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Looking Forward, Looking Back: Cultural Differences and Similarities in Time Orientation

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Cultural Differences and Similarities in Time Orientation

Donnel A. Briley

time /tim/ – n. the indefinite continued progress of existence, events, etc., in past, present and future regarded as a whole.

— Oxford Dictionary

Time is an important physical dimension. Along with concepts like space, time is an essential building block of all other quantities from physics (e.g., velocity, force, energy). Society has developed complex, broadly shared systems for measuring the passing of time (millenia, hours, microseconds) and for identifying specific points in time (Tuesday, 1200 SC, 16:30 GMT). We track the passing of time at an accuracy level of about 30 billionths of a second per year, with one second defined as exactly 9,192,631,770 oscillations of the cesium atom's resonant frequency ("The Atomic Age of Time Standards," 2007). This preoccupation with time is not a new phenomenon. Calendars can be traced as far back as 20,000 years ago, when Ice Age hunters in Europe gouged holes in sticks and bones to track moon phases. And early clocks were probably first crafted 5000 to 6000 years ago by civilizations in the Middle East and North Africa (US National Institute of Standards and Technology, 2007).

Why this obsession with observing, measuring, and tracking time? Time offers an important basis for helping us to understand our shared and individual experiences in the world. Rather than being strictly an artifact of physics, time forms an essential frame for organizing and interpreting life's events. The central role of time in shaping our thoughts, lives, and very existence has been put forth by great thinkers from both philosophy and psychology, including Immanuel Kant (1781/1965), William James (1890/1950), and Martin Heidegger (1927). Thus, rather than existing independent of the person, in a social vacuum, time has an important psychological role (Block, 1990).

The present chapter explores the interplay of time and mind from a cultural perspective, investigating how people focus their attention when they must interpret and negotiate situations and events they encounter. In particular, I try to understand whether East Asians and North Americans differ on these occasions with respect to their temporal focus. Research has established that people often display biases in their temporal focus (e.g., Zimbardo & Boyd, 1999), and that these biases are predictive of unhealthy emotions (Zimbardo & Boyd, 1999), risky choices (Boyd & Zimbardo, 2005; Keough, Zimbardo & Boyd, 1999; Zimbardo, Keough, & Boyd, 1997), and, ultimately, overall well-being (Bonniwell & Zimbardo, 2004). Given the importance of temporal processes to key

psychological functions, and the possibility of both commonalities and differences across cultures, this research domain deserves attention.

In the first section below, I introduce the time orientation concept. Second, some findings are discussed that show cultural differences in people's mental models for understanding how event chains unfold. Topics examined include people's retrospective and prospective causal inferences and their expectations of change in the future. These findings could indicate that culture influences concreteness and salience of representations of events experienced in the past or anticipated in the future. Some implications of this idea are then explored. In the third section, I look at the extent to which individuals focus on past, present, and future time zones when making a common, everyday decision—an impulse purchase of an ice-cream cone. And in the fourth section, people's tendencies to assert control over time are explored using some data showing endorsements of time-related proverbs. Conclusions are presented in the final section.

TIME ORIENTATION

For we convinced physicists, the distinction between past, present, and future is only an illusion, however persistent.

— Albert Einstein (Greene, 2004)

Despite the physical reality that time is a continuous variable, people's subjective experiences of time suggest a compartmentalized structure. This structure offers three possibilities regarding the timing of events that affect us. Events might have already happened (past), they might be currently unfolding (present), or they might have yet to occur (future). These three temporal frames, which encompass all human experience, emerge from cognitive processes that distinguish any one frame from the others (Boniwell & Zimbardo, 2004). Thus, these frames are psychological concepts that we construct to organize the array of events that we encounter in daily life. They provide cognitive categories with which knowledge structures can be tagged. Consequently, they become relevant for memory processes (encoding, storage, and retrieval), and for developing inferences, goals, and expectations (Zimbardo & Boyd, 1999). By partitioning the continual flow of experiences into these frames, the mind provides order, coherence, and meaning to these events.

Time orientation has been defined as "the relative dominance of past, present or future in a person's thoughts" (Hornik & Zakay, 1996, p. 385) and involves "a preference for locating action in some temporal zone" (Lennings, 1996, p. 72). Building on these ideas, time orientation is conceived in the present chapter as the relative salience and application, at a given point in time, of knowledge representations (e.g., memories, motives, goals, affect) that are associated with either the past, present, or future. Some additional thoughts regarding this conceptualization are worth noting. First, my view allows time orientation to be situation-specific. The present chapter is interested in addressing contexts in which people attempt to comprehend incoming information so that they can formulate appropriate responses. My conceptualization of time orientation does not insist that a particular orientation bias applies equally to all situations. Even though a person might tend to draw on knowledge associated with a particular time zone under certain circumstances, he or she might not under others. For example, someone who often relies on knowledge related to the past when interpreting new situations might not dwell on the past chronically. This person's attention to past events could be prompted by the situation at hand.

