006). Thus, manipulating visual perspective in externally generated images provides insight into the role of visual perspective in internally generated images while affording greater experimental control over the content of those images. Participants



**Figure 4.1** Judgments of the immorality of helping a friend to cheat on an exam, depending on the imagery perspective used to picture the incident (first-person vs. third-person) and the background circumstances leading up to the incident (friend won a TV or experienced a devastating relationship break-up).

watched video clips of simple hand or foot movements filmed either from the first-person perspective of the person doing the actions or from the third-person perspective of an observer. Results revealed that sensory-motor areas of the brain were more active upon viewing first-person than third-person clips, consistent with the idea that greater “reliving” with first-person imagery reflects real differences in the extent to which actors’ internal experiences are simulated depending on imagery perspective.

The evidence we have reviewed thus far makes the point that imagery perspective influences the information people incorporate into their representation of an event and the subjective experience of simulating it. We next turn to further evidence suggesting that these findings reflect even more fundamental differences between first-person and third-person representations: differences in how people define the events they picture and differences in the manner by which people arrive at an understanding of the events’ meaning.

### 3.3. Perspective and action identification

A variety of findings converge on the idea that imagery perspective is related not just to the information people attend to and their subjective experience of mental simulation, it is tied to the way people define the event itself. Theories of abstraction in event representation (Goldman, 1970; Trope &

Liberman, 2010; Vallacher & Wegner, 1985) offer a framework for understanding this point and its psychological significance. These theories apply to simple actions and complex events alike, although the basic principles are most clearly demonstrated with the example of a simple action.

Any action (e.g., voting) can be defined in many different ways, and these descriptions can be ordered on a continuum from concrete (e.g., pulling a lever) to abstract (e.g., influencing the election, being a good citizen). Concrete construals define an action in terms of its constituent steps, whereas abstract construals define an action in relation to its broader context—for example, the causes or consequences of the action, the characteristics or motivations of the actor. A change in action identification functions psychologically like a change in action: subjectively, people are doing something different when they are “influencing the election” than when they are “pulling a lever,” despite the fact that objectively the action—voting—is the same (Vallacher & Wegner, 1985). Evidence suggests that imagery perspective serves an analogous representational function. The same action can be pictured from one perspective or the other. Psychologically, however, a change in perspective functions like a change in the action itself (cf. Asch, 1940).

Initial evidence for this idea came from a study (Libby, 2003) that employed a measure designed to index individual differences in the tendency to construe actions abstractly. This measure, the Behavioral Identification Form (BIF; Vallacher & Wegner, 1985), consists of 25 actions (e.g., “locking a door”) each accompanied by a concrete (e.g., “putting a key in the lock”) and abstract (e.g., “securing the house”) description. Respondents’ preferences for abstract construal are measured according to the number of actions for which they choose the abstract option. Consistent with the idea that these preferences tap into a stable individual difference in how people think about actions and events, those with higher abstraction scores on the BIF also tend to be less impulsive, have more certain self-concepts, and a stronger internal locus of control—as would be expected for people who tend to think of their actions in terms that incorporate motives and broader meaning (Vallacher & Wegner, 1989).

If imagery perspective functions to represent actions in concrete or abstract terms, then people who tend to think about actions abstractly should also tend to picture them from the third-person perspective. Indeed, just such an association emerged when participants were asked to picture themselves doing each BIF action and report the perspective of their images, in addition to their choice of construal (Libby, 2003). Further studies (Libby, Shaeffer, & Eibach, 2009) revealed evidence for the causal relationship between these variables and demonstrated that it worked in both directions. Describing actions in abstract as opposed to concrete terms caused individuals to be more likely to picture themselves doing those actions from the third-person perspective. And, picturing doing actions from the third-person as opposed to first-person perspective caused individuals to be more likely to describe those actions abstractly.

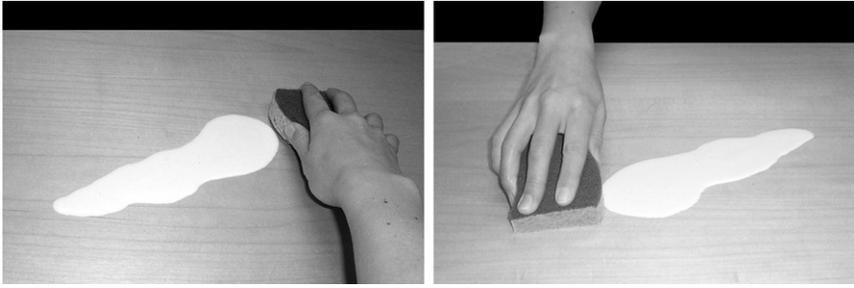
Additional evidence supports the idea that these effects are the result of visual representations. These studies (Libby et al., 2009) measured and manipulated imagery perspective using photographs of other people rather than mental images of the self. Pairs of photographs depicting 30 common actions were compiled, along with a concrete and abstract description for each action. One photograph in each pair depicted the action from the actor's first-person visual perspective and the other photograph depicted the action from an observer's third-person visual perspective. When the action description was manipulated and participants were asked to choose which photograph better depicted the action, they were more likely to choose the third-person photograph when they had received the abstract as opposed to concrete description. When perspective was manipulated using the photographs and participants were asked to choose which description better captured the photograph, they were more likely to choose the abstract description when they had been shown the third-person photograph than when they had been shown the first-person photograph.

The fact that these experiments replicated the patterns observed when imagery perspective was varied in mental images of the self supports the idea that those effects depended on visual representations. However, these studies, alone, do not pinpoint what it is about images from different perspectives that are responsible for the effects. First- and third-person images of a given scene may vary in terms of the distance from the action, which objects are included in the image, and at what resolution. To what extent do the effects we have just described depend on such differences? The answer appears to be, not at all. As we will describe next, the differences appear instead to reflect different styles of event processing that characterize the two perspectives.

### 3.4. Perspective and style of processing

Evidence for the representational function of visual perspective, *per se*, comes from studies using photographs that vary perspective independent of the objects in the image and the distance to the action. These photographs depict actions such as wiping up a spill, stamping a letter, and cutting vegetables. For each action there are two photographs, one from each perspective, but both are shot from the same distance to the action so that they include the same objects at the same resolution (see Fig. 4.2). In one study (Libby et al., 2009), participants were given either concrete or abstract descriptions of the actions depicted in these distance-controlled photographs. For each action, participants were asked to choose which of the photographs better depicted the action. They were more likely to choose third-person images when they received abstract as opposed to concrete descriptions.

Additional experiments used these distance-controlled photographs to manipulate imagery perspective and results suggest that not only are people



**Figure 4.2** An example of the distance-controlled action photograph pairs used to measure and manipulate visual perspective. These photographs depict the action of wiping up a spill. *Left*: First-person perspective. *Right*: Third-person perspective. From Libby et al. (2009), p. 511, published by American Psychological Association, reprinted with permission.

defining actions differently depending on perspective, but people are also processing information differently. These studies rely on the idea that a processing style in one context can be measured by carryover effects on processing in a subsequent task (Galinsky & Moskowitz, 2000; Gollwitzer, Heckhausen, & Steller, 1990; Rees & Israel, 1935). For example, in one study (Shaeffer, Libby, & Eibach, 2011), participants viewed a series of the distance-controlled action photographs—either first-person or third-person—under the guise that they would later be asked questions about them. Interspersed with the series of photographs, allegedly as part of an unrelated task, participants were asked to complete the BIF, choosing either a concrete or abstract construal for a variety of actions. None of the BIF actions were depicted in the photographs; however, the perspective of the photographs influenced participants' action identification of the BIF actions. Participants who had been primed with third-person as opposed to first-person photographs were more likely to prefer abstract construals. The results of the earlier studies suggest that participants were construing the actions in the photographs more abstractly when they were depicted from the third-person than from the first-person perspective, and the fact that this effect carried over to how participants construed unrelated actions suggests that the effect of visual perspective on action construal is the result of a shift of processing style according to perspective.

Another study (Shaeffer et al., 2011) provides converging evidence and demonstrates that the effect reflects a processing difference relevant to understanding complex events as well as simple actions. This study used the same procedure to manipulate perspective, but instead of measuring processing according to construal of simple actions on the BIF, it measured interpretation of Aesop fables. These fables depict a simple story but are intended to communicate an abstract moral. For example, in one fable a lion

is trapped in a hunter's net and a mouse saves him by chewing through the ropes. Before reading each fable, participants viewed a series of distance-controlled action photos—either first-person or third-person. After reading each fable, participants expressed their preferences for different descriptions of the story that ranged from concrete (e.g., “A mouse chewed a rope to free a lion.”) to abstract (e.g., “Big friends can come in small packages.”). Priming participants with third-person as opposed to first-person images made participants more likely to define the fables in terms of abstract morals.

Across these studies, the contents of the actions used to manipulate perspective and the events used to measure processing style were not overlapping, yet the perspective from which the initial actions were depicted systematically influenced the interpretation of subsequent actions and events. These findings suggest that the perspective of the action images influenced the style of processing participants used to understand those actions, and it was this style that carried over to their processing of subsequent actions and events. This link between perspective and style of processing suggests it may not be a coincidence that a variety of everyday expressions equate looking at one's self from an external perspective and gaining insight into the broader meaning of one's actions. For example, individuals may be advised to “Take a long hard look at yourself” or “Watch what you're doing.” It has been argued that linguistic metaphors reflect the nature of cognitive processes (Boroditsky & Ramscar, 2002; Lakoff & Johnson, 1980). If so, expressions like those we note here may reflect the phenomenological experience involved in understanding events in terms of their broader significance.

### 3.5. Summary: Imagery perspective as a representational tool

The research reviewed thus far demonstrates that whether images are internally or externally generated, and whether they depict the self or another person as the actor, imagery perspective serves a common function in defining the subjective meaning of the action or event depicted in the image. Picturing an event from the first-person perspective involves a bottom-up style of making meaning in which people incorporate information about the experience evoked by concrete features of the pictured situation and define the event in terms of these constituent aspects. Picturing an event from the third-person perspective involves a top-down style of making meaning in which people integrate the pictured event with a broader context and define the event in terms of the abstract meaning that results.

Further, these links are bidirectional in nature: perspective influences the meaning people see in actions, and the meaning they see influences the perspective they use. Thus, imagery perspective is a representational tool. As such, imagery perspective should play a role in event understanding in any context in which images are used to depict events, whether those images be

externally generated (e.g., photographs, video) or internally generated (e.g., memory, imagination), and whether the actor is the self or another person. In [Section 4](#), we explore the implications specifically for the case of internally generated images of events involving the self—that is, mental simulations of life events. Memories of the past and simulations of possible futures are centrally involved in defining the human sense of self ([Ross & Buehler, 2001](#)). We explore the function of imagery perspective in this process, investigating the implications for self-judgment, emotion, motivation, and behavior.



## 4. THE FUNCTION OF IMAGERY PERSPECTIVE IN REPRESENTING LIFE EVENTS

### 4.1. Alternative account

Before introducing our account, we begin by acknowledging an intuitively compelling alternative. Because first-person imagery affords a phenomenological merging of present and pictured selves it is tempting to assume that first-person imagery necessarily connects the pictured event to the self in the present, whereas third-person imagery detaches the pictured event from the self. Further, logical analysis and empirical evidence might seem to support such a conclusion: the presence versus absence of internal information is a key dimension that distinguishes self from nonself ([Legrand & Ruby, 2009](#)).

This line of reasoning leads to the assumption that third-person images necessarily provide a self-distanced representation of events, and this assumption has guided various investigations and interpretations of imagery perspective effects in the literature. For example, it has been suggested that by reducing the reliving of past emotion, third-person imagery necessarily blunts the emotional meaning of a pictured event, thus leading people to process the event in an unemotional or personally detached manner ([Kenny et al., 2009](#); [McIssac & Eich, 2004](#); [Williams & Moulds, 2007](#)). It has been proposed that people use third-person imagery to disavow responsibility for undesirable past events as a mode of self-enhancement ([Sanitioso, 2008](#)).

However, although there is good evidence that first-person imagery leads people to incorporate information about internal experience into their representation of the event, and information about internal experience is an important component of the self, this type of information is not all that defines the self. A long history of scholarship supports the idea that the self is dual-faceted, and this tradition provides the basis for our model of how imagery perspective functions in the mental representation of life events.

## 4.2. The proposed model

Many scholars have suggested that there are two facets of the self—one defined by experiential awareness and the other by conceptual knowledge (Damasio, 1994; Epstein, 2003; Gallagher, 2000; LeDoux, 2002; Wilson, 2002). James' (1890/1950) notion of the "I" (self as experiencer) versus the "me" (self as object) is a well-known example of this distinction. The experiential "I" self can be understood as emerging in a bottom-up fashion, evoked by concrete features of the environment and one's actions on it. The conceptual "me" self is a mental representation of the self as an abstract entity that spans across time. This facet of the self is a rich assemblage of diverse meaning structures including self-schemas (Markus, 1977), self-theories (Hong, Chiu, Dweck, Lin, & Wan, 1999; Ross, 1989), possible selves (Markus & Nurius, 1986), ideal and ought selves (Higgins, 1996), and self-narratives (McAdams, 2001; Neisser, 1994; Singer & Salovey, 1993).

These two facets of the self, I and me, are typically interrelated as events unfold in real time (Farb et al., 2007)—experiences evoked bottom-up by features of the environment can influence the conceptual self-knowledge that is activated, and conceptual self-knowledge can influence the interpretation and experience of features of the environment. However, these two facets of the self nonetheless appear to be distinct. It has been suggested that the experiential "I" represents a more primitive awareness of self that we may share with other animals, whereas the conceptual "me" is an elaborated version relying on uniquely human capabilities for language and self-reflection (Damasio, 1994; Farb et al., 2007; Gallagher, 2000). Consistent with these ideas, it has been argued that the two aspects of the self are supported by different neural systems (Gallagher, 2000; Klein, Rozendal, & Cosmides, 2002; Lieberman, Jarcho, & Satpute, 2004; Northoff & Bermpohl, 2004). We believe that this distinction between the two facets of the self is crucial to understanding the psychological function of imagery perspective in representing life events.

Evidence reviewed earlier demonstrates that when people picture an event from the first-person perspective, they define that event in terms of the experience evoked by concrete features of the situation—in the case of life events, this phenomenology defines the experiential self. When people picture an event from the third-person perspective they define that event in relation to its broader context—for example, the characteristics of the actor, other causally related events. In the case of life events, the conceptual self is a ready source of such contextual information. Thus, we propose that when people picture an event in the personal past or future, imagery perspective serves to frame that event either in terms of the experiential I-self (first-person) or in relation to the conceptual me-self (third-person). This analysis leads to hypotheses about the role of imagery perspective in the self and emotion that diverge from hypotheses based on the alternative account we outlined earlier.

#### 4.2.1. Hypotheses about implications for the self

According to our model, the perspective people use to picture a life event should depend on whether they think about that event in terms of the experience evoked by concrete features of the situation (first-person) or in terms of the event's broader meaning in their lives (third-person). This should be the case regardless of whether people are motivated to claim or disavow the pictured event as part of the present self. In addition, the effect of picturing an event from the third-person as opposed to first-person perspective should depend crucially on its abstract meaning in relation to the self-concept. If this level of meaning highlights a discrepancy between present and pictured selves, picturing an event from the third-person rather than first-person perspective should indeed help detach the event from the present self, as alternative accounts predict third-person imagery to do. However, if the meaning of the event in relation to the self-concept highlights continuity, picturing an event from the third-person rather than first-person perspective should enhance the connection between the pictured and present selves. In both cases, though, the outcome of picturing the event from the third-person perspective would reflect the meaning of the event in relation to the beliefs and theories that define one's own understanding of the self, rather than the meaning a detached, objective observer might infer.

