# SOCIO-CULTURAL CONSTRUCTION OF THE SELF: EFFECTS OF VOLUNTARY SETTLEMENT, PUBLIC SELF-PRESENTATION, AND CULTURAL NORMS FOR PUBLIC BEHAVIOR

by

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#### **ABSTRACT**

This dissertation includes three manuscripts that explore the effects of sociohistorical as well as socio-cultural factors on shaping the self. In particular, this dissertation concerns (a) how culturally normative expectations toward independence or interdependence of the self are formed; (b) how those normative expectations are personally endorsed and internalized; and (c) how cultural norms shape individuals' attitudes and guide their behavior. Chapter 2 explores the effects of the economically motivated voluntary settlement in the US on advancing independent mentalities. The effects were expected to be more pronounced in domains directly associated with survival in and adaptation to ecologically harsh and socio-culturally primitive frontier conditions. In a tri-cultural comparison involving the US, Germany, and Japan, it was found, as expected, that Americans were higher than Germans in motivational and normative independence but not in epistemic independence. Chapter 3 explores the role of public self-presentation in the internalization of culturally normative expectations toward independence or interdependence of the self. It was expected that people would align their self-view to the normative self-view in their cultural context, more so in public than in private settings. Consistent with this expectation, Americans were more likely in public than in private to describe themselves by reference to inner attributes and assess themselves to be independent, thereby endorsing to a greater degree the culturally normative view of the self as an independent and bounded entity. By contrast, Japanese

were more likely in public than in private to describe themselves by reference to social roles and status and assess themselves to be interdependent, thereby endorsing to a greater degree the culturally normative view of the self as an interdependent and relational entity. The implications of repeated public self-presentation for internalization were discussed. Chapter 4 explores the role of culturally varying norms in shaping attitudes and guiding behavior. Whereas public consistency is highly valued in North American cultural contexts, public flexibility is highly valued in East Asian cultural contexts. Accordingly, it was hypothesized that individuals with North American cultural backgrounds would form a more potent attitude and be more likely to show behavior consistent with that attitude in public rather than in private settings. By contrast, individuals with East Asian cultural backgrounds would form a less potent attitude and thus leave room for flexibly adjusting their behavior to situations, while in public rather than in private settings. The results from Chapter 4 give partial support for the hypothesis.

#### **CHAPTER 1**

#### INTRODUCTION

For the last two decades, cultural psychological research has been unearthing interesting and important differences in various aspects of the self. Much attention has been given to comparing people with different cultural backgrounds in respect to selfconcepts and self-related motivations. As a result, there is mounting evidence demonstrating how widely and profoundly cultures affect the way people construe themselves. The general theoretical framework of this research is that there are two distinct views of the self that typically characterize North Americans and East Asians. In North American cultural contexts, a view of the self as independent has been elaborated. The self is seen as defined primarily by one's internal attributes such as personality traits, preferences, and desires. By contrast, in East Asian cultural contexts, a view of the self as interdependent has been elaborated. The self is seen as more expansive and primarily defined by one's interpersonal relationships and social roles, even though inner attributes are still acknowledged. Previous cross-cultural examinations of spontaneous selfdescription nicely support these notions (Bond & Cheung, 1983; Cousins, 1989; Kanagawa, Cross, & Markus, 2001; Rhee, Uleman, Lee, & Roman, 1995). When given a chance to describe who they are, Westerners typically refer to abstract inner characteristics that are true of themselves regardless of time and situations. By contrast,

East Asians typically refer to relational aspects of the self; even when they mention their personal characteristics, they tend to focus on how those characteristics come out differently depending on the immediate situation.

The two views of the self do not limit themselves to describing what people across cultures are like. More importantly, they provide general socio-cultural normative expectations about how to be a good person. As such, they exert profound influences on various aspects of psychological processes of people engaging in different cultures. It is typically assumed that 1) these views of self are developed and elaborated as a function of a variety of socio-historical and ecological factors; 2) these views of self are internalized through socialization and eventually personally endorsed to varying extents; and 3) as a consequence, they have various psychological effects. In my dissertation I make unique contributions to each of these three points.