Second, the distinction between past, present, and future knowledge is determined subjectively, based on people's own "labeling" of constructs on which they draw. Consider the situation in which someone was told yesterday about a task that they will need to complete tomorrow. This knowledge could plausibly be categorized in any of the three time zones, and the ultimate categorization could depend on a number of factors (e.g., the person's interpretation of and beliefs about the target event, the context in which this knowledge is retrieved, and the situation in which it is to be applied).

And finally, my view of time orientation hinges on the salience in the mind of relevant knowledge that is associated with past, present, or future. This approach might allow some insights regarding the cognitive underpinnings of temporal focus biases. Rather than focusing only on the extent to which people gravitate toward particular time frames to interpret and act, my conceptualization encompasses the level of concreteness and detail of the knowledge that is brought to bear in these situations. Implicit to this view is the idea that biases in a person's temporal focus arise because constructs in the mind that are associated with a particular time frame (e.g., future) are particularly concrete and salient, and therefore are more likely to be applied.

LOOKING FORWARD, LOOKING BACK

CONNECTING EVENTS ACROSS TIME FRAMES

When an event or situation occurs in people's lives, they use various inferential processes to interpret it, and these processes often involve either a retrospective or prospective outlook.

Retrospective inferences. Quite a bit of research has examined the types of causal relationships that people from East Asian and North American backgrounds infer for events they observe, and much of this research has a retrospective view. These studies present an outcome event, then seek an understanding of people's inferences regarding the stimulus, condition, or agent that caused this outcome. A consistent finding from this research stream is that East Asians, compared to Westerners, make broader, more complex causal attributions (e.g., Menon, Morris, Chiu, & Hong, 1999; Morris, Menon, & Ames, 2001; Morris & Peng, 1994; for a review, see Chiu & Hong, 2007).

Consider the case where a person has displayed unusual behavior for ambiguous reasons. Westerners tend to attribute cause to the individual, often explaining the behavior in terms of an actor's personal characteristics (fundamental attribution error; see Ross, 1977); though East Asians are more inclined to take into account events that have befallen the actor (Lee, Hallahan, & Herzog, 1996; Morris & Peng, 1994; Miller, 1984). Morris and Peng (1994) illustrate this point with an analysis of news reports of mass murders, comparing stories that appeared in newspapers targeted at either American or Chinese communities. They examined articles about two assailants—Gang Lu, a Chinese physics student, and Thomas McIlvane, an American postal worker. These articles appeared in the leading English language (*The New York Times*) and Chinese language (*World Journal*) newspapers in the United States. In stories about both tragedies, American reporters most often attributed the events to the disposition of the assailant (e.g., bad temper, mentally unstable), though Chinese reporters most often suggested that some event from the assailant's history was responsible (e.g., recently fired, isolation from loved ones).

Note that the causal reasoning processes of Chinese include an examination of past events and situations that might contribute to the event at hand. The causal model of Americans requires a past-oriented purview to a lesser extent because actors' characteristics and attributes, which Americans consider to be stable over time (Markus & Kitayama, 1991; Noranzayan, Choi & Nisbett, 2002), are perceived to be the primary agent of cause.

Prospective inferences. Recent research by Maddux, Yuki, and their colleagues (Maddux & Yuki, 2006; Maddux, Lau, Chiu, Hong, & Yuki, 2007) examines causal reasoning from a prospective view: people are asked to ascertain which future outcomes a particular focal event might precipitate. Springboarding from the idea that East Asians display more complex (retrospective) causal attributions than North Americans do, they predicted that East Asians would be more sensitive to (prospective) consequences of an event. This prediction was correct.

In one study (Maddux & Yuki, 2006, study 1), Asian Americans and Anglo Americans saw a picture of a person making a shot in a game of pool and were asked to answer questions about the downstream effects of this shot. They indicated how much this shot would affect (a) the person who took the next shot and (b) the person who took the sixth shot after the focal shot. Anglo Americans, as compared to Asian Americans, thought the focal shot would have greater impact on the person

taking the next shot. But, the pattern reversed when the temporal distance between the two events was large. When considering the effect of the initial shot on the person taking the sixth shot, Asian Americans thought the focal shot would have greater impact than Anglo Americans did. In sum, participants' cultural backgrounds affected the extent to which they connected events occurring in the near term versus those occurring in the future. Maddux et al. (2007) extends this work, finding further confirmation of this pattern of cultural differences.