#### 4.2.2. Hypotheses about implications for emotion

According to this logic, we also predict that third-person imagery should have the potential to intensify emotional reactions relative to first-person imagery, not uniformly to dampen emotional response as alternative accounts predict. Events can have emotional significance not only because of the responses evoked by concrete features of the situation but also because of the broader meaning of the event in one's life (e.g., [Gilovich & Medvec, 1995](#); [Tangney & Dearing, 2002](#)). Thus, we predict that in cases where considering the meaning of an event in relation to one's life more broadly decreases its emotional power, third-person imagery should reduce emotional response relative to first-person imagery. However, in cases where considering the meaning in relation to one's life more broadly increases the emotional power of an event, third-person imagery should increase emotional response. In both cases, though, the outcome of picturing the event from the third-person perspective would reflect the meaning of the event in relation to the beliefs and theories that define one's understanding of the self, rather than reflecting a direct influence of perspective on the emotional impact of thinking about the event.

We now review a program of research that provides support for these hypotheses about the role of imagery perspective in defining the self and emotional responses in relation to recalled and imagined life events.

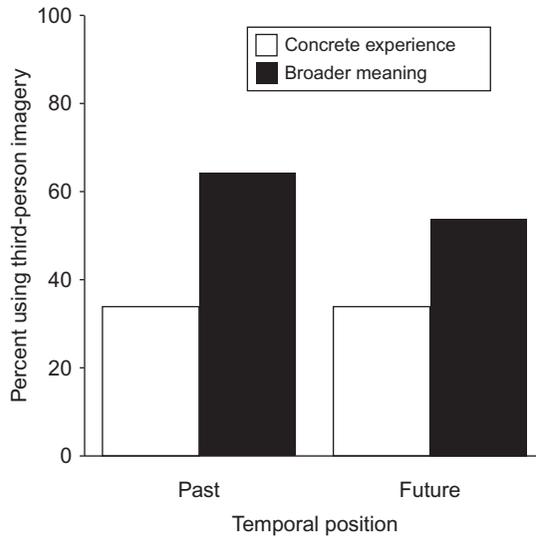
### 4.3. Implications for the self

#### 4.3.1. Meaning-making influences perspective

If perspective functions to define the level of meaning in the visual representation of an event, then the perspective people use to picture an event should vary according to the level of meaning that they are focused on as they think about it. In a test of this hypothesis (Libby & Eibach, 2011), undergraduate participants received one of two sets of instructions for describing either their high school or college graduation (a past or future event, respectively). One set of instructions directed participants to describe the experience of the event's concrete details—that is, specific actions and sensory experiences. The other set directed them to describe the event's meaning in the broader context of their lives—that is, its connection to other events and its role in defining their identity. After describing their high school or college graduation in the specified manner, participants were instructed to close their eyes and picture it. As predicted, regardless of whether the graduation was in the past or the future, participants were more likely to picture it from third-person if they focused on its broader meaning than if they focused on the experience of its concrete details (see Fig. 4.3).

A related study (Libby & Eibach, 2011) directly pitted our proposed mechanism against an alternative—that people shift perspective depending on whether they desire to claim (first-person) or disown (third-person) the pictured event (Sanitioso, 2008). In this study, undergraduate participants were instructed to imagine themselves at an interview for their desired career or graduate program. It was either specified that participants imagine this interview unfolding according to a best-case or a worst-case scenario. And, as in the previous study, participants were either instructed to describe the experience of the event's concrete details or to describe the event's meaning in the broader context of their lives. According to the alternative account, perspective should vary according to the valence of the event, with third-person imagery more common in the worst-case than in the best-case scenario. According to our account, perspective should vary according to whether participants focused on the event's broader meaning or the experience of its concrete details. Results strongly supported our account. Regardless of whether participants pictured a best-case or worst-case scenario, thinking about the broader meaning of the interview made participants significantly more likely to picture it from the third-person perspective than did thinking about the experience of the event's concrete features.

Complementing findings from studies involving direct manipulations of the focus people adopt as they think about life events, other studies investigate the effect of factors that are likely to lead people spontaneously to adopt such a focus. One such factor is the consistency of an event with the present self-concept. People are motivated to maintain a coherent self-concept, and inconsistent events represent a potential threat to this goal. However,



**Figure 4.3** Percent of participants using third-person imagery to picture their graduation, depending on temporal position of the event and manipulated mental focus. From Libby and Eibach (2011, p. 721), published by Sage, adapted with permission.

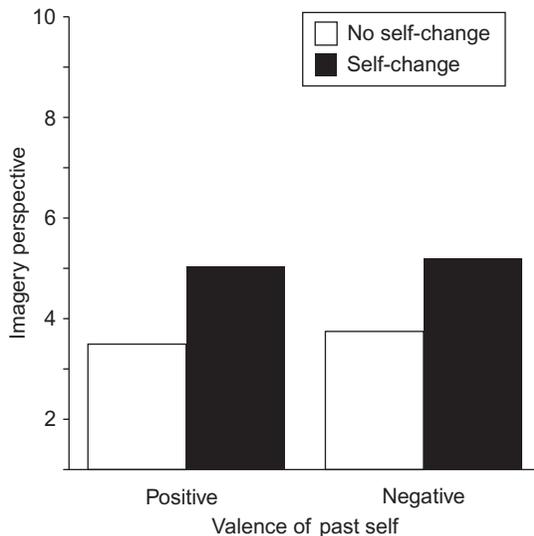
people can maintain coherence in the face of inconsistency by linking the event to a broader explanatory framework that makes sense of it (Ross & McFarland, 1988)—for example, a trajectory of change or pattern of contextual variability in the self. If, as we propose, third-person imagery functions to link events to such broader explanatory frameworks, then people should be more likely to adopt the third-person perspective when the actions they recall or imagine are inconsistent with their present self-concepts than when they are consistent.

Evidence supporting this hypothesis comes from a series of studies that varied whether actions were consistent or inconsistent with participants' working self-concepts and then measured the imagery perspective participants used to picture those actions (Libby & Eibach, 2002). For example, one study manipulated participants' perceptions of their own religiosity. In one condition, participants were induced to feel high in religiosity by answering questions that were worded so as to elicit predominantly pro-religious responses (e.g., At least occasionally, I have felt like devoting time to religious or spiritual activities.). In another condition, participants answered questions that were worded to elicit predominantly antireligious responses (e.g., At least occasionally, I have felt like not devoting time to religious or spiritual activities.). Then, participants in both conditions recalled an episode in which they behaved religiously and reported the perspective they used to picture it. Consistent with our account, participants

were more likely to adopt the third-person perspective while recalling the religious behavior if they had been induced to feel low in religiosity than they were if they had been induced to feel high in religiosity.

The idea that incongruity between pictured actions and the present self-concept promotes third-person imagery has also been studied in the context of naturally occurring changes in the self-concept over time. Consistent with results from the studies involving experimental manipulations of inconsistency, people are more likely to adopt the third-person perspective when they recall past behaviors related to aspects of themselves that have since changed than when they recall behaviors related to aspects of themselves that have remained stable over time (Libby & Eibach, 2002, 2011).

Importantly, this effect of self-change on perspective does not depend on whether participants consider the change in themselves to be a change for the better (i.e., recalling a relatively negative past self) or a change for the worse (i.e., recalling a relatively positive past self) (Libby & Eibach, 2011; see Fig. 4.4). This is further evidence that the third-person perspective does not necessarily function to psychologically distance oneself from a negatively evaluated past self (*contra* Sanitioso, 2008). Rather, evidence supports the hypothesis that perspective functions to define the level of meaning of events. Specifically, individuals are more likely to focus on the meaning of an event in relation to their lives more broadly if they have changed since



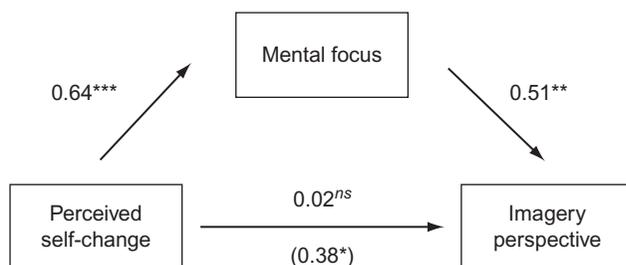
**Figure 4.4** Mean imagery perspective ratings for recalled event, depending on the valence of the past self and on whether it was associated with a dimension of the self that had since changed or had not. Ratings were made on a scale ranging from *entirely first-person* (1) to *entirely third-person* (10). From Libby and Eibach (2011, p. 718), published by Sage, adapted with permission.

it occurred than if they have not, and this difference in mental focus accounts for changed individuals' greater use of third-person imagery (see Fig. 4.5) (Libby & Eibach, 2011).

#### 4.3.2. Perspective moderates the influence of self-theories on self-judgment

The studies we just described demonstrate how focusing on the meaning of an event in relation to the conceptual self, as opposed to focusing on the phenomenology evoked by features of a pictured situation, makes people more likely to picture that event from the third-person perspective. If this effect reflects a functional role of imagery perspective in representing the meaning of events in relation to the two facets of the self, then the reverse causal relation should emerge when imagery perspective is manipulated. As a result, reactions to pictured events should reflect a stronger influence of the general theories and beliefs that define the conceptual self when people picture those events from the third-person than from the first-person perspective. We next describe a series of studies that provide support for this hypothesis with regard to a range of different self-theories and self-beliefs.

**Theories of self-change** People have theories about how their personal attributes change or remain stable over their lifespan, and this aspect of the conceptual self can shape people's interpretations of the past and plans for the future (Ross & Buehler, 2001). According to our account, such influence should be pronounced when people picture events from the



**Figure 4.5** Path diagram relating perceived self-change and mental focus to imagery perspective. Numbers on paths represent standardized regression coefficients. The coefficients along the path from perceived self-change to imagery perspective are the coefficients with (no parentheses) and without (parentheses) mental focus included in the equation. Perceived self-change was coded  $-1$  for no change and  $+1$  for change. The mental-focus index was coded such that higher numbers indicate greater focus on broader meaning and less focus on details of experience. Higher numbers on the imagery perspective measure indicate more third-person imagery. Sobel  $z = 2.69$ ,  $p < 0.01$ . \* $p < 0.05$ . \*\* $p < 0.01$ . \*\*\* $p < 0.001$ . From Libby and Eibach (2011, p. 720), published by Sage, reprinted with permission.

third-person perspective and not when they use the first-person perspective. As a result, third-person imagery should increase perceived self-change relative to first-person imagery in domains where people tend to adopt a theory of self-change but reduce perceived self-change in domains where they tend to adopt a theory of self-stability.

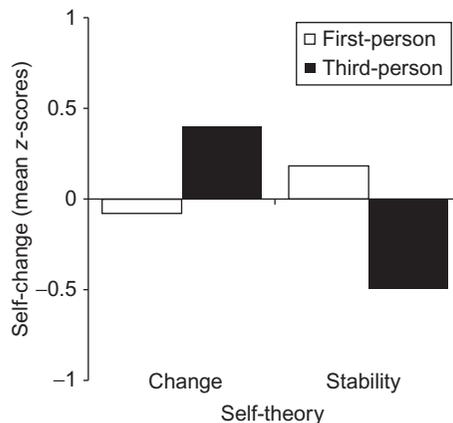
One piece of evidence consistent with this hypothesis comes from a study that manipulated the visual perspective that individuals undergoing psychological therapy used to visualize their first treatment session (Libby et al., 2005a). As they did so, they reported how much they had changed since that session. Given that the typical purpose of therapy is to change the self in some way, those undergoing treatment could be expected to adopt a theory of self-change when looking back at their first day of therapy (Conway & Ross, 1984). And, if the third-person perspective leads people to interpret events in relation to self-theories, then patients should perceive greater self-change when recalling their first treatment session from the third-person than from the first-person perspective. This is exactly what the results revealed.

A follow-up study sought to conceptually replicate this effect and test its power to influence present behavior. In this study, undergraduates who had been socially awkward in high school recalled an incident of such behavior from that time period. This is another context in which individuals are likely to adopt a theory of self-change as they recall the past (Ross & Wilson, 2002): doing so would help reassure them that they were better-adjusted to social life in college. And, consistent with the previously described findings, picturing their past socially awkward behavior from the third-person rather than first-person perspective caused participants to perceive greater improvement in their social skills since that time. Further, these subjective impressions of self-change carried over to influence participants' present social behavior: those who had been instructed to picture their past socially awkward behavior from the third-person perspective went on to demonstrate greater social skill in a subsequent interaction.

If these findings reflect the role of self-theories in shaping interpretations of events that are pictured from the third-person perspective, then the effect of perspective on self-change should reverse in situations where individuals hold a theory of self-stability. Evidence from studies investigating the moderating effect of individual differences in self-theories is consistent with this hypothesis (Libby et al., 2005a). Direct manipulations of self-theories provide definitive evidence. For example, in one study (Libby et al., 2005a) undergraduates were asked to identify a memory from high school and then were instructed either to write about how their personalities had changed since that time or how their personalities had remained the same. They then were instructed to picture their high school memory either from the third-person or first-person perspective and subsequently to rate the amount of change in themselves since the event they were picturing

had occurred. Consistent with the idea that self-theories shape the meaning of events when individuals picture them from the third-person, but not first-person perspective, the manipulation of self-theories influenced judgments of change only when individuals pictured the event from the third-person perspective. Further, third-person imagery caused individuals to perceive more change in themselves if they had been induced to adopt a theory of self-change, but third-person imagery caused individuals to perceive less change in themselves if they had been induced to adopt a theory of self-stability (see Fig. 4.6). In other words, the effect of imagery perspective depends crucially on the self-theory that guides the meaning-making process that people engage in as they picture events from the third-person. If this account is correct, the same pattern should hold for other types of self-theories, as we will explore next.

**Theories of self-worth** Self-esteem has been described as a self-theory capturing people's global self-evaluations (Conner Christensen, Wood, & Barrett, 2003; Epstein, 1973). One of the most well-documented differences between low and high self-esteem individuals (LSEs and HSEs) is in how they react to failure: LSEs have much stronger negative responses (Blaine & Crocker, 1993; Taylor, 1991). One reason for these different responses appears to be the different meanings that LSEs' and HSEs' general self-views afford as they consider the meaning of any given failure in their lives more broadly. HSEs tend to minimize failures in relation to their other more positive qualities and experiences (Dodgson & Wood, 1998), whereas



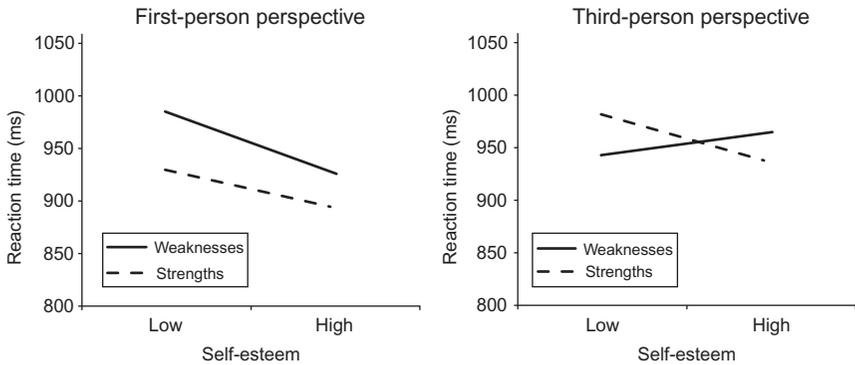
**Figure 4.6** Adjusted mean composite self-change judgments, depending on imagery perspective and induced self-theory of change or stability, controlling for objective temporal distance of recalled event. From Libby et al. (2005a, p. 57), published by American Psychological Association, adapted with permission.

LSEs overgeneralize from failures (Brown, 1998), linking their individual failure experiences together in confirmation of their globally negative self-views (Kernis, Brockner, & Frankel, 1989). Thus, even when the objective features of a failure are held constant, LSEs still have more extreme negative reactions (e.g., Brown & Marshall, 2001; Dodgson & Wood, 1998; Tangney & Dearing, 2002).