Chapter 2 focuses on the origin of the American emphasis on independence. In particular, it examines the effect of a socio-cultural factor on shaping personal as well as normative expectations toward independence. Drawing on Kitayama, Ishii, Imada, Takemura, and Ramaswamy (2006), I propose that economically motivated voluntary settlements in frontier regions foster independent mentalities. An important implication of this notion is that despite their common cultural heritage that acknowledges the independence of the self, Americans, compared to Western Europeans, are likely to show a stronger orientation toward independence especially in psychological features closely associated with survival in and adaptation to ecologically and socio-culturally harsh environments. In order to test this empirically, a distinction has been made between different components of independence, namely, motivational independence (personal

rather than communal goal orientation), normative independence (societal reward contingency sanctioning independence), and epistemic independence (dispositional bias in social judgment). A group of Americans were compared with a group of Western Europeans as well as a group of East Asians. It was expected that Americans and West Europeans would be higher than East Asians in all the three facets of independence. Of greater relevance to the present investigation, it was hypothesized that Americans would be especially higher than West Europeans in motivational independence and normative independence.

As has been extensively documented, cultures vary with regard to the normative self-view that they sanction (Kitayama, Duffy, & Uchida, 2007; Markus & Kitayama, 1991; Triandis, 1995). Not only does culture describe what its members are like, but it also carries normative expectations that most members are motivated to uphold. North American cultural contexts reward and reinforce the view of the self as independent while East Asian cultural contexts reward and reinforce the view of the self as interdependent. Yet, it is unclear how those culturally normative views of the self are internalized and incorporated into one's self-concepts so that individuals with different cultural backgrounds endorse the independence or the interdependence of the self to a varying degree. Chapter 3 focuses on mechanisms underlying the internalization of culturally normative self-views and proposes public self-presentation as one such mechanism. It was hypothesized that in public rather than in private settings, people are more likely to describe and assess themselves in accordance with the normative self-view of their cultural context. It was, thus, expected that Americans would be more likely in public than in private to describe themselves by reference to inner attributes and assess

themselves to be independent. On the contrary, Japanese would be more likely in public than in private to describe themselves by reference to social roles and status and assess themselves to be interdependent.

Not only do cultures vary with regard to the normative view of the self, but they also vary in respect to the norm for public manifestation of the private self. In North American cultural contexts, internal consistency of the self across time and situations is highly valued. By contrast, in East Asian cultural contexts, flexibility and appropriate modification of the self depending on the immediate situation is highly valued. Given that most people are motivated to align themselves to cultural norms, it is likely that North Americans are motivated to show attitude-consistent behavior, especially if they have formed the attitude in public as opposed to private settings. On the contrary, East Asians are likely to show such attitude-behavior consistency to a lesser degree and thus leave room for flexibly adjusting their behavior to the situation, especially if they have formed the attitude in public rather than in private. Chapter 4 focuses on the effect of the culture-specific norm regarding public behavior on the potency of the attitude formed either in public or in private. It examines whether the American norm for consistency and the East Asian norm for flexibility differentially influence on how strong the attitude will be.

Throughout the history of social psychology, it has been acknowledged that the self is inherently social as well as cultural (Baumeister, 2005; Cooley, 1902; Mead, 1934; Kitayama, Duffy, & Uchida, 2007). The present dissertation builds on this idea and delineates (a) how socio-historical factors influence the degree to which the independence or interdependence of the self is endorsed at the individual as well as the group level (Chapter 2); (b) how culturally normative self-views are internalized and

personally endorsed (Chapter 3); and (c) how attitudes are shaped by cultural norms (Chapter 4). The investigations shed light on the socio-culturally constructed self.

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#### **CHAPTER 2**

# WHAT MAKES AMERICANS UNIQUE? TESTING IMPLICATIONS OF THE VOLUNTARY SETTLEMENT HYPOTHESIS

Chapter 2 focuses on the origin of the American emphasis on independence. While historically derived from and substantially grounded in West European cultures, US culture is expected to be more extreme in their focus on independence. Indeed, the notion that Americans, as compared with Western Europeans, should be more independently oriented is not new, even though this assumption had never been discussed and empirically tested in the field of cultural psychology until very recently. More than a century ago, Frederick Jackson Turner (1893) put forth the frontier thesis in the context of discussing American uniqueness. In the center of the notion lies the idea that the development of the American frontier helped shape the character of the American people, in particular, their strong pursuit of independence. Economically motivated voluntary settlements in the new continent and subsequent westbound movements through the nineteenth century exposed the earliest and every successive generation of Americans to challenging ecological and socio-cultural environments. Encountering new environments that were vastly different from what they had known, Americans discarded European characteristics that were no longer useful, such as established aristocracies and intrusive governments. Instead, they developed their own ways of life that enabled them to best

achieve personal goals including, among others, survival in harsh environments. Without a doubt, the voluntary settlement in the new continent and the subsequent adaptation over the years had psychological consequences.