Research examining both prospective and retrospective causal reasoning reveals an interesting pattern. As compared to North Americans, East Asians are more in touch with the past, showing a sensitivity to events and forces that might have led to the focal event. East Asians are also more sensitive to the future, displaying a ready ability to see the distal consequences of an event. Importantly, at the core of these cultural differences are differences in the complexity of inferences made. North Americans make relatively simple inferences regarding what caused an event and what consequences it will have, whereas East Asians have a more complex, nuanced view of causal relationships.

EXPECTATIONS OF CHANGE OVER TIME

Ji, Nisbett, and Su (2001) suggest that Westerners expect greater stability and less change than East Asians do. These authors lay out a historically based rationale to support this idea. According to their arguments, many early Greek thinkers focused not on the ebb and flow of life's changes as time moves along but instead on the state of things in the present and on which aspects remain unchanged. Parmenides (born ~500 BC), for example, argued that we live in an eternally static reality and developed logical arguments to support his premise that change and transformation are not possible. His work influenced Plato, who was concerned with what is immutable and constant in the world.

Consistent with these ideas, Westerners appear to be more predisposed to "live in the moment" and discount the future, as illustrated by a popular ancient Roman poem which includes a phrase still in use today.

Scale back your long hopes to a short period. Even as we speak, envious time is running away from us.
Seize the day, trusting little in the future.

— Horace, *Odes I*, 23 BC (emphasis added)

But early Chinese thinkers, according to Ji et al. (2001), generally had a more fluid, less constrained view of time and change. The tremendously influential *I Ching*, or *Book of Changes*, explored the topic of transformation and change. It is thought to be the oldest of the classic Chinese texts and is generally considered to describe the philosophy at the core of Chinese cultural beliefs. In contrast to the view of Parmenides, *I Ching* preaches the inevitability of change in life, suggesting that transformation is a constant, recurring process.

This anecdotal evidence appears to suggest that culture might influence people's mental models for predicting what changes the future holds. Ji et al.'s (2001) studies confirm this speculation. Americans, as compared to Chinese, expect less change from an initial state, and more stable patterns of change when events are changing. For example, participants indicated the likelihood that a high school chess champion would lose his next game against his strongest opponent. Americans were more likely than Chinese to believe that the champion would not be beaten (study 1). In another study (study 2), Chinese and Americans were presented with graphs showing trends (e.g., global economic growth rates). The trends presented were of four types: positively accelerated growth, negatively accelerated growth, positively accelerated decay, and negatively accelerated decay. Participants were asked to predict the probability for the trend to go up, to go down, or to stay the same, as compared to the last point on the graph. In keeping with the authors' predictions, Americans were more likely than Chinese to predict that the trend would continue rather than being disrupted.

These data show that when making predictions about the future, Americans apply uncomplicated, straightforward models. Stability is often expected rather than change; and when change is inevitable, it is expected to unfold in an orderly, manageable way. The Chinese view incorporates more complexity, however. Chinese are more likely to see disjointed, nonuniform patterns on the horizon, a view that could reflect greater appreciation that events in life sometimes unfold in ways we don't anticipate.

A POSSIBLE EXPLANATION: MENTAL REPRESENTATIONS OF DISTAL TIMEFRAMES

Taken together, the aforementioned findings suggest that East Asian individuals have rather complex mental models for understanding how event chains unfold over time. When an event is encountered, East Asians as compared to North Americans are more likely to draw connections between the upstream causes and downstream consequences. The future is seen as more unpredictable and changing by East Asians, whose attention is more likely to be directed toward the broader context and toward the interrelationships among events. The underpinnings of these differences could pertain to the types of mental representations that are used to describe and understand temporally distant events. North Americans' representations of past and future events could often involve non-complex schemas, though those of East Asians could be more detailed, incorporating contextual factors.

Put differently, East Asians' representations of these events might often be "low-level construals," and North Americans' representations tend to be "high-level construals" (construal level theory; Liberman & Trope, 1998; Trope & Liberman, 2003). High-level construals are "schematic, decontextualized representations that extract the gist from the available information," and low-level construals tend to be "more concrete and include subordinate, contextual and incidental features of events" (Nussbaum, Trope & Liberman, 2003, page 485). Whereas high-level construals are parsimonious, consisting of general, superordinate, and core features of events, low-level construals are richer, more detailed, and less structured.

According to construal level theory, people use abstract, high-level construals to represent distant future events. And, as events become closer in temporal proximity, more concrete, low-level construals are used.* This pattern arises because people have a relative lack of knowledge about distant versus proximal events (Liberman, Trope, & Stephan, 2007). Patterns of inferences and predictions of North Americans, mentioned above, are generally consistent with the predictions of construal level theory: North Americans use high-level construals for representing future situations. But why would East Asians tend to have more low-level construals of future events? Differences across cultures in agency beliefs might provide an explanation.