If self-esteem as a component of the conceptual self influences reactions to failure in this top-down manner, our model predicts that when recalling or imagining failure low self-esteem should be associated with more negative reactions only to the extent that individuals use the third-person perspective. In a test of this prediction (Libby, Valenti, Pfent, & Eibach, 2011), participants recalled a personal failure and reported on the perspective they used to picture it. They also completed a measure of the extent to which they were overgeneralizing (Carver & Ganellen, 1983) from the event as they pictured it (e.g., When I think about this event I wonder if I can do well at anything at all.). Consistent with our model, LSEs overgeneralized more than HSEs only when recalling failures from the third-person perspective, not when recalling failures from the first-person perspective. Further, among LSEs third-person imagery was associated with a significantly greater tendency to overgeneralize, whereas among HSEs third-person imagery was associated with a significantly reduced tendency to overgeneralize.

Follow-up studies provided converging evidence for the causal role of perspective by manipulating it (Libby, Valenti, et al., 2011). One study operationalized overgeneralization by measuring the accessibility of participants' personal strengths versus weaknesses after picturing a failure: Greater overgeneralization should be characterized by greater accessibility of weaknesses relative to strengths. In this study, after participants had pictured personal failures from the specified perspective (first-person or third-person), participants engaged in a reaction-time task that assessed the speed with which they could identify words related to domains they had previously identified as representing their personal strengths and weaknesses. It was only when the failures had been pictured from the third-person perspective that lower self-esteem predicted greater accessibility of weaknesses relative to strengths. When the failures had been pictured from the first-person perspective, no such self-esteem differences emerged (see Fig. 4.7).

Another study conceptually replicated this pattern, manipulating the perspective that participants used to picture a past failure in their lives, and then measuring the accessibility of additional failure or success memories. It was only after participants had pictured the initial failure from the third-person perspective that additional failures were more accessible and successes less accessible for LSEs than for HSEs. When participants had used the first-person perspective no such effect of self-esteem emerged: successes



**Figure 4.7** Accessibility of personal strengths and weaknesses after recalling an initial failure from either the first-person or third-person perspective. Accessibility was operationalized as the reaction time to respond to words associated with personal strengths and weaknesses in a discrimination task. Smaller values indicate greater accessibility. Values are plotted at 1 SD above and below the sample mean of self-esteem.

were more accessible than failures for LSEs and HSEs alike. Given previous evidence suggesting that LSEs' tendency to overgeneralize from failure stems from the influence of their general theories of self-worth, the fact that this tendency to overgeneralize emerges only when failures are pictured from the third-person, and not first-person, perspective supports the idea that third-person imagery functions to represent life events in terms of these general theories that define the conceptual self.

**Theories of self-in-relation-to-other** In addition to representations of their own individual characteristics people's self-concepts also include representations of themselves in relationships with specific others (Baldwin, 1999; Ogilvie & Ashmore, 1991). These relational self-schemas can influence people's interpretations of events that happen in the contexts of their interpersonal relationships. According to our model, such effects of the conceptual self should be more pronounced when people picture events from the third-person than from the first-person perspective. Marigold, Eibach, Libby, Holmes, and Ross (2011) tested this hypothesis by manipulating the perspective individuals used to picture incidents in which their romantic partners had behaved badly toward them.

A dimension of relational self-schemas that reliably influences individuals' perceptions of the broader meaning of such relationship transgressions is self-reported attachment anxiety. Individuals high in attachment anxiety tend to interpret a relationship transgression as a sign that their partner rejects them (Collins, Ford, Guichard, & Allard, 2006), whereas individuals low in attachment anxiety tend to minimize the implications of a

relationship transgression by drawing on their background beliefs that their partner accepts and loves them (Simpson, Ickes, & Grich, 1999). Thus, a partner's transgressions tend to lower the perceived quality of the relationship among those high in attachment anxiety but not those with low anxiety.

If this account of this attachment style difference is correct, our model predicts that when individuals recall their partners' transgressions the attachment style difference should be more pronounced when individuals use the third-person as opposed to the first-person perspective. Indeed, Marigold et al. found that it was only when individuals pictured relationship transgressions from the third-person perspective that high attachment anxiety predicted lower perceived relationship quality. When individuals pictured the transgressions from the first-person perspective, no such attachment anxiety differences emerged.

#### 4.3.3. Harnessing the potential of perspective to influence motivation and behavior

When people want to achieve a goal, they are often advised to picture themselves achieving it (Bandura, 1997; Neck & Manz, 1992), and our model makes predictions about which perspective they should adopt. Evidence suggests that connecting desired behaviors to one's personal identity strengthens commitment and increases the likelihood of following through with those behaviors (Fishbach & Dhar, 2005; Koestner, Losier, Vallerand, & Carducci, 1996). The findings we have reviewed support the idea that third-person imagery leads people to interpret pictured events in a top-down manner, integrating them with more general self-knowledge to make meaning of them. If this is the case, picturing desired actions from the third-person, rather than first-person, perspective should make people more motivated to engage in those actions and more likely to achieve those goals.

Results from research that manipulated the perspective students used to picture successfully completing an academic assignment provide support for this hypothesis (Vasquez & Buehler, 2007). Using the third-person, as opposed to first-person, perspective caused participants to be more likely to interpret the imagined behavior in terms of their academic goals, endorsing abstract descriptions such as "pursuing higher education" more than concrete descriptions such as "doing an assignment." And, this difference in interpretation accounted for the greater motivation that third-person participants subsequently reported. No such effects of perspective on motivation emerged when participants pictured neutral performance—consistent with the idea that the increased motivation with third-person imagery resulted from the meaning of the imagined behavior in relation to participants' academic goals.

Another study demonstrates the power of such perspective effects to influence actual success at following through with desired actions. On the eve of the 2004 U.S. Presidential election, Libby et al. (2007a)

experimentally manipulated whether registered Ohio voters used the third-person or the first-person perspective to picture themselves voting the next day. As participants pictured themselves voting from the specified perspective, they rated the extent to which they were feeling excited (e.g., excited, inspired) and apathetic (e.g., bored, unmotivated), which, combined, provided an index of their overall enthusiasm for voting. As participants continued to picture voting, they responded to items tapping into their commitment to voting—their beliefs about the value and importance of voting, their likelihood of voting, the regret they would feel if they failed to vote and the satisfaction they would feel if they did vote, and the strength of their intention to vote even if they encountered a variety of obstacles.

According to our model, using the third-person perspective should lead participants to think about the act of voting in terms of their goals and identities as voters, thus enhancing the motivational potency of the image relative to using the first-person perspective. Consistent with this, results revealed that picturing voting from the third-person, rather than first-person, perspective caused participants to feel more enthusiastic about voting and caused them to perceive themselves as more committed to voting. Further, the effect of perspective on enthusiasm accounted for the effect on commitment. In other words, as a result of feeling more enthusiastic as they pictured voting from the third-person rather than first-person perspective, voters perceived themselves to be more committed to voting (Libby, Shaeffer, Eibach, & Slemmer, 2007b).

A final question is whether this effect of perspective on Election Eve made any difference in voting behavior on Election Day. To answer this question, Libby et al. followed up after the election to find out whether participants actually voted. Results revealed a sizeable effect of the perspective manipulation: a full 90% of those in the third-person condition turned out to the polls compared with 72% in first-person condition. And, the effect of perspective on participants' commitment to voting fully mediated the effect of perspective on voting behavior (Libby et al., 2007a). Given that this study was conducted in the context of a contentious election in a key swing state where voters were inundated with political advertisements and voting appeals, the effects of perspective that emerged are particularly impressive. These findings provide a compelling example of imagery perspective's power to shape self-perceptions and to thereby change important behaviors.

#### 4.4. Implications for emotion

Although it is often assumed that third-person imagery reduces the power of pictured events to elicit emotion (e.g., Holmes & Mathews, 2010; Kenny et al., 2009), the study we just described provides an example in which third-person imagery increased emotional response relative to first-person imagery. Indeed, our model predicts precisely this effect when the meaning

of an event in the broader context of one's life evokes a stronger emotional response than does the experience of the concrete details, as is arguably the case with voting. However, when considering the meaning of an event in the broader context of one's life evokes a weaker emotional response than does focusing on the concrete experience, third-person imagery should reduce emotional responses. This hypothesis leads to novel predictions about moderators of the relation between imagery perspective and emotion. We review studies that test these predictions next.

#### **4.4.1. Individual differences in the meaning of events moderate the effect of perspective on emotion**

If our hypothesis about the function of imagery perspective is correct, individual differences in general self-beliefs that lead to different emotional meanings of life events should moderate the effect of perspective on emotional responses to picturing those events. We report the results of two lines of research demonstrating such a pattern.

##### ***Attachment style and distress about relationship transgressions***

Earlier we described research in which [Marigold et al. \(2011\)](#) manipulated the perspective individuals used to picture past relationship transgressions. In addition to measuring the effect on participants' present judgments of relationship quality, Marigold et al. also measured the impact on participants' present emotions. As mentioned earlier, the effect of attachment style on reactions to relationship events has been proposed to occur through the influence of general relational schemas on subjective interpretations. And, as did the patterns that Marigold et al. observed for judgments of relationship quality, the effects on emotions supported the idea that picturing events from the third-person perspective leads people to draw on their general self-beliefs when making meaning of events. Greater attachment anxiety was related to greater present distress about the transgression only when individuals pictured it from the third-person and not from the first-person perspective. And, as a result, picturing the transgression from the third-person as opposed to first-person perspective reduced distress among those low in attachment anxiety but it increased distress among those high in attachment anxiety.

Additional data from this study help to distinguish between our model of imagery perspective and alternative models which propose that third-person imagery functions to provide a detached observer's interpretation of pictured events. At the end of the session, participants provided information on the nature of the transgression they had pictured, and independent coders rated the severity of the transgressions. Analyses relating these ratings to participants' emotional reactions revealed that it was only when participants had pictured the transgression from the first-person perspective that their distress correlated (positively) with coders' appraisals. When participants had

pictured the incident from the third-person perspective, there was no significant correlation between coders' appraisals and participants' feelings of distress.

These findings support the idea that picturing events from the first-person perspective focuses people on reactions evoked by concrete features of the situation itself—features that objective observers also clue into when evaluating the event's severity. When individuals picture the event from the third-person perspective, their perceptions are colored by their general beliefs about themselves in the relationship, leading high anxiety individuals to experience negative reactions out of proportion with the objective severity of the event and low anxiety individuals to minimize its significance, thereby protecting their relationship. Rather than causing people to adopt a detached, objective interpretation of the event, third-person imagery seems to have caused them to integrate the event with their own more general self-views, and their emotional reactions reflected the subjective meaning that resulted.

***Self-esteem and shame*** We have observed a similar pattern of results investigating the effect of perspective on feelings of shame when individuals picture personal failure. When people feel ashamed, they feel bad about themselves as a person in general (Tangney & Dearing, 2002). This bad feeling about the self is unique from other negative self-focused emotions, such as guilt, in which a person feels negatively about a specific action they have committed (Tangney & Dearing, 2002).

Low self-esteem is a risk factor for experiencing shame (Tangney & Fischer, 1995). Evidence suggests that this self-esteem difference in vulnerability stems from self-esteem differences in the general self-concept and the top-down influence these exert in shaping reactions (Brown, Dutton, & Cook, 2001; Conner Christensen et al., 2003). As a result of their positive and certain self-views, HSEs' feelings about themselves are unconditional and thus little influenced by failure, whereas the less positive and less certain views of LSEs cause their feelings about themselves to shift in a negative direction in response to failure. Thus, LSEs' general self-views put them at risk for experiencing shame, whereas HSEs' general self-views protect them from experiencing shame—even when the objective features of the failure they experience are held constant (Brown & Marshall, 2001; Kernis et al., 1989).

If third-person imagery causes people to interpret events in terms of their self-concept relevance, then the effect of self-esteem on feelings of shame as people recall or imagine personal failures should depend on perspective. LSEs should be at risk of greater shame only to the extent that failures are pictured from the third-person perspective.

To test this hypothesis, one study (Libby, Valenti, et al., 2011) employed a widely used inventory of shame-proneness, the Test of Self-Conscious

Affect (TOSCA; Tangney & Dearing, 2002). The TOSCA assesses shame-proneness according to individuals' predictions about how they would respond in hypothetical scenarios involving personal failures in a variety of domains (e.g., moral, personal, academic). For each scenario, respondents rate how likely they would be to have each of four reactions—one corresponds to a behavioral or emotional manifestation of shame; the others correspond to manifestations of guilt, detachment, and externalization. For example, for the scenario that involves doing poorly on an exam, respondents rate how likely they would be to: (a) *feel that you should have done better and should have studied more* [guilt]; (b) *feel stupid* [shame]; (c) *think: "It's only a test."* [detachment]; and (d) *think: "The teacher must have graded it wrong."* [externalization].

In the typical administration of the TOSCA, respondents are given no visualization instructions; in this study, we manipulated the perspective that participants used to visualize each scenario. And, participants' self-esteem had been previously measured in a separate session. Responses on the TOSCA revealed that, reliably across the range of failure scenarios, the effect of self-esteem on shame depended on perspective. As predicted, low self-esteem was associated with greater shame only when individuals pictured the scenarios from the third-person perspective and not when they pictured them from the first-person perspective. Further, these patterns were unique to shame—there was no effect of perspective or interaction with self-esteem on any of the other reactions indexed by the TOSCA.

According to our model, these findings reflect the greater influence of individuals' general self-beliefs on their interpretations of failure when they picture it from the third-person as opposed to first-person perspective. However, an alternate possibility is that third-person imagery simply primed participants' feelings about themselves, apart from the behavior they pictured. Results from another study (Libby, Valenti, et al., 2011) help to distinguish these accounts and also demonstrate the implications of the earlier findings for feelings of shame that people experience as they recall real personal failures. This study crossed a manipulation of imagery perspective (first-person vs. third-person) with a manipulation of the event participants pictured. Some participants pictured a past incident in which they had failed at something important to them, some pictured a past incident in which they had succeeded at something important to them, and still others pictured a neutral action (tying their shoe). As participants pictured the specified event from the specified perspective, they rated the extent to which they were presently experiencing a variety of emotions, including shame.

Feelings of shame in the failure condition replicated the pattern found with hypothetical failures in the earlier study. Further, picturing failure from the third-person as opposed to first-person perspective significantly

increased shame among LSEs while significantly decreasing shame among HSEs. Finally, these patterns were unique to shame—they did not emerge on any of the other 19 emotions participants rated—and they were unique to picturing failure—there were no effects of self-esteem, perspective or their interaction on shame when participants pictured success or a neutral incident. These results are consistent with the idea that the results in the failure conditions reflect the effect of perspective on the role of the self-concept in shaping the broader meaning of failure, rather than an effect of perspective on eliciting self-esteem differences in self-feelings apart from failure.

#### 4.4.2. Manipulations of event type and theories of emotion moderate the effect of perspective on emotion

The studies we just described demonstrate that the effect of perspective on emotion can reverse depending on differences across individuals in the emotional power of events when considered in relation to more general self-knowledge. We next describe studies that conceptually replicate these patterns using experimental manipulations.

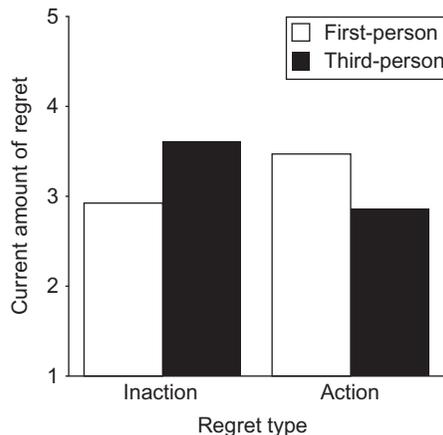
***Regret of action versus inaction*** People regret things they have done and things they have failed to do, but they tend to regret these two types of incidents for different reasons. Regret over actions tends to stem more from the immediate experience of the action and less from its broader consequences, because the immediate negative experience prompts restorative work—overt and psychological—that blunts the broader negative impact of the regrettable action (Gilovich & Medvec, 1995). For example, being turned down upon asking a love interest out on a date creates embarrassment that is regrettable in the moment, but these immediate negative feelings lead people to do things (such as seek another partner) that lessen the action's actual negative impact or to think about the action in ways that lessen its negative emotional impact (e.g., coding the event as a learning experience). Thus, when considered in the broader context of one's life, the negative impact of regrettable actions is minimized. However, regret over inactions stems less from the immediate experience of the event (indeed, inactions often have no immediate impact) and more from a sense of lost opportunity that arises when people reflect on how their inaction has impacted their life as a whole (Gilovich & Medvec, 1995). For example, choosing not to ask a love interest out due to fear of embarrassment avoids immediate regret, but provides ample opportunity for regret when one reflects on the many ways one's life might have been different if only one had the courage to try (Gilovich & Medvec, 1995).