The voluntary settlement hypothesis was empirically tested only recently by Kitayama and colleagues in the context of comparing mainland Japanese to residents in Japan's northern frontier region called Hokkaido (Kitayama, Ishii, Imada, Takemura, & Ramaswamy, 2006). In testing the hypothesis, Kitayama et al. (2006) have suggested that voluntary settlements involve three distinct psychological processes, namely, selfselection for settlement, reinforcement of independence during settlement, and institutionalization of tacit beliefs and practices of independence, which, in turn, might sustain a higher level of independence in frontier regions. First, only those people who feel personally inspired to take challenges and seek wealth and freedom may choose to launch a journey to frontier regions (self-selection). Second, because frontier regions are often ecologically harsh and primitive in social institutions and infrastructures, sheer survival becomes an issue. Moreover, given a great deal of social mobility, there may be minimal communal constraints on people's behaviors. As a consequence, personal initiatives and pursuit of personal goals are likely to be not only tolerated, but also highly encouraged (reinforcement of independence). Finally, once people who pursue personal goals gather to form a community, the corresponding ethos may develop over time in the community (institutionalization). Then, the resulting social system is likely to strongly foster the corresponding motivational orientation toward independence.

On the basis of the voluntary settlement hypothesis, one might expect that the settlement history would have increased the level of independence. Furthermore, the

hypothesis also implies that settlement effects should be more pronounced in domains of independence that are closely associated with survival in and adaptation to harsh and primitive frontier environments. In what follows, I present three overlapping, yet theoretically distinct domains of independence vis-à-vis interdependence and describe which domains might see greater settlement effects.

Three Domains of Independence: Motivational, Normative, and Epistemic

Motivational independence and interdependence. Motivational independence (vis-à-vis interdependence) refers to the extent to which an individual is strongly motivated to pursue either independent or interdependent goals. Independent goals include influencing and persuading others, pursuing personal achievement, and seeking financial independence. By contrast, interdependent goals include adjusting and fitting in with others, pursuing social harmony, and seeking emotional and social interdependence.

Previous research on motivation suggests that in order for any given goal to regulate and control behavior, it should be available, accessible, and applicable (Higgins & Sorrentino, 1990; Gollwitzer & Bargh, 1996; Kuhl & Beckman, 1985). Furthermore, if the goal is to be pursued with intrinsic interest, pleasure, and a sense of satisfaction, it must be self-endorsed (Ryan & Deci, 2000). It is proposed here that each of the foregoing conditions is influenced and constrained by culture.

First, culture influences the availability of goals. Although both independent and interdependent goals may be available in all cultural contexts, the relative availability of the two types of goals varies across cultures to a substantial degree. Practices and public meanings of independent cultural contexts offer a greater number and variety of independent goals compared to interdependent ones; conversely, the practices and

meanings of interdependent cultural contexts offer a greater number and variety of interdependent goals than independent ones (Kitayama & Park, in press).

Second, culture influences the accessibility of the goals. The diverse sets of goals that are available in a cultural context are continuously primed and activated in everyday life as those goals are deeply embedded in the practices and public meanings of the culture. Independent goals are made more accessible in independent cultural contexts, whereas interdependent goals are made more accessible in interdependent cultural contexts (Oyserman & Lee, 2007).

Third, culture influences the applicability of the goals. Practices and public meanings in a given culture provide a wide array of interpretive frameworks that relate mundane behaviors to certain goals. In different cultural contexts, an identical behavior not only could take on very different meanings but also could serve in pursuing very different goals. For instance, "making money" could be a means for achieving an independent goal if it is pursued to achieve financial independence. However, it could be a means for an interdependent goal if it is pursued to return a debt to one's parents, thereby to fulfill filial piety.

Finally, individuals are expected to align their self-view to the salient view of the self in their cultural context. We may expect that people in independent cultural contexts would generally self-endorse independent goals more often than interdependent goals. By contrast, those in interdependent cultural contexts are expected to self-endorse interdependent goals more than independent goals.