Agency and abstraction. People who have a general feeling of control and empowerment are more likely to engage in abstract thinking than those who don't have this feeling (Smith & Trope, 2006). Such feelings predispose people to focus on the "big picture" and higher goals and consequently, to take a psychologically distal perspective on a given situation. Increasing one's psychological distance from an event, in turn, increases a person's tendency to form more abstract representations of it (Trope, Liberman, & Wakslak, 2007). Further, greater feelings of independence accompany feelings of control (Overbeck & Park, 2001), fostering a greater sense of self-distinctiveness and exacerbating felt psychological distance from the people and events of interest (Lee & Tiedens, 2001; Stapel & Koomen, 2001).

People who feel in control of their future can rely on simple, schematic representations to construe anticipated events. In their view, they themselves are the primary actor driving the direction

* Overreliance on oversimplified, schematic models of future behavior, which fail to incorporate contextual factors, has been shown to underlie a number of common prediction errors, including individuals' overconfident predictions of others' behaviors (Dunning, Griffin, Milojkovic, & Ross, 1990; Griffin, Dunning, & Ross, 1990; Vallone, Griffin, Lin, & Ross, 1990) and underestimation of task completion times (Buehler, Griffin, & Ross, 1994; Kahneman & Lovallo, 1991; Kahneman & Tversky, 1979).

and outcomes of events in which they will be involved, and additional detail regarding these events is often superfluous. But, those who don't feel that they control their own futures are more likely to require and attend this additional detail. People who don't have strong feelings of control and power are likely to have greater connections to and dependency on others (Emerson, 1962) and to feel the need to accommodate them (Anderson, Keltner, & John, 2003; Keltner, Gruenfeld, & Anderson, 2003). As a consequence, they are less likely to operate at an abstract level, because they find useful and perhaps essential the additional specificity of more concrete, low-level construals of target events. With the need to "fit in" and to adjust to the various unexpected turns that arise as the future unfolds, high-level construals are typically insufficient.

Studies by Smith and Trope (2006) support this view, showing that people who are primed to feel greater control of their lives become more likely to construe problems in abstract, high-level terms—even when these problems are unrelated to the domain in which control has been primed. In one study (study 1), participants were either primed so that they felt a strong or weak sense of control. Those in the high-control condition were asked to write about a particular time or incident in which they had control over someone else, and those in the low-control condition were asked to write about a particular time or incident in which someone had control over them. Participants then completed a categorization task that showed the extent to which they included atypical exemplars (e.g., purse) as members of a given category (e.g., clothing). As expected, participants in the low-versus high-control priming condition showed more low-level, detailed processing by excluding these atypical items more often.

Adding to this evidence, Liu and Aaker's (2007) findings suggest that people who suffer a family death due to cancer—an event which is likely to remind them that control of life's outcomes is elusive—think about the future in a more concrete, detailed way.

Cultural differences in agency beliefs. According to reviews by Dyal (1984) and Weisz, Rothbaum, and Blackburn (1984), East Asians are less likely than Anglo Americans to believe in their own agency. For example, when indicating how much "control you have over the way life turns out," respondents from East Asian countries (China, South Korea, and Japan) reported less feelings of control than those from North America; and among North American respondents, Asian Americans reported less feelings of control than Anglo Americans (Sastry & Ross, 1998). Because East Asians don't always believe that they can act on their environments to achieve their goals and wishes ("primary control"), they often achieve a sense of control by aligning themselves with existing realities to control the psychological impact of events ("secondary control"; Rothbaum, Weisz, & Snyder, 1982; Weisz et al., 1984; for a review, see Morling & Evered, 2006). Thus, one might expect that the secondary control mode requires a greater sensitivity to anticipated events and situations that the future holds.

Morling and her colleagues confirm the use of primary and secondary control modes in studies of North American and Japanese individuals and, consistent with the proposition raised above, suggest that control mode patterns are tied to individuals' cognitions (Morling, 2000; Morling & Evered, 2006; Morling, Kitayama, & Miyamoto, 2002).

The nature of people's socio cultural environment can shape their cognitive representations in important ways (Boroditsky, 2001; Chiu, Leung, & Kwan, 2007; Wang & Ross, 2007). Along these same lines, the differences between East Asians' and North Americans' views of distal events could be related to the ways in which these events are represented in the mind. Because East Asians generally feel less agency than North Americans, relying on secondary control modes, they should be more likely to represent these events using more low-level construals. East Asians see their own actions as fitting within the broader context of others' actions and unexpected events, and their representations should capture this detail so that they can foresee and navigate this complex landscape. North Americans, on the other hand, believe that their own actions have primary importance in determining outcomes in their lives. Consequently, their representations of distal time frames often should consist largely of noncomplex schemas, which discount the influence of outside forces.