Applying our model to this analysis predicts that picturing a regrettable incident from the third-person rather than first-person perspective should decrease feelings of regret for actions but increase feelings of regret for inactions. Indeed, a series of studies demonstrates just such a pattern

(Valenti, Libby, & Eibach, 2011). For example, in one study, undergraduates were asked to think of a regrettable incident from their senior year of high school—either an incident in which they did something they regretted or an incident in which they did not do something and regretted their inaction. They were instructed to picture the incident from the either first-person or third-person perspective. As they pictured the incident, they rated their current feelings of regret, and the effect of perspective depended on regret-type. Third-person imagery increased regret relative to first-person imagery for inactions, but third-person imagery decreased regret for actions (see Fig. 4.8).

### *Experimentally manipulated theories of emotional experience*

Another investigation produced converging evidence for our predictions about the effect of perspective on emotion by taking advantage of a motivational influence on people's interpretations of personal events. Earlier research had shown that making the financial costs of children salient motivates parents to adopt a theory that idealizes parenthood by exaggerating the emotional rewards in order to dispel the dissonance associated with the financial costs (Eibach & Mock, 2011). In a follow-up study, Eibach, Mock, and Libby (2011) crossed a manipulation of the salience of children's costs with a manipulation of the visual perspective that parents used to recall an interaction with their children. While holding the image of this interaction in mind from the specified perspective, participants reported the



**Figure 4.8** Adjusted mean levels of current regret, depending on type of regrettable incident and the imagery perspective used to picture it, controlling for previous level of regret. Ratings were made on a scale ranging from *none at all* (1) to *an extreme amount* (5). [From Valenti et al. (2011), published by Elsevier, adapted with permission.]

emotions they experienced during the interaction. On average, parents recalled experiencing more pleasant emotions in their interactions with their children when children's costs were made salient than in the control condition. However, if this effect relies on parents' applying a theory that exaggerates the emotional rewards of parenting when children's costs are made salient, then the effect should be driven by those in the third-person conditions. Consistent with this hypothesis, the salience manipulation caused participants to recall more pleasant emotions only when they pictured the incident from the third-person perspective, not when they used the first-person.

Together, the evidence we have reviewed demonstrates that rather than directly determining the emotional impact of picturing an event, imagery perspective determines whether people focus on the concrete situational details and the experience those evoke or whether people focus on an event's meaning in the context of their lives more broadly. Whether third-person imagery increases or decreases emotional response relative to first-person imagery depends on which construal evokes a stronger emotional response.

Another way to think about the findings that we have reviewed, both in this section and the earlier one, is in terms of their implications for the role of imagery perspective in linking events to the two facets of the self, I versus me. The evidence suggests that people are drawing differentially on these two facets of the self as they construct events in memory and imagination. Thus far, we have focused primarily on the implications for linking pictured events with the me-self, demonstrating that people interpret and respond to events in terms of their self-concept relevance from the third-person but not first-person perspective. In the final section of findings, we describe studies that represent an initial effort to also explore the implications of our model for linking pictured events with the I-self. If people do indeed draw differentially on these two facets of the self as they mentally simulate events, then simulations from the two perspectives have the potential to provide differential insight into the two facets of the self. We explore this possibility in the context of forecasting future behavior and feelings.

#### 4.5. Implications for forecasting the future

Mental simulation plays a crucial role in the ability to plan and prepare for the future (Atance & O'Neill, 2001; Schacter et al., 2007; Wheeler, Stuss, & Tulving, 1997). For example, when contemplating an upcoming decision, we may wonder what we will do when the time comes to make a choice. When anticipating a social interaction, we may wonder how we will feel as it unfolds. Playing through the event in one's mind offers one way to arrive at an answer to such questions, thus influencing our expectations and

shaping our plans (Taylor et al., 1998), as well as offering the opportunity to gain insight into the self.

Individuals' beliefs about their behavior and reactions—the basis for the conceptual “me” self—do not always correspond with the behaviors and reactions that situations may evoke in them—the basis for the experiential “I” self (Wilson, 2002). The research we have reviewed suggests that picturing an event from the third-person perspective leads people to integrate the event with more general self-knowledge, whereas picturing an event from the first-person perspective leads people to focus on reactions evoked by concrete features of the pictured situation. If this is the case, the two facets of the self could differentially influence forecasts about reactions in future situations, depending on the perspective people use to simulate them. As people picture a potential future event, the self-concept—people's beliefs about who they are—should influence forecasts more when people use the third-person perspective than when they use the first-person, consistent with effects observed in studies we reviewed earlier. However, reactions evoked by concrete features of the pictured situation should influence forecasts more when people use the first-person perspective than when they use the third-person. Along with our collaborators, we have begun to test these hypotheses by investigating the effect of perspective on forecasts of future choice behavior and future feelings.

#### 4.5.1. Forecasting future choice

**Political choices** In the months leading up to political elections, pollsters make a business out of asking voters to forecast the choices they will make in the booth, and these forecasts are of great interest to strategists, pundits, and the general public. Libby, Eibach, Valenti, and Hines (2011) sought to determine whether the perspective people used to picture themselves voting as they forecasted their future candidate choice would determine the facet of the self they relied on in making these forecasts. We predicted that participants' beliefs about their preferences would have a stronger influence on their forecasts when they pictured voting from the third-person perspective than from the first-person. And, we predicted that gut reactions evoked by salient features of this choice situation—the candidates themselves—would have a stronger influence on participants' forecasts when they pictured voting from the first-person perspective than from the third-person.

To find out, we conducted a study in the month before the 2008 US Presidential election. Registered voters were either instructed to use the first-person or third-person perspective to picture themselves voting on Election Day. As they were picturing this situation from the specified perspective, we asked them to predict whom they would actually vote for. In an earlier session, these voters had completed two different measures of their candidate preferences. One was a personalized Implicit Association Test (IAT; Olson & Fazio, 2004), which measured the relative ease with

which participants could categorize photos of each candidate together with personally liked versus disliked attitude objects. This measure provided an index of participants' preferences based on their gut reactions to the candidates. To obtain an index of participants' beliefs about their preferences, we simply asked them to report their evaluations explicitly, using rating scales.<sup>1</sup>

Results revealed good support for our hypotheses. Participants' forecasts of their actual voting behavior corresponded more closely with their beliefs about their candidate preferences, as indexed by their responses on the explicit scales, when they pictured voting from the third-person perspective than from the first-person. And, the opposite effect of perspective emerged for the correspondence between forecasts and the gut reactions that the two candidates evoked in participants, as indexed by the IAT. Forecasts corresponded more closely with IAT scores when participants pictured voting from the first-person perspective than from the third-person. These effects emerged when including perspective and both preference measures along with their interactions with perspective in the same model. Thus, these patterns reflect differential predictive value of gut reactions and beliefs about preferences, independent of each other, depending on the perspective participants used to mentally simulate the choice situation.

**Health choices** In an attempt to replicate the patterns observed in the study of voters, we (Libby, Eibach, et al., 2011) conducted another study with the same design but in a different context. We again manipulated the perspective that participants used to picture themselves in a choice situation, but this time that situation was at a deli counter, and the choice was between potato chips or an apple as a side item for a sandwich. Given that women are typically more concerned with weight management and controlling their eating than men are (Pliner, Chaiken, & Flett, 1990), we tested our predictions focusing on women in particular. While they pictured the choice situation from the specified perspective, we asked them to predict which side item they would actually choose the next time they were faced with such a choice. As in the voting study, in a session prior to the imagination task, participants had completed two different measures of their preferences for apples versus potato chips—a personalized IAT and an explicit measure of preference.<sup>2</sup> And, as in the voting study, we expected that the extent to which forecasts corresponded with each measure would depend on imagery perspective.

<sup>1</sup> Among participants in both perspective conditions, the implicit and explicit measures were positively correlated but not identical ( $r = 0.64$ ,  $p < 0.001$ ), consistent with the idea that the two measures tap into different components or manifestations of attitudes (Fazio & Olson, 2003; Wilson, Lindsey & Schooler, 2000).

<sup>2</sup>  $r = 0.38$ ,  $p < 0.01$ .

Indeed, women's forecasts of their choice behavior corresponded more closely with their explicit reports of preferences for apples versus potato chips when they pictured making the choice from the third-person perspective than from the first-person. However, women's forecasts corresponded more closely with their implicit evaluations when they pictured making the choice from the first-person perspective than from the third-person. These findings converge with the results from the voting study to support the hypothesis that the perspective people use to picture future events influences the facet of the self they draw on in forecasting how they will behave. First-person imagery focuses people on the reactions the situation evokes in them—the I-self—and third-person imagery focuses people on their beliefs about who they are and what they like—the me-self. And, these factors differentially influence forecasts depending on the perspective people use to picture the future event.

Alternative accounts of imagery perspective suggest it functions to determine whether one applies one's own versus others' psychological perspective to interpret an event (e.g., Huebner & Fredrickson, 1999). By such accounts, adopting a first-person perspective leads one to consider the event in terms of one's own values and motivations, whereas adopting a third-person perspective amounts to considering the event in terms of what others think of the self. Explicit reports of attitudes, as we used in the previous studies, can reflect not only self-beliefs but also the self-image one wishes to present to others. And, implicit measures can be interpreted to reflect one's own personal attitudes, apart from the self-image one wishes to present to others. Thus, by the alternative account, the patterns we described earlier could be due to third-person imagery causing people to focus on how others judge the self and first-person imagery causing people to rely on their own personal attitudes.

We expected this alternative account to be unlikely because it relies on a model of imagery perspective that cannot predict other findings we have reported in this chapter (e.g., carryover effect of perspective on action identification level) and is directly contradicted by other findings (e.g., the fact that distress reactions to relationship transgressions correlated with the severity ratings of actual objective "observers" only when individuals pictured the transgression from the first-person and not third-person perspective). However, we sought additional evidence to distinguish between these accounts in another study, which also allowed us to extend the effects we observed in the context of forecasting choice to the context of forecasting feelings.

#### 4.5.2. Forecasting future feelings

***Anxiety in interracial interactions*** In an initial exploration, we (Libby, Eibach, et al., 2011) investigated the effect of imagery perspective on the basis for individuals' forecasts about how they would feel during an

interracial interaction. Such forecasts can have considerable impact on efforts to reduce stereotyping and prejudice. When people anticipate interracial interactions, they often expect to experience negative emotions, and these expectations can lead them to avoid the interactions altogether (Shelton & Richeson, 2005). This is unfortunate because evidence suggests that often interracial interactions are in fact more positive than expected (Mallett, Wilson, & Gilbert, 2008), and intergroup contact holds great potential for breaking down stereotypes and prejudice (Pettigrew & Tropp, 2006).

In our study, we manipulated the visual perspective that White students used to picture an interaction with a Black peer. We were interested in whether imagery perspective would determine the extent to which participants' forecasts about their feelings in this interaction depended on their gut reactions to the partner's race and the extent to which participants' forecasts depended on their beliefs about their own prejudice. To explore these questions, we asked participants to complete measures of these predictors in a separate session from the one in which they imagined and made forecasts about the interaction.

Participants completed a personalized IAT that measured the relative ease with which they could categorize pictures of Black versus White faces together with personally liked versus disliked attitude objects. We used this measure as an index of the relative positivity or negativity of participants' gut reactions to Black individuals. Participants also completed explicit measures that tapped their beliefs about their own prejudice. Whereas the explicit measures in the previous studies did not allow us to distinguish between responses that reflected beliefs about one's own attitudes from concerns about the image portrayed to others, the explicit measures in the present study did. We measured participants' beliefs about the extent to which they were motivated to avoid being prejudiced due to concerns about how they were viewed by others (external motivation, EMS) and the extent to which they were motivated by a personal commitment to avoid being prejudiced (internal motivation, IMS) (Plant & Devine, 1998).<sup>3</sup>

Consistent with our interpretation of the choice-forecasting results, we expected that participants' forecasts about their feelings in the imagined interracial interaction would correspond more closely with their IAT scores in the first-person than in the third-person condition, and forecasts would correspond more closely with IMS in the third-person than first-person condition. If the alternative model holds, and imagery perspective determines whether people rely on their own personal beliefs (first-person) or the image of themselves in the eyes of others (third-person), then forecasts

<sup>3</sup> Greater preference for Whites relative to Blacks as measured by the IAT was correlated with less internal motivation to avoid prejudice ( $r = -0.21$ ,  $p < 0.05$ ) but not with external motivation ( $r = -0.07$ ,  $p = 0.48$ ).

should correspond more closely with IMS in first-person than third-person and with EMS in third-person than first-person.

When participants arrived at the lab for the imagination session, they were told that they would be asked to picture themselves taking part in some tasks as a part of a two-person team. Participants were led to believe that these tasks had actually been used in a previous experiment and that they would be randomly assigned to imagine themselves doing the tasks with a participant from the previous experiment. They then received information about the basic physical characteristics of the (actually fictional) partner, allegedly to help them to visualize this person. This information indicated that the partner was the same gender as the participant, of average age, weight, and height, with brown hair and eyes, and African American. After participants received this information, the perspective manipulation was introduced, and participants read a description of the tasks they were to picture completing with the partner. The tasks were chosen to be ones that involved close physical contact—taking one another's pulse, engaging in a game of Twister, and practicing a secret handshake. Immediately after participants had pictured themselves engaging in these tasks with the partner, participants were asked to forecast the feelings they would have if they were actually taking part in the experiment they imagined. In particular, we were interested in their anticipated anxiety.

We predicted participants' forecasted anxiety from imagery perspective, IAT scores, and their interaction, along with IMS and EMS and their interactions with the previous variables. Results supported our account. IAT scores interacted with perspective to predict forecasted anxiety, with greater preference for Whites associated with greater forecasted anxiety only when individuals pictured the interaction from the first-person and not the third-person perspective. IMS also interacted with perspective to predict forecasted anxiety, with greater IMS predicting less forecasted anxiety when participants pictured the interaction from the third-person, but not first-person, perspective. Greater EMS predicted less forecasted anxiety, but this effect was not moderated by perspective. And, no other interactions emerged.

Thus, it does not appear that imagery perspective was functioning to determine whether people interpreted the event in terms of their own personal beliefs (first-person) versus the image they wished to portray to others (third-person). Instead, consistent with our model, participants' forecasts of anxiety reflected reactions evoked by features of the imagined environment—in this case, the Black partner—when picturing an event from the first-person but not the third-person perspective. From the third-person perspective, people instead framed the meaning of the event in relation to their more general self-beliefs; thus, from this perspective, individuals who personally believed themselves to be less prejudiced expected to feel less anxiety. And, imagery perspective appeared to have

no bearing on the extent to which participants were considering the self-image they wished to portray to others. These findings may help to explain why picturing an intergroup interaction from the third-person perspective has been found to increase intentions to initiate contact (Crisp & Husnu, 2011). Our account suggests that such a strategy for improving intergroup relations may be most effective among individuals who are internally motivated to reduce prejudice.

To this point, we have been focusing on how perspective influences the use of implicit and explicit attitudes as people forecast the future. Another type of information that can figure into forecasts about a target event is counterfactual alternatives. Counterfactuals can provide a comparison level for the target (Galinsky, Seiden, Kim, & Medvec, 2002; Medvec, Madey, & Gilovich, 1995). However, because counterfactuals are not an inherent feature of the target experience but rather a part of the broader context in which it occurs, our model predicts that information about counterfactual alternatives will influence people's forecasts about a target event more when they visualize it from the third-person perspective than when they visualize it from the first-person perspective. Next, we review findings from studies that test this hypothesis about an additional way in which perspective can influence people's forecasts.