Kitayama, Mesquita and Karasawa (2006) have suggested that motivational propensities toward independence and interdependence can be assessed by testing when

each individual is most likely to experience happiness and well-being. If one's overarching goal is independence, happiness and well-being should be especially enhanced when some form of independence is achieved. On the contrary, if one's overarching goal is interdependence, happiness and well-being should be especially enhanced when some form of interdependence is achieved. In line with this reasoning, Kitayama et al. (2006) have found that Americans are more likely than Japanese to report happiness when they experience positive emotions associated with personal achievement and accomplishment (e.g., pride and feelings of superiority). By contrast, Japanese are more likely than Americans to report happiness when they experience positive emotions associated with harmonious social relations (e.g., friendly feelings and feelings of closeness to others).

Normative independence and interdependence. Culture prescribes a socially desirable view of the self and attendant attitudes and behaviors (Markus & Kitayama, 1991). The cultural view of the self as independent or interdependent defines actions and predispositions that are normatively sanctioned and reinforced and those that are not, thereby setting out reward contingencies of the given cultural context. The societal reward contingencies are likely to determine each individual's long-term adjustment and well-being as a function of the person's orientation toward independence or interdependence. This means that we can assess the societal reward contingency in a cultural context by examining, at the cultural group level, which type of individuals (oriented toward independence vs. interdependence) are happier than those with the other type. If in a certain culture, people that are strongly oriented toward independence achieve greater happiness and well-being than those oriented toward interdependence, we

would say that the culture rewards the successful pursuit of independence. Conversely, if people that are strongly oriented toward interdependence achieve greater happiness and well-being than those oriented toward independence, we would say that the culture rewards the successful pursuit of interdependence.

A case in point is found in Kitayama, Markus and Kurokawa (2000). While Americans who are predisposed to independence (with a frequent experience of socially disengaging positive emotions) were happier than those who were not, Japanese who are predisposed toward interdependence (with a frequent experience of socially engaging positive emotions) were happier than those who were not. The findings suggest that the American culture normatively sanctions independence while the Japanese culture normatively sanctions interdependence.

Epistemic independence and interdependence. Culture also describes socially shared folk theories about the nature of the self and its relation to society (Chiu & Hong, 2006). As such, these theories provide a general cognitive schema by which we interpret and understand the social world. This represents an epistemic aspect of independence and interdependence. Independent folk theories regard the self as autonomous, separate, and disengaged from others, whereas interdependent folk theories regard the self as relational and embedded.

There is rich evidence showing that the contrasting epistemic views of the self have profound influences on social perception: those with the independent view of the self are more likely than those with the interdependent view of the self to focus on dispositional factors in accounting for a person's behavior. For example, Miller (1984) has shown that the fundamental attribution error, that is, the tendency to overestimate the

importance of internal factors while underestimating the importance of situational factors, is almost absent among Indians in India. This initial finding has been replicated and expanded in a number of studies with samples of varied cultural backgrounds (e.g., Choi & Nisbett, 1998; Kitayama, Ishii et al., 2006; Morris & Peng, 1994).

Voluntary Settlement and the Three Domains of Independence and Interdependence

As discussed earlier, the effects of voluntary settlements are expected to be more pronounced in domains of independence that are closely associated with survival in and adaptation to harsh and primitive frontier environments. In that vein, I propose that greater settlement effects should be expected in the motivational and normative domains of independence. First of all, voluntary settlers are likely to have a greater motivational propensity toward personal goal pursuit and self-promotion in the first place. Moreover, the motivational characteristic is likely to be enhanced while striving for survival in and adaptation to the harsh conditions of frontiers. Thus, it seems plausible that over time the corresponding norm which promotes independent behavioral propensities is likely to be established. While both motivational and normative independence would strongly encourage behaviors that are adaptive in the ecological and social conditions of frontier regions, epistemic independence would do so to a much lesser degree. The mere fact that one endorses a folk theory of the self as independent does not necessarily mean that the person acts on the theory. The folk theory must first be translated into corresponding motivational proclivities or norms in order for it to have any impacts on behavior. Moreover, when Western Europeans are compared with Americans, it should be noted that the former strongly endorse a lay theory of independence of the self. Therefore, we may assume that this existent folk theory may suffice to understand increasingly

independent behaviors that emerge in frontier regions. Accordingly, it was expected that the differences, if any, between European Americans and Western Europeans with regard to epistemic independence should be fewer than differences between the two groups in motivational and normative independence.