Two implications of the propositions laid out in the present section are examined in the sections to follow. In the next section, I examine whether the time zones that people consider when making decisions differ culturally, and whether the pattern is consistent with expected differences in representations of events in these zones. The subsequent section addresses the influence of agency beliefs on people's conceptions of their relationships with time.

BEHAVIORAL DECISIONS

The particular time period of the events on which a person focuses when making decisions can influence the nature of these decisions and, potentially, the outcomes. For example, suppose a person is deciding whether or not to buy an ice-cream cone on a warm day. Events or experiences that are associated with the past, present, or future time frames could be reviewed to inform the decision. If the decision maker is focused primarily on the future, her assessments will be related to understanding the future implications of the immediate action, eating ice cream. The decision maker is likely to consider experiences or events that she anticipates will or could happen at some point in the future, and how her ice-cream decision will or could impact these experiences. The projected experiences that become salient could pertain to her aspirations, and thus could touch on hopes or fears, or could pertain to events that are associated with either concrete or vague plans.

When the "past" time frame is influential, prior situations that are analogous to the one at hand are recalled. Thus, the decision maker might typically bring to mind some of her previous experiences with ice cream. Memories of these experiences, and the related costs and benefits, might be accurate or distorted. And certain affective states that might attend these recollections—e.g., feelings of nostalgia, delight, or contentment—are likely to be influential as well.

Finally, this person might focus on the "present" category when deciding. According to *Zimbardo and Boyd (1999)*, substantially different cognitive processes come into play in this case than when a person focuses on the past or future. In the latter cases, individuals construct a representation of the past or future using various abstract cognitive vehicles (e.g., memories or future expectancies). In contrast, a focus on the present involves a keen sensitivity to the experience that is in the process of unfolding. The target stimuli at hand are likely to draw primary attention, with sensory, biological, and social elements of the (present) environment weighted heavily. The actions and judgments that ensue can often address the pulls one feels at the moment. One might expect that in situations where one considers an ice-cream cone purchase, which is typically an impulse buy, a present orientation might often be involved.

If the representations of temporally distant events differ culturally, as suggested above, then evidence of this difference might appear in the decision-making domain. East Asians (as compared to North Americans) are expected to have more concrete, detailed representations of events and experiences from time frames that are removed from the present. And because these more concrete events should be more salient than less concrete ones (*Baumeister & Vohs, 2003; Fredrick, Loewenstein & O'Donoghue, 2003; Liu & Aaker, 2007*), East Asians should be more likely to draw on the past and future to decide on behaviors.

DATA

Briley and Aaker (2007) examined the time frames that people focus on when deciding whether to buy an ice-cream cone. Participants were asked to indicate the extent to which they focus on the past, present, and future when making this decision. The ice-cream purchase scenario offers a reasonable context because it is an everyday situation that most people have considered, regardless of their cultural background. In addition to looking at the ice-cream purchase scenario, these data explored the influence of time orientation on participants' reported happiness.

Participants were presented with several purchase scenarios, among which was the target ice-cream cone task. They were asked to indicate how much they would expect to draw on events,

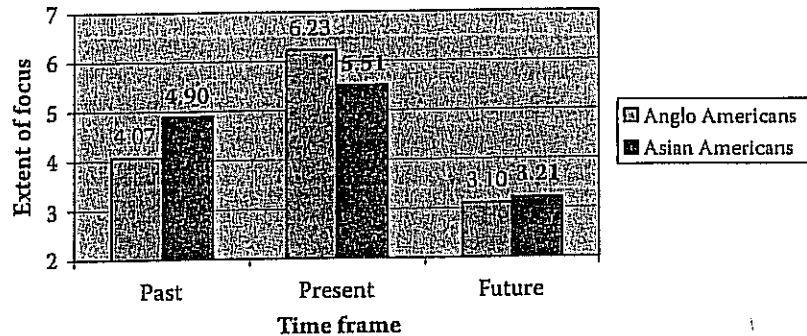


FIGURE 18.1 Reports of the extent to which participants draw on each time zone when making an ice-cream purchase decision.

experiences, and feelings from each time zone (past, present, and future) when making this decision, using a scale from 1 (very little) to 7 (a lot). Also, participants completed a four-item measure of subjective happiness (Lyubomirsky & Lepper, 1999).

Participants' tendencies to focus on the present, past, and future were examined as a function of their ethnic background (Anglo, Asian) using a separate ANOVA for each of the three time frames. These results are summarized in Figure 18.1. Participants focused most on the present ($M = 5.87$), somewhat on the past ($M = 4.47$), and least on the future ($M = 3.16$). However, Anglos reported a significantly stronger focus on the present than did Asians (6.23 versus 5.51, respectively), whereas Asians reported a significantly stronger focus on the past than Anglos (4.90 versus 4.07, respectively). Anglos and Asians drew on the future to a similar extent (3.10 versus 3.21, respectively).