***Enjoyment in the face of alternatives*** Whatever path one's life takes, there are always alternatives—alternative places to live, people to date or marry, and careers to choose. How do the paths not taken influence enjoyment of the path we take? Evidence suggests that people's predictions about how much they will enjoy one option among alternatives often diverge from how much they actually enjoy that option if they experience it (e.g., Hsee & Zhang, 2004; Morewedge, Gilbert, Myrseth, Kassam, & Wilson, 2010).

One reason for this discrepancy is that predictions are often based on evaluation of the target option in relation to the alternatives, whereas experiences are based on the reaction to the target option in isolation (Morewedge et al., 2010). For example, in one study, individuals were asked to predict how much they would enjoy eating potato chips, under one of two conditions: either in the presence of a superior alternative (chocolate candy) or in the presence of an inferior alternative (potted meat). They expected to enjoy the chips more when they could have been eating potted meat than when they could have been eating chocolate—in other words, participants believed that the alternative would influence their enjoyment of the chips. However, when individuals actually consumed potato chips under these two conditions the alternative did not influence their enjoyment: regardless of the alternative, the chips themselves were the same and thus produced the same amount of enjoyment.

According to our model, first-person imagery causes interpretations of an event to be driven bottom-up in terms of actions and reactions to concrete features of the imagined environment, and third-person imagery causes interpretations of an event to be driven top-down as people integrate the event with its broader context, including knowledge of other events beyond the one that is pictured. If this account is correct, then individuals' predictions about their enjoyment of one option among alternatives should be influenced by those alternatives when picturing the event from the third-person perspective but not the first-person. MacGregor, Valenti, Libby, and Eibach (2011) conducted a study based on Morewedge et al.'s (2010) chips study to provide support for this hypothesis.

MacGregor et al. (2011) manipulated the perspective participants used to picture being in an experiment in which they were randomly assigned to eat potato chips rather than an alternative, manipulated to be either sardines or chocolate. As participants used the specified perspective to picture eating the chips, participants were asked to forecast how much they would enjoy eating the chips. Indeed, participants' forecasts reflected an influence of the alternative when they pictured eating the chips from the third-person perspective: they expected to enjoy the chips more when the alternative was sardines than when it was chocolate. And, their forecasts showed no such influence of the alternative when they pictured eating the chips from the first-person perspective: regardless of the alternative, forecasted enjoyment was the same.

Another experiment tested whether this effect would generalize to the domain of interpersonal interactions. In the context of relationships, the attractiveness of alternative partners can be an important influence on evaluations of one's actual partner (Thibaut & Kelley, 1959), and this experiment sought to determine whether the perspective people used to imagine interacting with a particular relationship partner might moderate such effects. To this end, MacGregor et al. (2011) manipulated the perspective participants used to picture being in an internet dating experiment in which they were randomly assigned to go on a date with one of two individuals depicted in online dating profiles. All participants saw two profiles depicting individuals of the gender they preferred to date: one profile was moderately attractive and the other was either unattractive or highly attractive. Regardless of the alternatives they saw, participants were all instructed to imagine that they were assigned to go on a date with the moderately attractive individual.

Participants pictured this date from the specified perspective and forecasted how much they would enjoy it. Again, forecasts reflected an influence of the alternative when participants pictured the target event from the third-person perspective: participants expected to enjoy the date with the moderately attractive partner more when the alternative partner was unattractive than when he or she was attractive. However, participants'

forecasted enjoyment was the same regardless of the alternative when they pictured the date from the first-person perspective.

Together, the findings from these studies investigating the role of imagery perspective in forecasting behavior and emotion provide converging support for our proposed model, demonstrating not only that the beliefs and theories that define the conceptual self shape responses from the third-person perspective but also that the concrete experience evoked by imagined situations—the basis for the experiential self—shapes responses in the first-person perspective. These results also highlight the potential utility of imagery perspective for achieving different types of self-insight, a question to which we will return in the discussion (see [Section 5.8](#)).



## 5. DISCUSSION

The visual perspective people use to picture an event is tied to the level of meaning they see in it. From the first-person perspective, people make meaning of events in a bottom-up fashion, incorporating information about the experience evoked by concrete features of the pictured situation and defining the event in terms of these constituent aspects. From the third-person perspective, people make meaning of events in a top-down fashion, integrating the pictured event with a broader context and defining the event in terms of the abstract meaning that results. Further, experiments investigating the determinants of imagery perspective demonstrate that people shift perspective according to this representational function, adopting the first-person perspective when they seek to understand the experience of an event's concrete details and the third-person perspective when they seek to understand that event in relation to its broader context. Together, these findings establish imagery perspective as a representational tool. Here we discuss how our model of imagery perspective connects with other models that describe the self and event representation, and we explore the implications for classic and contemporary areas of social psychological inquiry.

### 5.1. Imagery perspective and the self

By alternative accounts, imagery perspective functions to define the connection of a pictured event to the present self, and thus picturing events from the third-person perspective promotes a self-distanced, objective interpretation of events that dampens their present emotional impact (e.g., [Holmes & Mathews, 2010](#); [Kenny et al., 2009](#); [Williams & Moulds, 2007](#)). However, the findings we have reviewed document the potential of third-person imagery to facilitate the connection between past and present selves,

promoting perceptions of stability; the potential of third-person imagery to enhance the emotional impact of pictured events, increasing feelings of shame, regret, distress, and enthusiasm; and the potential of third-person imagery to increase the tendency to adopt rather than avoid the behavior of a pictured self. Whereas these findings are inconsistent with the alternative accounts of imagery perspective's function, these findings follow directly from the model we propose.

This difference in explanatory power underscores the importance of distinguishing between experiential and conceptual facets of the self (also see [Legrand & Ruby, 2009](#)). The alternative models appear to conflate these two aspects of the self by assuming that the lack of experiential simulation that occurs in third-person imagery necessarily corresponds to a lack of connection with the pictured self altogether. By the model we have proposed, there is not a one-to-one relation between perspective and perceived self-ownership of actions. First-person imagery represents an event in terms of the experiential I, and third-person imagery represents the event in relation to the conceptual me. Thus, first-person imagery could be considered to merge past and pictured selves on an experiential level. However, third-person imagery does not entail detaching the event from the self altogether. In fact, third-person imagery leads people to understand the event in relation to broader self-knowledge, which could result either in bolstering or diminishing the connection between present and past selves on a conceptual level. For this reason, picturing a past or future self from the third-person perspective is not the same as detaching it from the self altogether, as would be the case with imagining the event happen to another person or imagining being another person watching the self. In addition, emotion is not necessarily reduced as might be expected based on a detachment account. The effect on emotion depends on whether an emotion is primarily evoked by concrete features of the situation, in which case first-person imagery should increase emotional response, or whether an emotion is primarily evoked by the meaning of the event in one's life, in which case third-person imagery should increase emotional response.

Distinguishing between the experiential and conceptual facets of self is helpful not only in accounting for the function of visual imagery perspective but also in considering how its function may be distinct from other processes that have been described in terms of perspective, as we consider next.

## 5.2. Distinguishing visual perspective from other dimensions of perspective

As we noted in [Section 2](#), “perspective” is a widely used term that can have multiple meanings. The findings we have reviewed help to distinguish effects involving variation in visual perspective from effects involving variation along other dimensions that may also be commonly referred to as

“perspective,” such as empathy (e.g., [Davis, 1983](#)), psychological perspective-taking (e.g., [Galinsky, Ku, & Wang, 2005](#)), or self-distancing (e.g., [Ayduk & Kross, 2008](#)). For example, everyday language equates empathy and other forms of psychological perspective-taking with seeing the world through another’s eyes. However, empirical evidence highlights that psychological and visual perspective-taking operate differently and with different consequences.

In the case of manipulating perspective on others’ actions, visual perspective manipulations influence the type of information people recall, but empathy manipulations do not ([Abelson, 1975](#); [Fiske et al., 1979](#)). Depicting a target’s actions visually from a first-person rather than third-person perspective promotes concrete construal of those actions ([Libby et al., 2009](#)), but instructions to empathize with a target promote abstract construal of that target’s actions ([Kozak, Marsh, & Wegner, 2006](#)).

Considering the mechanisms by which these different forms of perspective-taking operate helps to explain these divergent findings. Empathy and other forms of psychological perspective-taking increase the accessibility of the self-concept, and it is on this conceptual level that self and other are merged ([Davis, Conklin, Smith, & Luce, 1996](#); [Galinsky, Ku, & Wang, 2005](#)). To the extent that this conceptual knowledge guides psychological perspective-taking, it is a top-down process which could be expected to promote abstract construal but not to preferentially influence memory for details related to sensory experience. First-person visual perspective manipulations focus attention on features of the environment and simulating reactions to it and actions on it, consistent with the fact that people remember this information better and construe actions more concretely from the first-person perspective. This analysis suggests that a crucial difference between adopting the psychological versus visual perspective of a target is in the style of meaning-making each process invokes—top-down (psychological) or bottom-up (visual).

In some cases, different types of perspective-taking manipulations produce common effects, yet it is still the case that different mechanisms could be at work. An example comes from considering the different types of perspective-taking that can occur as people consume entertainment media such as literature, film, or video games. Stories can be told from a first-person or third-person narrative voice, and scenes can be shot from a protagonist’s visual perspective or an observer’s. Consumers of entertainment media may naturally identify with a character to varying degrees ([Cohen, 2001](#)), and individuals can actively attempt to empathize with a target (e.g., [Batson, Early, & Salvarani, 1997](#)). Across a variety of such dimensions of perspective a common pattern emerges: taking the perspective of a character causes people to adopt attitudes and behavior consistent with the target’s attitudes, behavior, and identity. However, evidence suggests that these common effects result from different mechanisms.

For example, actively attempting to adopt the perspective of an outgroup member in a vignette reduces stereotyping of that target (Galinsky et al., 2005). Reductions in prejudice have also been documented through manipulations of narrative style that implicitly invite adopting the character's phenomenological perspective in a story (first-person voice and access to character's thoughts and feelings) and thereby experiencing the events in the story as if they were happening to the self (Kaufman & Libby, 2011). However, other evidence suggests different mechanisms behind these common effects on prejudice. Explicit instructions to adopt an outgroup member's perspective appear to operate by a top-down mechanism whereby the reader's self-concept is activated and then applied to interpret the target (Galinsky et al., 2005). In contrast, self-concept activation interferes with the perspective-taking effects produced by narratives designed to implicitly invite the reader to experience the story from the character's perspective (Kaufman & Libby, 2011). Instead, effects produced by this form of perspective-taking appear to emerge in a bottom-up manner triggered by phenomenologically merging with the character and simulating that individual's experiences. Although different perspective-taking manipulations can have common effects, differentiating the pathways by which they occur is likely to be informative given that such differences can have downstream effects even in the presence of common effects on initial responses (e.g., Appel & Richter, 2007; Green & Brock, 2002).

### 5.3. Psychological distance and abstract representation

Construal level theory proposes that the more distant a stimulus is from an individual's direct experience, the more abstractly that stimulus will be construed—be it an object, person, or event (Trope & Liberman, 2010). The findings we have reviewed demonstrate that third-person imagery involves less simulation of direct interaction with the environment than first-person imagery does and that third-person imagery represents the event more abstractly. This pattern is thus consistent with the central tenet of construal level theory. At the same time, the findings we have reviewed uniquely contribute to an understanding of the phenomenon that construal level theory seeks to explain, as well as highlight some open questions.

Construal level theory identifies four dimensions of distance from direct experience—temporal, physical, social, and hypotheticality (Trope & Liberman, 2010). The evidence supporting the link between abstraction and these dimensions of distance from experience appears to rely primarily on objective measures or manipulations of distance on those dimensions—for example, whether an event is occurring the next day or in a year (Liberman & Trope, 1998) or whether it is occurring in one's own city or in another country (e.g., Henderson, Fujita, Trope, & Liberman, 2006). In contrast, imagery perspective is malleable—any event at any given objective

distance can be represented from either perspective. Thus, imagery perspective is a dimension of distance from experience that can be dynamically modified to support both abstract and concrete understandings of an event at any given actual distance from present experience. Further, the bidirectional nature of the relation between perspective and abstraction suggests that people do in fact use this aspect of imagery in this representational capacity.

Construal level theory assumes that distance from direct experience with a stimulus produces feelings of psychological distance from that stimulus (Trope & Liberman, 2010). In the case of events, this would mean that the presence of concrete, experiential details would cause an event to feel close to, or part of, the self, whereas the absence of such details causes the event to feel distant, or detached, from the self. However, the research we have reviewed demonstrates that third-person imagery, which involves less simulation of concrete experience with the pictured situation, does not necessarily lead people to detach a pictured event from the present self, and can under certain circumstances enhance the connection between pictured and present selves. It should be noted that neither our work nor the work supporting construal level theory can speak directly to the question of what determines subjective feelings of distance: research supporting construal level theory tends to rely on objective measures and manipulations of distance (which do not necessarily map onto subjective feelings of distance, e.g., Ross & Wilson, 2002), and our studies did not focus on participants' perceptions of subjective distance either. However, on a theoretical level, our model suggests an additional factor to consider in evaluating the basis for subjective feelings of distance.

If the self is dual-faceted then it is necessary to define whether feelings of distance depend on distance from the experiential I-self or conceptual me-self. Further, feelings of distance may have different bases depending on which facet of the self serves as the reference point. The determinant of distance that construal level theory proposes—distance from direct experience of an event—may determine felt distance from the experiential I-self, in particular. In contrast, feelings of distance from the conceptual me-self may depend on whether the abstract meaning of the event fits with the present self-concept. Thus, an event might feel connected to the present self because one remembers and relives the details of the experience or, alternatively, because the event feels consistent with whom one considers one's self presently to be. Consistent with this possibility, the findings we have reviewed demonstrate that third-person imagery can lead people to incorporate a pictured event into the present self, even though this perspective reduces the simulation of the event's experiential details. More generally, this analysis suggests that subjective feelings of distance may not always be determined by distance from sensory experience, even if the tendency to construe abstractly is.

#### 5.4. Self-awareness theory

Self-awareness theory (Duval & Wicklund, 1972) distinguishes between subjective and objective self-awareness, states that could be understood as mapping onto the different experiences that first-person and third-person imagery afford (Sutin & Robins, 2008). Whereas self-awareness theory focuses on the significance of these states as they pertain to the present self, the research we have reviewed focuses on the significance of these states as they pertain to past and future selves. Despite this difference, it is relevant to consider how our model and findings relate to self-awareness theory.

According to self-awareness theory, objective self-awareness leads people to judge their behavior in terms of personal standards (Duval, Silvia, & Lalwani, 2001). The evidence we reviewed shows that when people picture events in their lives, third-person imagery leads people to understand those events in relation to the conceptual self, which includes but is not limited to personal standards. Further, evidence we reviewed demonstrates that perspective changes not only the evaluation of behavior, but the identification of the behavior itself. This occurs whether the actor is the self or another person, an effect that would not be directly predicted by self-awareness theory. When the actor is the self, general self-knowledge appears to shape the abstraction that occurs with third-person imagery, and thus shapes the meaning that results. It is possible that a change in action identification explains the effects of self-awareness manipulations as well.

According to our model, the relation between perspective and level of meaning in images is bidirectional. Thus, our account of why people adopt third-person imagery as they recall and imagine life events diverges from self-awareness theory's account of when people experience objective self-awareness. According to self-awareness theory, objective self-awareness varies according to Gestalt figure-ground principles: when the self is the "smaller" area of the cognitive field, people should spontaneously experience objective self-awareness (Duval & Wicklund, 1972). This is proposed to occur when the self is discrepant from a comparison set, which can consist of other people, non-social objects, or one's own past experience (Duval et al., 2001). Although the evidence we reviewed does indicate that people are more likely to picture an event from the third-person perspective when that past self is discrepant from the present self, this effect ultimately did not result from the discrepancy itself, but rather from the tendency to consider how the event related to more general self-knowledge, in an effort to construct a coherent concept of the self over time. It is possible that the same mechanism underlies changes in objective self-awareness that emerge due to discrepancies between the self and the relevant comparison set. Such discrepancies may invoke an effort to make sense of the discrepancies by drawing on a broader conceptual framework, and this may be what induces the objectively self-aware state.