## Present Study

The present study was designed to test the predicted differences or absence thereof between European Americans and Western Europeans with regard to the three domains of independence. The main focus was on comparing matched samples of European American college students and German college students. In general, it was expected that Americans would be more independent or less interdependent compared with Germans. Of greater relevance to the present investigation, it was expected that the difference between European Americans and Germans would be more pronounced in the motivational and normative domains than in the epistemic domain. In addition, a matched sample of college students from mainland Japan was included in the study, which made it possible to test whether the two Western groups would be more similar to one another when pitted against their Asian counterparts.

The second goal of the study was to gauge the relative validity of implicit and explicit measures of self-orientation. In assessing self-orientation, it is possible to use an explicit, attitudinal measure. That is, one could directly ask people to indicate to what degree they agree or disagree with statements that represent orientations toward either independence or interdependence. However, the validity of those explicit, attitudinal measures has been recently challenged for a variety of reasons including the acquiescence bias (Schimmack, Oishi, & Diener, 2005), the extremity or moderacy bias, and the

reference group artifact (Heine, Lehman, Peng, & Greenholtz, 2002; Peng, Nisbett, & Wong, 1997). There are also theoretical considerations against the use of explicit, attitudinal measures of self-orientation. First, culture is more often than not tacit and subtle as it is embedded in everyday social practices and public meanings, and thus only very limited conscious access is possible (Oyserman, Coon, & Kemmelmeier, 2002). In addition, cultural learning begins very early on, far before children develop any explicit beliefs about themselves (Keller, 2007). Together with the aforementioned empirical findings, these theoretical considerations suggest that there is no reason to expect high correspondence between explicit attitudes about one's self-orientation and implicit behavioral tendencies pertaining to self-orientation. Given the foregoing consideration, it is important to use implicit measures in assessing highly internalized and automatized tendencies toward independence and interdependence. Additionally, it is important to examine to what degree implicit and explicit measures converge or diverge. To address this issue, the present study utilized multiple implicit measures of self-orientation as well as one commonly used explicit attitudinal measure.

#### **METHOD**

### **Participants**

One hundred thirteen undergraduate students from the University of Michigan (M age = 18.70) and 166 undergraduate students from the University of Hamburg, Germany (M age = 26.96) participated in the study for partial fulfillment of a course requirement. The American sample included 19 ethnic minorities. The German sample included 39 participants of Russian, Turkish, or Asian origin. These cultures are considered relatively less independent or more interdependent. In order to preclude the

possibility that any differences to be observed between Americans and Germans might be due to these participants, we conservatively excluded them from the following analyses. The final American and German samples consisted of 94 and 125 participants, respectively. In addition, a total of 122 Japanese undergraduate students (M age = 20.96) were included. Among them, 90 were from Kyoto University and the remaining 32 were from Tokyo Woman's Christian University. Because of time constraints, Japanese participants completed only a subset of the tasks administered to both American and German participants. The German participants were relatively older than the American and Japanese participants, t (386) = 14.25, p < .001. Indeed, 24.7% of the German sample was of the age of 30 or higher. However, a preliminary analysis revealed no age effects in any of the experimental tasks. Thus, the data from the older German participants were included in the analyses below.

## Experimental Tasks

A total of eight theoretically derived measures were used. First, motivational independence/interdependence was assessed with the following measures: (a) within-subject predictor of happiness and (b) relative salience of socially disengaging vs. engaging emotions. Second, normative independence/interdependence was assessed with (c) a measure of between-subject predictor of happiness. Third, epistemic independence/interdependence was assessed with measures of (d) causal attribution judgment of another person's action and (e) counterfactual judgment of another person's behavior. In addition, two implicit measures that are likely to tap into motivational and epistemic aspects of independence/interdependence were included. One was (f) a measure of attention focus and the other was (g) a measure of symbolic self size. Finally,

(h) an explicit, attitudinal measure of self-orientation was included in the study.