Further analyses were performed to determine whether time orientation leanings contributed to happiness, and whether this contribution depends on one's cultural background. Present-focused individuals reported being happier than those who are not, and this effect was not contingent on participants' cultural background. Similar analyses of the effects of past and future orientation yielded no significant effects at all.

DISCUSSION

Arguments laid out in the previous section suggest that culture can influence the concreteness and, therefore, salience of temporally distant event representations. If this is the case, then culture should influence the time period that people draw upon when making decisions. The results are consistent with this proposition. When deciding whether to buy an ice-cream cone, Anglo Americans indicated that they would draw more on present experiences and feelings than Asian Americans. But, we found the opposite pattern for the contribution of past experiences. Asian Americans were more likely to draw on the past than were Anglo Americans. Note that both Asian Americans and Anglo Americans were more likely to draw on the present than on other time zones, possibly suggesting that both ethnic groups are largely in touch with the present when making this type of everyday decision. But Anglo Americans, unlike Asian Americans, may ground themselves in the present to the exclusion of strong contact with other time zones. We found no evidence of cultural differences in the reliance on expected or anticipated (future) experiences using the ice-cream scenario. However, this could be because anticipations are generally not very relevant for this decision.

It is interesting to note that happiness arises from a strong present orientation, and this was true regardless of culture. Participants' past-orientation and future-orientation scores were not found to influence how happy they are. A focus on the present might be an important stepping stone to well-being.

It should be noted that an ice-cream purchase decision might typically draw less attention and thoughtful processing than other, more important decisions that people make. More serious decision situations are likely to involve more in-depth deliberations and, in some cases, to become emotionally charged. These differences in processing could change the pattern of results observed here.

Cultural differences in people's beliefs about agency might also help to shape their conceptions of a person's relationship with time: Do people actively manage time, defer to its influence, or both?

ACTIVE AND PASSIVE RELATIONSHIPS WITH TIME: INSIGHTS FROM PROVERB ENDORSEMENTS

Proverbs store and transmit accepted wisdom developed over history, offering advice and recommended courses of action. Because proverbs typically address important dilemmas life brings, they often raise topics and themes of considerable interest. Therefore, examining people's reactions to the ideas communicated in proverbs can offer ripe ground for bringing to light differences across socio cultural groups (Briley, Morris, & Simonson, 2000; Briley & Wyer, 2002; Weber, Hsee, & Sokolowska, 1998). To this end, Briley and Aaker (2007) examined the reactions of Asian Americans and Anglo Americans to two time-related proverbs, "Time is money" and "Time heals all wounds." These two proverbs are of interest because they suggest different views of how people and time interact.

The adage "Time is money," coined by Benjamin Franklin (1748/1961) and deemed a "metaphor we live by" (Lakoff & Johnson, 1980), has a natural appeal for many. This is perhaps because time is arguably the most valuable resource we have (Perlow, 1997). Not surprisingly, economists often take this perspective ("Time Is Money, Professor Proves," 2002). But in addition, studies confirm that in everyday situations people often think about their time in terms of its cash value (Evans, Kunda & Barley, 2004; Kaveny, 2001; Perlow, 1997), and that those who do so give high priority to work and low priority to leisure activities and helping others (DeVoe and Pfeffer, 2007a, 2007b). Therefore, people who have a "time is money" perspective pursue active management of their time and emphasize material rather than social or other emotion-oriented pursuits.

The proverb "Time heals all wounds" expresses the common belief that as time passes, the impact and damage of problems from the past subside. A bad experience, such as a poor performance on a college exam, is more painful and prominent a week after it happens than a year afterward. The idea that time can heal ills that have befallen us is linked to a broader conviction that the passing of time tends to bring balance and equilibrium. Time, according to this way of thinking, has an important role in determining which experiences we attend, how much they affect us, and, ultimately, how we sometimes feel. This view acknowledges that the individual does not have total and complete control.

Though these two proverbs offer guidance that is not necessarily contradictory, they emphasize different views of how time and the individual interact. People who are guided strongly by the "time is money" ideal are likely to be predisposed to actively embrace action, particularly those who yield measurable material gains. Those who subscribe to "time heals all wounds" recognize that the power of the individual sometimes subordinates to that of time. "Time is money" emphasizes active, hands-on management of one's time, whereas "time heals all wounds" emphasizes a less control-oriented relationship. Given that North Americans tend to believe that they have substantial control over their environments, as discussed above, they might embrace the principles offered by "time is money" more than those of "time heals all wounds," though East Asians may have the opposite pattern.