Empirical research testing self-awareness theory has focused almost entirely on the effects of experiencing one state of self-awareness or the other, and very little on the determinants of the two states (Eichstaedt & Silvia, 2003). One reason has been the lack of measures that can assess states of self-awareness without disrupting those states (but see Eichstaedt & Silvia, 2003). When people imagine the past and future, imagery perspective may be a tool for assessing objective self-awareness of the past or future self. However, more work would be necessary in order to determine whether or not a common mechanism underlies the effects of imagery perspective and those using self-awareness manipulations.

## 5.5. Attribution

A classic question in social psychology has to do with how people infer the causes of their own and others' behaviors. Observers tend to perceive actions as more a function of actors' dispositions and less a function of the situation than the actors themselves do (Jones & Nisbett, 1971; Watson, 1982). Initial work on this actor-observer effect identified the divergent visual perspectives of actors and observers as one of the differences that could theoretically contribute to producing the differences in their attributions (Jones & Nisbett, 1971). However, subsequent empirical investigations revealed mixed evidence (Watson, 1982). Some experiments supported the hypothesis (Storms, 1973), including experiments using manipulations of visual perspective in mental imagery (Frank & Gilovich, 1989). Other experiments failed to find evidence for the effect of visual perspective on dispositional versus situational attributions (Taylor & Fiske, 1975; Taylor, Crocker, Fiske, Sprinzen, & Winkler, 1979). The model we have proposed suggests one explanation for these mixed results.

Before people can attribute a cause for an action, they must identify the action (Gilbert, 1998; Trope, 1986). Research we reviewed demonstrates that the visual perspective from which people view actions corresponds with the level of abstraction at which they identify those actions. Because dispositional information about an actor provides a framework for guiding this abstraction, the tendency to label an action more abstractly when viewing it from an observer's than from an actor's perspective may contribute to the tendency for observers to perceive actions as more a function of dispositions than actors do. However, although dispositional inferences are a common way that people make sense of behavior, they are not the only way.

We propose that visual perspective corresponds to whether people process information about events in a bottom-up fashion, focusing on the concrete details of a pictured situation, or in a top-down fashion, framing the event in terms of its significance in a broader context. Thus, by this account, perspective should not directly influence whether people perceive dispositional or situational causes, but rather influence the process by which they make

meaning of events. The attributions should follow from the understanding they construct. Evidence we have reviewed in this chapter is consistent with this account, showing that imagery perspective does not directly determine the impact of a pictured event on self-judgment, but instead the effect is moderated by knowledge about one's self (e.g., self-esteem) and other life events (e.g., counterfactuals) that shapes the meaning that emerges when the focal event is pictured from the third-person perspective.

Direct evidence for the role of broader self-knowledge in shaping causal inferences made from the third-person perspective comes from a study in which individuals recalled a past instance of overeating (Libby et al., 2005b). Data revealed that only among individuals who considered controlling eating to be an important part of their self-concept did third-person imagery promote dispositional attributions for their overeating. These individuals should have been particularly likely to use the frame of controlling eating to interpret the behavior they pictured (Bargh, Lombardi, & Higgins, 1988), and thus this shaped the abstraction that occurred with third-person imagery, which in turn affected their attributional inferences. Individuals for whom controlling eating was not an important personal goal likely applied some other frame to guide abstraction from the third-person perspective, and this frame did not uniformly point to inferences about dispositional tendencies to overeat. This analysis suggests that in order to predict the effect of visual perspective on attribution, it is necessary to know the broader knowledge frames that individuals will draw on as they abstract from the third-person perspective. Earlier investigations of the effect of visual perspective on attribution did not take such moderators into account, which may be one reason for the mixed findings that emerged.

Other analyses of the actor-observer effect have challenged the idea that it necessarily occurs along the dispositional versus situational dimension in the first place (Malle & Knobe, 1997; Malle, Knobe, & Nelson, 2007). Although acknowledging systematic differences in how actors and observers draw inferences about the causes of behavior, this alternate model proposes that the differences occur along dimensions other than dispositional versus situational. One of these dimensions is the extent to which perceivers refer to subjective reasons for acting versus causal histories in attributing causes for behaviors. "Whereas reason explanations try to capture what the agent herself considered and weighed when deciding to act, causal history explanations take a step back and try to capture processes that led up to the agent's reasons" (Malle et al., 2007, p. 493). It is proposed that observers are more likely than actors to reference causal histories. These causes include, but are not limited to, dispositions. For example, when explaining why a person worked a 14-hour day, that person himself would be more likely to refer to an impending deadline and observers more likely to refer to workplace norms or to the actor's industriousness (Malle et al., 2007). Our model suggests that divergent visual perspectives could underlie this tendency,

given that third-person imagery promotes the use of broader contextual information, versus specific actions and reactions, in identifying and judging a pictured action or event.

### 5.6. The role of perspective in understanding others' views of the self

When people adopt the third-person perspective, do they tend to look at themselves through their own eyes or through someone else's eyes? This distinction between different types of third-person perspectives on the self is not a pure one, because how people see themselves is influenced by their beliefs about how others see them (Baldwin & Holmes, 1987; Leary, Tambor, Terdal, & Downs, 1995), and people's beliefs about how others see them are egocentrically influenced by their own perceptions of themselves (Chambers, Epley, Savitsky, & Windschitl, 2008; Gilovich & Savitsky, 1999). Nevertheless, it is still possible to consider whose psychological perspective—one's own or others'—predominates when people adopt the third-person perspective.

It is often assumed that when people adopt the third-person perspective, they are viewing themselves through an internalized other's eyes (Mead, 1934/1962). However, the evidence we have reviewed suggests that from the third-person perspective, people tend to view themselves through their own eyes, applying their own self-theories, explicit attitudes, and personal goals to make meaning of events. Further, in studies that directly compared the influence of participants' own versus others' views when picturing events from the third-person perspective, results provided strong support for the influence of own views and no support for the influence of others'. For example, participants' forecasts about an interracial interaction corresponded more closely with their own personal motivation to control prejudice when they pictured the incident from the third-person than from the first-person perspective, but the perspective manipulation had no effect on the extent to which forecasts corresponded with concerns about appearing prejudiced to others.

However, there are findings in the literature that would seem to suggest that people do use third-person imagery in the service of understanding others' interpretations of events. Social phobics, who are preoccupied with what others think of them in social situations, are more likely to adopt the third-person perspective when recalling anxiety-provoking social events than are non-phobic controls (Wells & Papageorgiou, 1999). When recalling memories of a college party—a context in which women tend to be sexually objectified—female undergraduates are more likely than males to use the third-person perspective (Huebner & Fredrickson, 1999). In these examples the people who have greater concerns about others' evaluations of them are more likely to picture events from the third-person perspective, and these results have typically been interpreted in terms of models that suggest imagery perspective functions to distinguish one's

own interpretation of events (first-person) from others' (third-person). Our model offers another way to understand these patterns.

According to our model, when people picture an event from the third-person as opposed to first-person perspective they are thinking about the broader meaning of that event in the context of their lives. The findings we have reviewed suggest that often one's own personal views provide the framework for imbuing life events with broader meaning. However, there are undoubtedly cases where others' opinions and frameworks are what cause a person to imbue an event with broader significance. In fact, this is likely the case for social phobics recalling socially anxious incidents and for female undergraduates recalling a college party. Thus, in these cases, use of third-person imagery may ultimately reflect a focus on the event's broader meaning rather than the use of another person's view of the self, *per se*.

This analysis may also be relevant to interpreting cross-cultural differences in tendencies to use first-person versus third-person imagery (e.g., Cohen, Hoshino-Browne, & Leung, 2007). The imagery perspective studies we reviewed in this chapter were conducted in North America, where individualism is a defining feature of the culture. The fact that personal self-beliefs tended to shape the broader meaning that participants saw when they pictured events from the third-person perspective could be a product of this cultural influence. It is possible that in collectivist cultures where others' opinions and beliefs are more central to defining the self that others' opinions and beliefs would shape the meaning people see as they picture events from third-person perspective. This may explain why some evidence suggests that individuals from collectivist cultures are more likely than individuals from individualist cultures to experience third-person images when picturing events where they are the center of other people's attention (Cohen & Gunz, 2002). However, our model suggests that in both cases use of third-person imagery would reflect a common function—representing the event in terms of its broader meaning. According to our model, third-person imagery affords a more abstract understanding of events, but perspective does not directly specify whether the process of making meaning is driven by one's own view of the self or others' views. Thus, considering the broader meaning that others would see in events may prompt people to adopt the third-person perspective for the same reason that considering the broader personal meaning does. The question of how or if imagery perspective is used in understanding others' viewpoints is ripe for further investigation.

## 5.7. Coping with negative life events

Memories of negative life events can have a detrimental impact on present well-being. For example, individuals who experience a traumatic event may continue to be plagued by flashback images of the event, a characteristic

feature of posttraumatic stress disorder (PTSD; Ehlers & Steil, 1995). The perspective of trauma memory images has been found to correspond with the subjective qualities of the memory in much the same way as is the case for images of non-traumatic events: first-person imagery is associated with reporting more about the affective reactions, psychological states, and physical sensations experienced during the event (McIssac & Eich, 2004). However, the evidence for the role of imagery perspective in coping with traumatic events is mixed (Kenny & Bryant, 2007; Kenny et al., 2009; McIssac & Eich, 2004). Because avoiding reliving of events has been associated with worse recovery (Brewin, Dalgleish, & Joseph, 1996; Foa, Steketee, & Rothbaum, 1989), researchers have expected to find third-person imagery of traumatic events to be associated with poorer outcomes among trauma survivors. Although such associations have emerged on some indicators (Kenny & Bryant, 2007; Kenny et al., 2009), the opposite has emerged on others (McIssac & Eich, 2004). Our model suggests an alternative prediction about the role of imagery perspective in coping and offers a potential explanation for the apparent inconsistency in existing data.

According to our model, third-person imagery is defined not only by the absence of simulating the concrete experience of pictured events but also by the tendency to process the event abstractly in relation to its broader context. Thus, use of third-person imagery could signal avoidance of reliving but could also signal attempts at meaning-making. Further, the meaning that emerges as individuals abstract from the third-person perspective depends on the nature of their general self-beliefs. Other work on PTSD suggests that in addition to its emotional symptoms, PTSD is characterized by a tendency to perceive the traumatic event as representing a negative central organizing theme in one's life (Berntsen & Rubin, 2007). Taking all of this into account suggests that whether spontaneous use of third-person imagery when recalling traumatic events predicts better or worse coping would depend on the meaning people were prone to see when thinking about the traumatic event in the broader context of their lives. Among those prone to see the event as representing a negative central organizing theme, shifts to third-person imagery should not signal greater recovery and in fact could signal greater problems. However, among those prone to adopt a more adaptive interpretation of the meaning of the event in their lives (e.g., Taylor, 1983), shifts to third-person imagery may indeed correspond with recovery. Not taking this moderating variable into account would be expected to obscure the relation between imagery perspective and PTSD symptomatology.

This interpretation gains plausibility in light of the research we described earlier showing perspective to interact with self-esteem to determine feelings of shame when individuals pictured failures in their lives. Perspective did not predict emotional response directly; the relation depended entirely

on self-esteem. Individuals with low self-esteem tend to overgeneralize from such events (Carver & Ganellen, 1983; Kernis et al., 1989), perceiving them as representing a central organizing theme in their lives, whereas individuals with high self-esteem tend to interpret such events in a more adaptive manner, perceiving them to be inconsequential in light of other more positive aspects of the self (Dodgson & Wood, 1998). And, third-person imagery was related to greater shame among individuals with low self-esteem but lesser shame among those with high self-esteem.

This leads to the caveat that pure manipulations of imagery perspective are unlikely to have a direct effect on the ability to adaptively cope with negative events. In order for third-person imagery to promote adaptive coping, it should be necessary also to specify an adaptive framework to guide the meaning-making that occurs with third-person imagery. This point may provide insight into the mechanism by which “self-distancing” facilitates adaptive working through of negative emotional events (e.g., Kross, Ayduk, & Mischel, 2005). The “self-distanced” style is evoked through instructions that direct participants to picture the negative event from a third-person visual perspective and also to think about the event having happened to “the distant you.” Effects of this style of recall are compared with a “self-immersed” style in which people are instructed to relive the event “as if it were happening to you all over again.” Research we reviewed earlier crossed a manipulation of visual perspective with a manipulation of perceived continuity between past and present selves (theory of self-change vs. self-stability). Results revealed that only when people consider a past self to be discrepant from the present does third-person imagery help to separate the past from the present (Libby et al., 2005a). Thus, in manipulations of “self-distancing” the instruction to imagine past negative incidents as if they are happening to a distant self is likely key in producing the beneficial effects that have been observed, especially among populations with generally negative self-views (Kross & Ayduk, 2009). Our model suggests that without the instruction to separate their present self from the past, these individuals would likely be inclined to consider the past self as part of the present, which would cause third-person imagery to lead to detrimental effects on present well-being, as in the case of LSEs recalling failures from the third-person perspective.

### **5.8. A tool for achieving self-insight and studying top-down versus bottom-up processing**

Perspective does not directly determine whether an event is personally connected to the present self or not; thus, simply manipulating visual perspective in an effort to induce such a difference in how people think about events is unlikely to be successful. However, perspective does directly determine the process by which people make meaning of events they

picture. When people picture events from the first-person perspective, they adopt a bottom-up approach, simulating their actions and reactions to the environment and construing the event concretely in these terms. When people picture events from the third-person perspective, they adopt a top-down approach, integrating the event with its broader context and construing the event abstractly in these terms. Thus, simply manipulating visual perspective is an effective strategy for inducing one style of processing or the other. This highlights certain areas of inquiry in which imagery perspective may be a particularly useful tool.

Although top-down and bottom-up influences often work in concert to determine reactions to events as they unfold online in real time, the question of how each influence contributes has been of interest to researchers in a variety of domains including self-judgment (e.g., Klein & Monin, 2009), autobiographical memory (e.g., Woike, 2008), emotion (e.g., Ochsner et al., 2009), and behavior (e.g., Dovidio, Kawakami, & Gaertner, 2002). If imagery perspective in mental simulations of events functions to pull apart these two influences, as we suggest, then manipulating imagery perspective as people mentally simulate events should provide the opportunity for observing and studying the role of each influence. For example, those interested in studying the role of self-theories in self-judgment (e.g., Ehrlinger & Dunning, 2003; Ehrlinger, Gilovich, & Ross, 2005; Pronin, Gilovich, & Ross, 2004), motivation (e.g., Dweck & Grant, 2008), and emotion (e.g., Barrett, 1997; Robinson & Clore, 2002) should find third-person imagery to be an effective tool. The interplay between bottom-up, automatically activated attitudes and top-down, explicit attitudes has been of interest to many researchers (e.g., Dovidio et al., 2002; see Chapter 2). The evidence we reviewed demonstrating that implicitly and explicitly measured attitudes differentially predict responses to imagined events depending on perspective suggests the utility of imagery perspective manipulations in this area of inquiry.

In addition to studying the role of top-down and bottom-up influences, researchers have also been interested in people's abilities to detect these influences—in other words, the extent to which people can achieve self-insight (e.g., Dunning, 2005; Hofmann & Wilson, 2010; Wilson, 2002). Our analysis suggests that in approaching the question of self-insight, it is necessary to consider the dual-facets of the self and distinguish between insight into the experiential I versus the conceptual me. People's beliefs about who they are—the “me” self—do not always correspond with the reactions that the environment evokes in them—the “I” self. Because people's self-beliefs can have such a powerful influence on their perceptions, it can be difficult to gain insight into the “I.”