Motivational independence/interdependence. As measures of motivational independence, two indices developed by Kitayama et al. (2006) were used. The first index (the when-do-I-feel-happy index) assesses the extent to which happiness is associated with successfully achieving independence (vis-à-vis interdependence) in multiple situations for each person. An individual is said to be motivationally oriented toward independence (or interdependence) is his or her happiness is closely associated with successfully achieving independence (or interdependence) in different mundane social situations. The second index (the relative salience of disengaging over engaging emotions index) assesses the extent to which socially disengaging emotions, such as pride and anger (which are contingent on achieving independent, personal goals and failing to achieve them, respectively) are experienced, relative to socially engaging emotions such as friendly feelings and guilt (which are contingent on achieving interdependent, communal goals and failing to achieve them, respectively). If an individual is motivated toward personal goals and pursues them, the individual is likely to experience disengaging emotions more than engaging emotions. The reverse should be the case for an individual motivated toward communal goals. Thus, an individual is said to be more independently oriented (or interdependently oriented) if he or she experiences disengaging (or engaging) emotions more intensely.

These two facets of motivational independence were measured with an Implicit Self-Orientation Questionnaire (ISOQ). In the questionnaire 10 types of everyday life situations were presented. Some of these involved social relations (e.g., "having a positive interaction with friends"), some were related to study and work (e.g., "being

overloaded with work"), and others concerned daily hassles and bodily conditions of the self (e.g., "being caught in a traffic jam"). Participants were asked to remember the latest event pertaining to each of the 10 situations. Then they were asked to report the extent to which they have experienced a series of emotions in each of the situations. The list of emotions contained four theoretically derived types of emotion terms, which were defined by the social orientation dimension (socially disengaging vs. socially engaging) and its valence (positive vs. negative). In sum, there were four emotion types as follows: socially disengaging positive emotions (feeling superiority and pride), socially disengaging negative emotions (frustration and anger), socially engaging positive emotions (feelings of closeness to others and friendly feelings), and socially engaging negative emotions (shame and guilt). In addition, several emotion terms were included to measure well-being or general positive emotions (elated, happy, and calm) and negative well-being or general negative emotions (unhappy). 6-point scales that ranged from 1 (not at all) to 6 (very strongly) were used in rating emotional experience.

As described above, the *when-do-I-feel-happy* index and the *relative intensity of disengaging over engaging emotions* index were drawn from the ISOQ. First, to obtain the *when-do-I-feel-happy* index, both the reported intensity of experiencing disengaging positive emotions and the reported intensity of experiencing engaging positive emotions were used to predict the reported intensity of general positive emotions across all of the 10 situations for each participant (Kitayama et al., 2006). The size of the resulting beta for disengaging emotions (or engaging emotions) is a measure of motivational orientation toward independence (or interdependence).

Second, to obtain the relative salience of disengaging over engaging emotions

index, the extent to which disengaging (vis-à-vis engaging) emotions were experienced in situations that were matched in valence to the emotions was calculated (Kitayama et al., 2006). First, for each situation for each participant, the perceived valence of the situation was obtained by subtracting the average general negative emotion from the average general positive emotion. If the difference was positive, indicating that the perceived valence of the situation was positive, then the average rating of positive emotions that were either disengaging or engaging was used. On the other hand, if the valence of the situation was negative, the average rating of negative emotions was used. Then, the intensities for positive situations and negative situations were averaged to form a single index of relative intensity of experiencing disengaging over engaging emotions. Thus, a positive value on this measure represents a greater orientation toward independence while a negative value represents a greater orientation toward interdependence.

Normative independence/interdependence. A third index (the who-are-happier-in-this-society index) was derived from the ISOQ in order to assess the degree to which independence (vis-à-vis interdependence) is rewarded in a given society. The index involves, at the society level, associations between general positive emotions and positive emotions that are either disengaging or engaging. For each participant, across all the situations, the average intensity was computed for general positive emotions, disengaging positive emotions, and engaging positive emotions. For each society, the average intensity for general positive emotions was then regressed on the average intensity for disengaging positive emotions and that for engaging positive emotions. The size of the regression coefficient for disengagement (or engagement) is the crucial factor in measuring normative demands of a society. A society is said to be normatively

independent if the regression coefficient for disengagement is relatively greater than that for engagement. By contrast, a society is said to be normatively interdependent if the regression coefficient for engagement is relatively greater than that for disengagement.

Epistemic independence/interdependence. Measures of dispositional bias in social judgment (Kitayama, Ishii et al., 2006) were used in assessing epistemic independence/interdependence. An individual is said to be more independent (or less interdependent) if he or she puts a greater emphasis on dispositional (vis-à-vis situational) factors in accounting for another person's behavior. Dispositional bias was assessed in terms of both attribution judgment and counterfactual judgment.