Relative endorsements of "Time is money" and "Time heals all wounds." Seeking insights regarding beliefs about time, Briley and Aaker (2007) collected data by asking Asian American and Anglo American individuals to indicate the extent to which they endorse the ideas expressed in the proverbs "Time is money" and "Time heals all wounds." Participants read several common idioms, among which were our two targets. Each idiom appeared with a brief explanation. For each of these

expressions, they completed measures of their familiarity with and endorsement of each phrase. To measure their familiarity with the phrases, they were asked how familiar they are with each and how often they had heard it growing up ($\alpha = .68$). As a measure of endorsement of each proverb, participants indicated how much they agree with the idea expressed, rely on this idea for living life and making decisions, and draw on it as a source for giving advice ($\alpha = .83$).

Participants also gave self-reports of their time orientation. They reported the extent to which they would describe themselves as a person who is past-oriented, present-oriented, and future-oriented. They then responded to two items which asked whether they felt that they could be present-oriented and future-oriented at the same time, and whether they felt that they were not able to be both at the same time. These two items were averaged after reverse-scoring the latter item to form a "present and future focus" measure ($\alpha = .83$).

Responses to all items were reported along a scale from 1 (not at all) to 7 (very much). Some of these measures used a single item, which has been shown to predict as well as multiple item measures (Bergkvist & Rossiter, 2007; Rossiter, 2002).

As expected, Asian Americans and Anglo Americans were equally familiar with the target proverbs. And although they did not differ in their endorsements of non-target items, their responses to target items differed significantly.

The relative endorsements of the two target proverbs were examined using a repeated measure MANOVA, with proverb type (active, non-active view) as the within-subject variable and participants' ethnic backgrounds (Anglo, Asian) as a between-subject predictor. To control for participants' experience with the proverbs, their reported familiarity with the target proverbs and their age were included as control variables. As expected, a significant interaction of proverb type and participants' cultural background emerged. Anglo Americans endorsed "Time is money" ($M = 4.52$) significantly more than "Time heals all wounds" ($M = 4.24$), and Asian Americans had the opposite pattern ($M = 4.78$ and $M = 5.30$ for "Time is money" and "Time heals all wounds," respectively). Cell means are in Figure 18.2.

ADDITIONAL ANALYSES

The counsel offered by "Time heals all wounds" compels one to be forward-looking, extrapolating a current situation to a future period. This advice encourages people to connect the future to the present and to appreciate the inevitability of change. To understand whether certain time orientations help to advance these beliefs and whether cultures differ regarding this influence, it is of interest to look at how endorsements of this proverb correlate with people's time orientations.

First, participants' endorsements of this proverb were examined as a function of their beliefs that they are able to focus on both the present and future at once. In an Ordinary Least Squares (OLS)

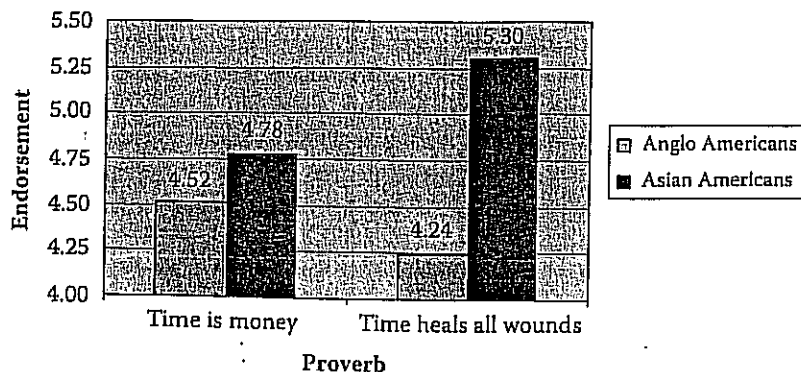


FIGURE 18.2 Endorsement of proverbs by ethnic group.

regression, endorsements of the proverb were predicted using ethnicity (Asian, Anglo), the "present and future focus" variable, and the interaction of these two. Consistent with other findings showing that East Asians are more adept at making connections between present events and other time frames, these data showed that Asian Americans endorsed "Time heals all wounds" more strongly than Anglo Americans. In addition, participants were generally more likely to endorse the proverb if they strongly believed that they could focus on both the present and future at the same time than if they did not.

Second, an analysis examined whether participants' endorsements of "Time heals all wounds" correlated either positively or negatively with their focus on the present. In an OLS regression, proverb endorsements were predicted with the present orientation variable, participants' ethnic group (Anglo, Asian), and the interaction of these two variables. Consistent with the previous analysis, Asian Americans were found to give stronger endorsements of the proverb than Anglo Americans. Interestingly, this effect is qualified by participants' present-orientation levels. For Asian Americans, participant proverb endorsements and focus on the present were nonsignificantly positively correlated. However, a significant negative correlation between these two variables emerged for Anglo Americans.

Similar analyses that examined the effects of participants' focus on the past and future on their endorsements of "Time heals all wounds" yielded the expected main effect of ethnicity but no interactions.