One way to gauge insight into the “I” is to assess the correspondence of explicit reports with implicit measures. Mindfulness meditation and instructions to focus on one's gut reactions to stimuli have both been

shown to bring explicit attitudes in line with implicit measures (Gawronski & LeBel, 2008; Koole, Govorun, Cheng, & Gallucci, 2009). Both of these manipulations share a conceptual similarity with the style of meaning-making that we propose occurs with first-person imagery, where people focus on their responses to the imagined environment, without judgment shaped by their broader concept of the self. And, some of the emerging findings we reviewed suggest that first-person imagery has an analogous effect on the correspondence between explicit reports and implicit measures. In these studies, participants completed implicit and explicit measures of their attitudes and later we manipulated the perspective they used to picture future attitude-relevant situations as they made explicit forecasts about their behaviors or feelings. Results showed that these explicit forecasts were more in line with participants' implicit attitudes when they pictured future events from the first-person than third-person perspective. Forecasts were more in line with explicit attitudes when participants had pictured future events from the third-person perspective. Thus, by leading people to focus on the experience of events, apart from their general self-beliefs, first-person imagery may be a tool to achieve insight into the experiential "I." Conversely, third-person imagery has the potential to enhance insight into the "me" self: as people picture events from the third-person perspective, the meaning of those events in relation to their self-concept becomes salient.



## 6. CONCLUSION

The research that we reviewed demonstrates that first-person and third-person images afford different modes of understanding events. Picturing events from the first-person perspective involves a bottom-up style of making meaning in which people incorporate information about the experience evoked by concrete features of the pictured situation and define the event in terms of these constituent aspects. Picturing events from the third-person perspective involves a top-down style of making meaning in which people integrate the pictured event with a broader context and define the event in terms of the abstract meaning that results. People use these different perspectives in order to differentially access their experiential and conceptual selves, to guide emotional responses to imagined and recalled events, and to use implicit and explicit attitudes to inform predictions about future behavior and gain insights into their own preferences. Visual imagery perspective thus is not a mere epiphenomenon of thought, but rather it is a representational tool that is implicated in many fundamental social-cognitive functions.

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## REFERENCES

- Abelson, R. P. (1975). Does a story understander need a point of view? In R. Schank & B. I. Nash-Webber (Eds.), *Theoretical issues in natural language processing* (pp. 140–143). Washington, DC: Association for Computational Linguistics.
- Appel, M., & Richter, T. (2007). Persuasive effects of fictional narratives increase over time. *Media Psychology, 10*, 113–134.
- Asch, S. E. (1940). Studies in the principles of judgments and attitudes: II. Determination of judgments by group and by ego-standards. *Journal of Social Psychology, 12*, 433–465.
- Atance, C. M., & O'Neill, D. K. (2001). Episodic future thinking. *Trends in Cognitive Sciences, 5*, 533–539.
- Ayduk, O., & Kross, E. (2008). Enhancing the pace of recovery: Self-distanced analysis of negative experiences reduces blood pressure reactivity. *Psychological Science, 19*, 229–231.
- Baldwin, M. W. (1999). Relational schemas: Research into social-cognitive aspects of interpersonal experience. In D. Cervone & Y. Shoda (Eds.), *The coherence of personality: Social-cognitive bases of consistency, variability, and organization* (pp. 127–154). New York: Guilford.
- Baldwin, M. W., & Holmes, J. G. (1987). Salient private audiences and awareness of the self. *Journal of Personality and Social Psychology, 53*, 1087–1098.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- Bargh, J. A., Lombardi, W. J., & Higgins, E. T. (1988). Automaticity of chronically accessible constructs in person  $\times$  situation effects on person perception: It's just a matter of time. *Journal of Personality and Social Psychology, 55*, 599–605.
- Barrett, L. F. (1997). The relationships among momentary emotion experiences, personality descriptions, and retrospective ratings of emotion. *Personality and Social Psychology Bulletin, 23*, 1100–1110.
- Batson, C. D., Early, S., & Salvarani, G. (1997). Perspective taking: Imagining how another feels versus imagining how you would feel. *Personality and Social Psychology Bulletin, 23*, 751–758.
- Berntsen, D., & Rubin, C. (2007). When a trauma becomes a key to identity: Enhanced integration of trauma memories predicts posttraumatic stress disorder symptoms. *Applied Cognitive Psychology, 21*, 417–431.
- Blaine, B., & Crocker, J. (1993). Self-esteem and self-serving biases in reactions to positive and negative events: An integrative review. In R. F. Baumeister (Ed.), *Self-esteem: The puzzle of low self-regard* (pp. 55–85). New York: Plenum Press.
- Boroditsky, L., & Ramscar, M. (2002). The roles of body and mind in abstract thought. *Psychological Science, 13*, 185–189.
- Brewer, W. F. (1996). What is recollective memory? In D. C. Rubin (Ed.), *Remembering our past: Studies in autobiographical memory* (pp. 19–66). New York: Cambridge University Press.
- Brewin, C. R., Dalgleish, T., & Joseph, S. (1996). A dual representation theory of posttraumatic stress disorder. *Psychological Review, 103*, 670–686.
- Brown, J. D. (1998). *The self*. New York: McGraw-Hill.
- Brown, J. D., Dutton, K. A., & Cook, K. E. (2001). From the top down: Self-esteem and self-evaluation. *Cognition and Emotion, 15*, 615–631.

- Brown, J. D., & Marshall, M. A. (2001). Self-esteem and emotion: Some thoughts about feelings. *Personality and Social Psychology Bulletin*, 27, 575–584.
- Buehler, R., Griffin, D., & Ross, M. (1994). Exploring the “planning fallacy”: Why people underestimate their task completion times. *Journal of Personality and Social Psychology*, 67, 366–381.
- Carver, C. S., & Ganellen, R. J. (1983). Depression and components of self-punitiveness: High standards, self-criticism, and overgeneralization. *Journal of Abnormal Psychology*, 92, 330–337.
- Chambers, J. R., Epley, N., Savitsky, K., & Windschitl, P. D. (2008). Knowing too much: Using private knowledge to predict how one is viewed by others. *Psychological Science*, 19, 542–548.
- Cohen, J. (2001). Defining identification: A theoretical look at the identification of audiences with media characters. *Mass Communication and Society*, 4, 245–264.
- Cohen, D., & Gunz, A. (2002). As seen by the other. . . perspectives on the self in the memories and emotional perceptions of Easterners and Westerners. *Psychological Science*, 13, 55–59.
- Cohen, D., Hoshino-Browne, E., & Leung, A. K. (2007). Culture and the structure of personal experience: Insider and outsider phenomenologies of the self and social world. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 39, pp. 1–67). San Diego, CA: Academic Press.
- Collins, N. L., Ford, M. B., Guichard, A. C., & Allard, L. M. (2006). Working models of attachment and attribution processes in intimate relationships. *Personality and Social Psychology Bulletin*, 32, 201–219.
- Conner Christensen, T. C., Wood, J. V., & Barrett, L. F. (2003). Remembering everyday experience through the prism of self-esteem. *Personality and Social Psychology Bulletin*, 29, 51–62.
- Conway, M. A., Meares, K., & Standart, S. (2004). Images and goals. *Memory*, 12, 525–531.
- Conway, M. A., & Pleydell-Pearce, C. W. (2000). The construction of autobiographical memories in the self-memory system. *Psychological Review*, 107, 261–288.
- Conway, M., & Ross, M. (1984). Getting what you want by revising what you had. *Journal of Personality and Social Psychology*, 47, 738–748.
- Crisp, R. J., & Husnu, S. (2011). Attributional processes underlying imagined contact effects. *Group Processes and Intergroup Relations*, 14, 275–287.
- Damasio, A. R. (1994). *Descartes' error: Emotion, reason and the human brain*. New York: Grosset/Putnam.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44, 113–126.
- Davis, M. H., Conklin, L., Smith, A., & Luce, C. (1996). Effect of perspective taking on the cognitive representation of persons: A merging of self and other. *Journal of Personality and Social Psychology*, 70, 713–726.
- Dodgson, P. G., & Wood, V. (1998). Self-esteem and the cognitive accessibility of strengths and weaknesses after failure. *Journal of Personality and Social Psychology*, 75, 178–197.
- Dovidio, J. F., Kawakami, K., & Gaertner, S. L. (2002). Implicit and explicit prejudice and interracial interaction. *Journal of Personality and Social Psychology*, 82, 62–68.
- Dunning, D. (2005). *Self-insight: Roadblocks and detours on the path to knowing thyself*. New York: Psychology Press.
- Duval, T. S., Silvia, P. J., & Lalwani, N. (2001). *Self-awareness and causal attribution: A dual systems theory*. Boston: Kluwer.
- Duval, T. S., & Wicklund, R. A. (1972). *A theory of objective self-awareness*. New York: Academic Press.
- Dweck, C. S., & Grant, H. (2008). Self-theories, goals, and meaning. In J. Y. Shah & W. L. Gardner (Eds.), *Handbook of motivation science* (pp. 405–416). New York: Guilford.

- Ehlers, A., & Steil, R. (1995). Maintenance of intrusive memories in posttraumatic stress disorder: A cognitive approach. *Behavioural and Cognitive Psychotherapy*, *23*, 217–249.
- Ehrlinger, J., & Dunning, D. (2003). How chronic self-views influence (and potentially mislead) estimates of performance. *Journal of Personality and Social Psychology*, *84*, 5–17.
- Ehrlinger, J., Gilovich, T., & Ross, L. (2005). Peering into the bias blind spot: People's assessments of bias in themselves and others. *Personality and Social Psychology Bulletin*, *31*, 680–692.
- Eibach, R. P., & Mock, S. E. (2011). Parenthood idealization as rationalization of parental investment. *Psychological Science*, *22*, 203–208.
- Eibach, R. P., Mock, S. E., & Libby, L. K. (2011). *Perspective and parenthood*. Unpublished data.
- Eichstaedt, J., & Silvia, P. J. (2003). Noticing the self: Implicit assessment of self-focused attention using word recognition latencies. *Social Cognition*, *21*, 349–361.
- Epstein, S. (1973). The self-concept revisited: Or a theory of a theory. *American Psychologist*, *28*, 404–416.
- Epstein, S. (2003). Cognitive-experiential self-theory of personality. In T. Millon & M. J. Lerner (Eds.), *Comprehensive handbook of psychology, Vol. 5: Personality and social psychology* (pp. 159–184). Hoboken, NJ: Wiley and Sons.
- Farb, N. A. S., Segal, Z. V., Mayberg, H., Bean, J., McKeon, D., Fatima, Z., et al. (2007). Attending to the present: Mindfulness meditation reveals distinct neural modes of self-reference. *Social Cognitive and Affective Neuroscience*, *2*, 313–322.
- Fazio, R. H., & Olson, M. A. (2003). Implicit measures in social cognition research: Their meaning and uses. *Annual Review of Psychology*, *54*, 297–327.
- Fishbach, A., & Dhar, R. (2005). Goals as excuses or guides: The liberating effect of perceived goal progress on choice. *Journal of Consumer Research*, *32*, 370–377.
- Fishbach, A., Dhar, R., & Zhang, Y. (2006). Subgoals as substitutes or complements: The role of goal accessibility. *Journal of Personality and Social Psychology*, *91*, 232–242.
- Fiske, S. T., Taylor, S. E., Etcoff, N. L., & Laufer, J. K. (1979). Imaging, empathy, and causal attribution. *Journal of Experimental Social Psychology*, *15*, 356–377.
- Foa, E. B., Steketee, G., & Rothbaum, B. O. (1989). Behavioral/cognitive conceptualizations of post-traumatic stress disorder. *Behavior Therapy*, *20*, 155–176.
- Frank, M., & Gilovich, T. (1989). Effect of memory perspective on retrospective causal attributions. *Journal of Personality and Social Psychology*, *57*, 399–403.
- Freud, S. (1907/1960). Childhood memories and screen memories. In J. Strachey (Ed.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 6, pp. 43–52). London: Hogarth Press.
- Galinsky, A. D., Ku, G., & Wang, C. S. (2005). Perspective-taking and self-other overlap: Fostering social bonds and facilitating social coordination. *Group Processes & Intergroup Relations*, *8*, 109–124.
- Galinsky, A. D., & Moskowitz, G. B. (2000). Counterfactuals as behavioral primes: Priming the simulation heuristic and consideration of alternatives. *Journal of Experimental Social Psychology*, *36*, 384–409.
- Galinsky, A. D., Seiden, V. L., Kim, P. H., & Medvec, V. H. (2002). The dissatisfaction of having your first offer accepted: The role of counterfactual thinking in negotiations. *Personality and Social Psychology Bulletin*, *28*, 271–283.
- Gallagher, S. (2000). Philosophical conceptions of the self: Implications for cognitive science. *Trends in Cognitive Sciences*, *4*, 14–21.
- Galton, F. (1883). *Inquiries into human faculty*. London: MacMillan.
- Gawronski, B., & LeBel, E. P. (2008). Understanding patterns of attitude change: When implicit measures show change, but explicit measures do not. *Journal of Experimental Social Psychology*, *44*, 1355–1361.

- Gilbert, D. T. (1998). Ordinary personology. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology* (4th ed., pp. 89–149). New York: McGraw Hill.
- Gilovich, T., & Medvec, V. H. (1995). The experience of regret: What, when, and why. *Psychological Review*, *102*, 379–395.
- Gilovich, T., & Savitsky, K. (1999). The spotlight effect and the illusion of transparency: Egocentric assessments of how we are seen by others. *Current Directions in Psychological Science*, *8*, 165–168.
- Goldman, A. I. (1970). *A theory of human action*. Englewood Cliffs, NH: Prentice-Hall.
- Gollwitzer, P. M., Heckhausen, H., & Steller, B. (1990). Deliberative and implemental mind-sets: Cognitive tuning toward congruous thoughts and information. *Journal of Personality and Social Psychology*, *59*, 1119–1127.
- Green, M. C., & Brock, T. C. (2002). In the mind's eye: Transportation-imagery model of narrative persuasion. In M. C. Green, J. J. Strange, & T. C. Brock (Eds.), *Narrative impact: Social and cognitive foundations* (pp. 315–342). Mahwah, NJ: Erlbaum.
- 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.
- Henri, V., & Henri, C. (1897). Enquête sur les premiers de l'enfance [An investigation of early childhood]. *L'Année Psychologique*, *3*, 184–198.
- Higgins, E. T. (1996). The “self digest”: Self-knowledge serving self-regulatory functions. *Journal of Personality and Social Psychology*, *71*, 1062–1083.
- Hofmann, W., & Wilson, T. D. (2010). Consciousness, introspection, and the adaptive unconscious. In B. Gawronski & B. K. Payne (Eds.), *Handbook of implicit social cognition: Measurement, theory, and applications* (pp. 197–215). New York: Guilford.
- Holmes, E. A., & Mathews, A. (2010). Mental imagery in emotion and emotional disorders. *Clinical Psychology Review*, *30*, 349–362.
- Hong, Y., Chiu, C., Dweck, C. S., Lin, D. M., & Wan, W. (1999). Implicit theories, attributions, and coping: A meaning system approach. *Journal of Personality and Social Psychology*, *77*, 588–599.
- Hsee, C. K., & Zhang, J. (2004). Distinction bias: Misprediction and mischoice due to joint evaluation. *Journal of Personality and Social Psychology*, *86*, 680–695.
- Huebner, D. M., & Fredrickson, B. L. (1999). Gender differences in memory perspectives: Evidence for self-objectification in women. *Sex Roles*, *41*, 459–467.
- Jackson, P. L., Meltzoff, A. N., & Decety, J. (2006). Neural circuits involved in imitation and perspective-taking. *Neuroimage*, *31*, 429–439.
- James, W. (1890/1950). *The principles of psychology* (Vol. 1). New York: Dover Publications, Inc.
- Jones, E. E., & Nisbett, R. E. (1971). The actor and the observer: Divergent perceptions of the causes of behavior. In E. E. Jones, D. E. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valins, & B. Weiner (Eds.), *Attribution: Perceiving the causes of behavior* (pp. 79–94). New York: General Learning Press.
- Kaufman, G., & Libby, L. K. (2011). *Expanding the scope of experience: Changing minds and behavior through identity-taking*. Manuscript submitted for publication.
- Kenny, L. M., & Bryant, R. A. (2007). Keeping memories at an arm's length: Vantage point of trauma memories. *Behaviour Research and Therapy*, *45*, 1915–1920.
- Kenny, L. M., Bryant, R. A., Silove, D., Creamer, M., O'Donnell, M., & McFarlane, A. C. (2009). Distant memories: A prospective study of vantage point of trauma memories. *Psychological Science*, *20*, 1049–1052.
- Kernis, M. H., Brockner, J., & Frankel, B. S. (1989). Self-esteem and reactions to failure: The mediating role of overgeneralization. *Journal of Personality and Social Psychology*, *57*, 707–714.