DISCUSSION

As a preliminary vehicle for uncovering cultural differences and similarities in people's views of time, Briley and Aaker (2007) examined endorsements of two popular proverbs. Some interesting insights emerged from this analysis. First, the relative endorsements of the idioms for Anglo Americans and Asian Americans were consistent with what might be expected based on cultural beliefs regarding agency and control. Anglo Americans lean toward active, assertive control of time, whereas Asian Americans are more likely to accept that they are not always in control. Interestingly, the two cultural groups reported similar endorsements of "Time is money" (diff = .26), though they differed significantly in their endorsements of "Time heals all wounds" (diff = 1.06). Thus, people of different cultures might be similar regarding their belief that time management is important but might differ with respect to their feelings that control is sometimes elusive.

Second, respondents' endorsements of "Time heals all wounds" were correlated positively with their tendencies to believe that they could be both present-oriented and future-oriented at the same time, and this was true regardless of culture. This pattern helps to confirm that both Asians and Anglos who are guided by the principles communicated by this proverb are more apt to make connections across time zones than those who are not.

And finally, participants' "present orientation" scores influenced their endorsements of "Time heals all wounds" differently, depending on their cultural background. Among Asian Americans, these endorsements had a nonsignificant positive correlation with present-orientation levels; but among Anglo Americans, this correlation was negative. Although these results are tentative, they could indicate that Anglos find a present orientation to be inconsistent with a forward-looking stance, whereas Asians might be comfortable holding these two potentially contradictory views (see Peng & Nisbett, 1999, 2000).

CONCLUSIONS

The present chapter explores people's time orientations from a cultural perspective, focusing on understanding the similarities and differences between East Asians and North Americans. When trying to understand ambiguous events or make decisions, North Americans have a tendency to be focused on the present. But East Asians, while grounded in the present as well, have a stronger tendency to reach to the past and future. East Asians, as compared to North Americans, are more likely to appreciate the causal chains connecting current situations to related past and future events

(Morris & Peng, 1994; Maddux & Yuki, 2001), to see the complex, uncontrollable nature of the future (Briley & Aaker, 2007; Ji et al., 2001), and to rely on their relevant past experiences when making decisions (Briley & Aaker, 2007).

These patterns could all be connected to differences across cultures in agency beliefs and consequent cognitive representations of past and future events. North Americans believe that the individual is the primary force determining outcomes, and their causal models center around the individual's intentions and actions. East Asians, who don't hold this belief, have causal models that center around the situations and events that impinge on the individual. North Americans' more simple mental models fit with their beliefs that they control their own destiny, and East Asians more complex models fit with their need to adjust to situations and events that they encounter. This pattern could have implications for the relative salience of temporally distant versus present experiences and feelings and, therefore, for their propensity to consider one or the other type of experience when developing judgments or deciding on actions. In particular, East Asians may be more likely to draw on time zones removed from the present—and to consider remembered (past) or anticipated (future) experiences—because, relative to North Americans, these representations are more vivid and salient.

Some other explanatory frameworks should be considered as well. For example, Hofstede's (2001) "long-term orientation" dimension could be useful for understanding the findings presented herein. This dimension, which captures aspects of Chinese cultural traditions conveyed in the teachings of Confucius, is associated with thrift and perseverance. Individuals who have a strong long-term orientation exhibit frugality and avoid impulse purchases (Bearden, Money, & Nevins, 2006).

Future research is needed to further develop this rather complex research area. A problem in probing this domain is that it is difficult to know with confidence which time zone a person is focusing on when they draw an inference or decide on a course of action. To illustrate, suppose that a person who is deciding whether or not to buy an ice-cream cone thinks about his favorite flavor, rocky road, and these positive thoughts compel him to get the cone. Thoughts about rocky road could pertain to a previous occasion on which this person ate this flavor (past), the delicious taste and creamy texture he can experience now (present), or the good reflections he anticipates having about this warm, leisurely afternoon eating rocky road (future). Indeed, knowledge from some combination of these time zones is likely to surface during the decision process.

In this regard, the intertemporal choice research paradigm (see Loewenstein, Read, & Baumeister, 2003) could offer a rich domain for cultural exploration. With this approach, preference for immediate utility (present focus) versus delayed utility (future focus) can be readily observed. A robust finding in the intertemporal choice literature is that people have a strong tendency to pursue immediate rather than delayed utility. But, this pattern could reflect the largely North American participant pool used for most of these studies. North Americans might discount future utility because relevant anticipations and future experiences are discounted or overlooked. This discounting could result because the representations of this future-oriented knowledge are vague and not particularly salient. Less discounting might occur for East Asians if their representations of the future are more vivid and better attended. Research that clarifies these issues would have implications for a wide range of judgments and decisions, including those related to consumption, spending, and conservation.

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