- Klein, W. M. P., & Monin, M. W. (2009). When focusing on negative and positive attributes of the self elicits more inductive self-judgment. *Personality and Social Psychology Bulletin*, *35*, 376–384.
- Klein, S. B., Rozendal, K., & Cosmides, L. (2002). A social-cognitive neuroscience analysis of the self. *Social Cognition*, *20*, 105–135.
- Koestner, R., Losier, G. F., Vallerand, R. J., & Carducci, D. (1996). Identified and introjected forms of political internalization: Extending self-determination theory. *Journal of Personality and Social Psychology*, *70*, 1025–1036.
- Koole, S. L., Govorun, O., Cheng, C., & Gallucci, M. (2009). Pulling yourself together: Meditation promotes the congruence between implicit and explicit self-esteem. *Journal of Experimental Social Psychology*, *45*, 1220–1226.
- Kosslyn, S. M., Thompson, W. L., & Ganis, G. (2006). *The case for mental imagery*. New York: Oxford University Press.
- Kozak, M. N., Marsh, A. A., & Wegner, D. M. (2006). What do I think you're doing? Action identification and mind attribution. *Journal of Personality and Social Psychology*, *90*, 543–555.
- Kross, E., & Ayduk, O. (2009). Boundary conditions and buffering effects: Does depressive symptomology moderate the effectiveness of self-distancing for facilitating adaptive emotional analysis? *Journal of Research in Personality*, *43*, 923–927.
- Kross, E., Ayduk, O., & Mischel, W. (2005). When asking “why” does not hurt. Distinguishing rumination from reflective processing of negative emotions. *Psychological Science*, *16*, 709–715.
- Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago, IL: University of Chicago Press.
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, *68*, 518–530.
- LeDoux, J. (2002). *Synaptic self: How our brains become who we are*. New York: Viking.
- Legrand, D., & Ruby, P. (2009). What is self-specific? Theoretical investigation and critical review of neuroimaging results. *Psychological Review*, *116*, 252–282.
- Libby, L. K. (2003). *Seeing meaning: Imagery perspective, action identification, and perceptions of change in the self* (doctoral dissertation).
- 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.
- Libby, L. K., & Eibach, R. P. (2009). Seeing the links between the personal past, present, and future: How imagery perspective in mental simulation functions in defining the temporally extended self. In K. Markman, B. Klein, & J. Suhr (Eds.), *The handbook of imagination and mental simulation* (pp. 359–372). New York: Psychology Press.
- Libby, L. K., & Eibach, R. P. (2011). Self-enhancement or self-coherence? Why people shift visual perspective in mental images of the personal past and future. *Personality and Social Psychology Bulletin*, *37*, 714–726.
- Libby, L. K., Eibach, R. P., & Gilovich, T. (2005a). Here's looking at me: The effect of memory perspective on assessments of personal change. *Journal of Personality and Social Psychology*, *88*, 50–62.
- Libby, L. K., Eibach, R. P., & Gilovich, T. (2005b). *The effect of imagery perspective and goals on attributions for eating behavior*. Unpublished raw data.
- Libby, L. K., Eibach, R. P., Valenti, G., & Hines, K. (2011). *Seeing the I versus the me: Manipulating imagery perspective affords differential access to implicit vs. explicit attitudes*. Manuscript in preparation.

- Libby, L. K., Shaeffer, E. M., & Eibach, R. P. (2009). Seeing meaning in action: A bidirectional link between visual perspective and action identification level. *Journal of Experimental Psychology: General*, *138*, 503–516.
- Libby, L. K., Shaeffer, E. M., Eibach, R. P., & Slemmer, J. A. (2007a). Picture yourself at the polls: Visual perspective in mental imagery affects self-perception and behavior. *Psychological Science*, *18*, 199–203.
- Libby, L. K., Shaeffer, E. M., Eibach, R. P., & Slemmer, J. A. (2007b). *The effect of imagery perspective on emotions about voting*. Unpublished raw data.
- Libby, L. K., Valenti, G., Pfent, A., & Eibach, R. P. (2011). *Seeing failure in your life: Third-person imagery causes self-esteem to shape reactions to recalled and imagined failure*. Manuscript submitted for publication.
- 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.
- Lieberman, M. D., Jarcho, J. M., & Satpute, A. B. (2004). Evidence-based and intuition-based self-knowledge: An fMRI study. *Journal of Personality and Social Psychology*, *87*, 421–435.
- MacGregor, K. E., Valenti, G., Libby, L. K., & Eibach, R. P. (2011). *Putting on the blinders: First-person imagery inhibits comparison with alternatives*. Manuscript in preparation.
- Malle, B. F., & Knobe, J. (1997). Which behaviors do people explain? A basic actor–observer asymmetry. *Journal of Personality and Social Psychology*, *72*, 288–304.
- Malle, B. F., Knobe, J. M., & Nelson, S. E. (2007). Actor–observer asymmetries in explanations of behavior: New answers to an old question. *Journal of Personality and Social Psychology*, *93*, 491–514.
- Mallett, R. K., Wilson, T. D., & Gilbert, D. T. (2008). Expect the unexpected: Failure to anticipate similarities leads to an intergroup forecasting error. *Journal of Personality and Social Psychology*, *94*, 265–277.
- Marigold, D. C., Eibach, R. P., Libby, L. K., Holmes, J. G., & Ross, M. (2011). *Framing memories of relationship transgressions: How visual imagery perspective activates relational knowledge*. Manuscript submitted for publication.
- Markus, H. (1977). Self-schemata and processing information about the self. *Journal of Personality and Social Psychology*, *35*, 63–78.
- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, *41*, 954–969.
- McAdams, D. P. (2001). The psychology of life stories. *Review of General Psychology*, *5*, 100–122.
- McIsaac, H. K., & Eich, E. (2002). Vantage point in episodic memory. *Psychonomic Bulletin & Review*, *9*, 144–150.
- McIsaac, H. K., & Eich, E. (2004). Vantage point in traumatic memory. *Psychological Science*, *15*, 248–253.
- Mead, G. H. (1934/1962). *Works of George Herbert Mead, Vol. 1: Mind, self, and society from the standpoint of a behaviorist*. Chicago, IL: University of Chicago Press.
- Medvec, V. H., Madey, S. F., & Gilovich, T. (1995). When less is more: Counterfactual thinking and satisfaction among Olympic medalists. *Journal of Personality and Social Psychology*, *69*, 603–610.
- Morewedge, C. K., Gilbert, D. T., Myrseth, K. O. R., Kassam, K. S., & Wilson, T. D. (2010). Consuming experience: Why affective forecasters overestimate comparative value. *Journal of Experimental Social Psychology*, *46*, 986–992.
- Neck, C. P., & Manz, C. C. (1992). Thought self-leadership: The influence of self-talk and mental imagery on performance. *Journal of Organizational Behavior*, *13*, 681–699.
- Neisser, U. (1994). Self narratives: True and false. In U. Neisser & R. Fivush (Eds.), *The remembering self: Construction and accuracy in the self-narrative* (pp. 1–18). New York: Cambridge University Press.

- Nigro, G., & Neisser, U. (1983). Point of view in personal memories. *Cognitive Psychology*, *15*, 467–482.
- Northoff, G., & Bermpohl, F. (2004). Cortical midline structures and the self. *Trends in Cognitive Sciences*, *8*, 102–107.
- Ochsner, K. N., Ray, R. R., Hughes, B., McRae, K., Cooper, J. C., Weber, J., et al. (2009). Bottom-up and top-down processes in emotion generation: Common and distinct neural mechanisms. *Psychological Science*, *20*, 1322–1331.
- Oe, K. (1974). *The silent cry* (J. Bester, Trans.). Tokyo: Kodansha International.
- Ogilvie, D. M., & Ashmore, D. D. (1991). Self-with-other representation as a unit of analysis in self-concept research. In R. C. Curtis (Ed.), *The relational self: Theoretical convergences in psychoanalysis and social psychology* (pp. 282–314). New York: Guilford Press.
- Olson, M. A., & Fazio, R. H. (2004). Reducing the influence of extrapersonal associations on the Implicit Association Test: Personalizing the IAT. *Journal of Personality and Social Psychology*, *86*, 653–667.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, *90*, 751–783.
- Plant, E. A., & Devine, P. G. (1998). Internal and external motivation to respond without prejudice. *Journal of Personality and Social Psychology*, *75*, 811–832.
- Pliner, P., Chaiken, S., & Flett, G. L. (1990). Gender differences in concern with body weight and physical appearance over the life span. *Personality and Social Psychology Bulletin*, *16*, 263–273.
- Pronin, E., Gilovich, T., & Ross, L. (2004). Objectivity in the eye of the beholder: Divergent perceptions of bias in self versus others. *Psychological Review*, *111*, 781–799.
- Rees, H. J., & Israel, H. E. (1935). An investigation of the establishment and operation of mental sets. *Psychological Monographs*, *46*, 1–26.
- Reynolds, M., & Brewin, C. R. (1999). Intrusive memories in depression and posttraumatic stress disorder. *Behaviour Research and Therapy*, *37*, 201–215.
- Robinson, J. A., & Swanson, K. L. (1993). Field and observer modes of remembering. *Memory*, *1*, 169–184.
- Robinson, M. D., & Clore, L. (2002). Episodic and semantic knowledge in emotional self-report: Evidence for two judgment processes. *Journal of Personality and Social Psychology*, *83*, 198–215.
- Roese, N. J., & Olson, J. M. (1997). Counterfactual thinking: The intersection of affect and function. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 29, pp. 1–59). San Diego, CA: Academic Press.
- Ross, M. (1989). Relation of implicit theories to the construction of personal histories. *Psychological Review*, *96*, 341–357.
- Ross, M., & Buehler, R. (2001). Identity through time: Constructing personal pasts and futures. In A. Tesser & N. Schwarz (Eds.), *Blackwell handbook of social psychology: Intraindividual processes* (pp. 518–544). Oxford, UK: Blackwell.
- Ross, M., & McFarland, C. (1988). Constructing the past: Biases in personal memories. In D. Bar-Tal & A. W. Kruglanski (Eds.), *The social psychology of knowledge* (pp. 299–314). New York: Cambridge University Press.
- Ross, M., & Wilson, A. E. (2002). It feels like yesterday: Self-esteem, valence of personal past experiences, and judgments of subjective distance. *Journal of Personality and Social Psychology*, *82*, 792–803.
- Sanitioso, R. B. (2008). Motivated self and recall: Visual perspectives in remembering past behaviors. *European Journal of Social Psychology*, *38*, 566–575.
- Schacter, D. (1996). *Searching for memory: The brain, the mind, and the past*. New York: Basic Books.
- Schacter, D. L., Addis, D. R., & Buckner, R. L. (2007). Remembering the past to imagine the future: The prospective brain. *Nature Reviews Neuroscience*, *8*, 657–661.

- Shaeffer, E. M., Libby, L. K., & Eibach, R. P. (2011). *Perspective primes processing style*. Manuscript in preparation.
- Shelton, J. N., & Richeson, J. A. (2005). Intergroup contact and pluralistic ignorance. *Journal of Personality and Social Psychology, 88*, 91–107.
- Simpson, J. A., Ickes, W., & Grich, J. (1999). When accuracy hurts: Reactions of anxious-ambivalent dating partners to a relationship-threatening situation. *Journal of Personality and Social Psychology, 76*, 754–769.
- Singer, J. A., & Salovey, P. (1993). *The remembered self: Emotion and memory in personality*. New York: Free Press.
- Storms, M. D. (1973). Videotape and the attribution process: Reversing actors' and observers' points of view. *Journal of Personality and Social Psychology, 27*, 65–175.
- Sutin, A. R., & Robins, R. W. (2008). When the "I" looks at the "me": Autobiographical memory, visual perspective, and the self. *Consciousness and Cognition: An International Journal, 17*, 1386–1397.
- Tangney, J. P., & Dearing, R. L. (2002). *Shame and guilt*. New York: Guilford Press.
- Tangney, J. P., & Fischer, K. W. (Eds.), (1995). *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride*. New York: The Guilford Press.
- Taylor, S. E. (1983). Adjustment to threatening events: A theory of cognitive adaptation. *American Psychologist, 38*, 1161–1174.
- Taylor, S. E. (1991). Asymmetrical effects of positive and negative events: The mobilization-minimization hypothesis. *Psychological Bulletin, 110*, 67–85.
- Taylor, S. E., Crocker, J., Fiske, S. T., Sprinzen, M., & Winkler, J. D. (1979). The generalizability of salience effects. *Journal of Personality and Social Psychology, 37*, 357–368.
- Taylor, S. E., & Fiske, S. T. (1975). Point of view and perceptions of causality. *Journal of Personality and Social Psychology, 32*, 439–445.
- Taylor, S. E., Pham, L. B., Rivkin, I. D., & Armor, D. A. (1998). Harnessing the imagination: Mental simulation, self-regulation, and coping. *American Psychologist, 53*, 429–439.
- Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups*. New York: John Wiley and Sons.
- Trope, Y. (1986). Identification and inferential processes in dispositional attribution. *Psychological Review, 93*, 239–257.
- Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review, 117*, 440–463.
- Tulving, E. (2002). Episodic memory: From mind to brain. *Annual Review of Psychology, 53*, 1–25.
- Valenti, G., Libby, L. K., & Eibach, R. P. (2011). Looking back with regret: Visual perspective in memory images differentially affects regret for actions and inactions. *Journal of Experimental Social Psychology, 47*, 730–737.
- Valenti, G., & MacGregor, K. (2011). *Perspective and morality*. Unpublished raw data.
- Vallacher, R. R., & Wegner, D. M. (1985). *A theory of action identification*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Vallacher, R. R., & Wegner, D. M. (1989). Levels of personal agency: Individual variation in action identification. *Journal of Personality and Social Psychology, 57*, 660–671.
- Vasquez, N. A., & Buehler, R. (2007). Seeing future success: Does imagery perspective influence achievement motivation? *Personality and Social Psychology Bulletin, 33*, 1392–1405.
- Watson, D. (1982). The actor and the observer: How are their perceptions of causality divergent? *Psychological Bulletin, 92*, 682–700.
- Wells, A., & Papageorgiou, C. (1999). The observer perspective: Biased imagery in social phobia, agoraphobia, and blood/injury phobia. *Behaviour Research and Therapy, 37*, 653–658.

- Wheeler, M. A., Stuss, D. T., & Tulving, E. (1997). Toward a theory of episodic memory: The frontal lobes and auto-noetic consciousness. *Psychological Bulletin*, *121*, 331–354.
- Williams, A. D., & Moulds, M. L. (2007). Cognitive avoidance of intrusive memories: Recall vantage perspective and associations with depression. *Behaviour Research and Therapy*, *45*, 1141–1153.
- Wilson, T. D. (2002). *Strangers to ourselves: Discovering the adaptive unconscious*. Cambridge, MA: Harvard University Press.
- Wilson, T. D., Lindsey, S., & Schooler, T. Y. (2000). A model of dual attitudes. *Psychological Review*, *107*, 101–126.
- Wilson, A. E., & Ross, M. (2003). The identity function of autobiographical memory: Time is on our side. *Memory*, *11*, 137–149.
- Woike, B. A. (2008). A functional framework for the influence of implicit and explicit motives on autobiographical memory. *Personality and Social Psychology Review*, *12*, 99–117.
- Wollheim, R. (1984). *The thread of life*. New Haven, CT: Yale University Press.
- Zhou, X., Sedikides, C., Wildschut, T., & Gao, D. (2008). Counteracting loneliness: On the restorative function of nostalgia. *Psychological Science*, *19*, 1023–1029.