Participants were presented with four vignettes; in half of the vignettes the protagonist enacted a socially desirable behavior (e.g., a baseball player holding free baseball camps during his vacation) and in the other half the protagonist enacted a socially undesirable behavior (e.g., a surgeon covering up a major medical mistake). After reading each vignette, participants were asked to indicate, on 7-point scales (1: strongly disagree, 7: strongly agree), to what extent they agreed or disagreed with each of the following statements:

- 1. Dispositional attribution judgment: "Features of the protagonist (such as his/her character, attitude, or temperament) influenced his/her behavior."
- 2. Situational attribution judgment: "Features of the environment that surround the protagonist (such as the atmosphere, social norms, or other contextual factors) influenced his/her behavior."
- 3. Dispositional counterfactual judgment: "The protagonist would have acted differently if his/her features (such as his/her character, attitude, or temperament)

had been different."

4. Situational counterfactual judgment: "The protagonist would have acted differently if features of the environment that surround him/her (such as the atmosphere, social norms, or other contextual factors) had been different."

Dispositional bias would be indicated by stronger agreements with the first and third statements than with the second and the fourth statements.

Two additional implicit measures. Two additional tasks were included for exploratory purposes. Those tasks tapped into both motivational and epistemic independence.

The first task was a measure of attention focus. If individuals are strongly oriented toward personal goals, they are likely to focus attention on specific goal-relevant objects. In contrast, if they are oriented toward communal goals, they are likely to focus attention on a broader field because of the need to be attentive to the social and communal context. If so, motivational independence may result in greater attention on goal-relevant objects, albeit non-social. Also, focused attention could be related to a cultural assumption that behavior is caused by internal factors of the target person rather than the social context where the person is situated in. Thus, it was also likely that epistemic independence would result in greater attention on goal-relevant objects. No strong *a priori* prediction was made regarding which of the two would be more important in inducing attention focus. If motivational independence is more crucial, one might expect Americans to show more focused attention compared with Germans.

The Framed-Line Task (FLT; Kitayama, Duffy, Kawamura, & Larsen, 2003) was used to assess attention focus. The task was presented in a booklet. Participants were

given both the absolute task and the relative task in a counterbalanced order, receiving specific instructions for each task right before they performed it. In both tasks, in each trial, participants were shown for 5 seconds a square frame with a vertical line inside it. The line was perpendicular to the square, starting from the center of the upper horizontal line of the square and extending downward. The participants were then given an empty square frame that was larger than, smaller than, or of the same size as the first frame. The task was to draw in the empty gray frame an appropriate length of line depending on the task type. In the absolute task, the participants were to draw a line that had the same absolute length as the line in the first frame. In the relative task, the participants were to draw a line that had proportionally the same length as the line in the first frame. Participants were given detailed instructions for each type of the task with concrete examples, and then went through practice trials (3 practice trials for each type). In the actual task six different sets of stimuli were used. In particular, for two of them the first and the second square frames were the same in size. For half of the remaining sets the second frame was larger than the first frame and for the other half the second frame was smaller than the first frame. The six sets of stimuli were presented in a random order. The order of presenting stimulus sets was the same both in the absolute task and in the relative task.

Another exploratory task was included to measure symbolic self size. To the extent that individuals regard the self as an agent taking initiatives for one's own action (which is the purview of motivational independence), they may value the self more than others. In the same vein, if people assume that the self is at the center of the social world (which is the purview of epistemic independence), they may also value the self more than

others. Again, no strong *a priori* prediction was made regarding the relative impact of the two in producing a boosted perception of self-importance. If motivational independence is more crucial, one might expect Americans to show a more exaggerated perception of self-importance compared with Germans.

The sociogram task (Duffy, Uchida, & Kitayama, 2007) was used to assess symbolic self size. Participants were asked to draw for 5 minutes a schematic picture of the social network among their friends. Specifically, they were instructed to put themselves in an oval and then to draw as many ovals as they wish to designate their friends. They were further instructed to specify relationships among their friends by connecting ovals with lines; if any two of them were friends to each other, the ovals should be connected with a line. The relative size of the self oval in comparison to the average size of the ovals used to designate the friends constitutes a measure of symbolic self size. All measurement was done in millimeters.

Explicit, attitudinal measure of self-orientation. The Singelis self-construal scale (1994) was used as an explicit, attitudinal measure of self-orientation. The scale is composed of 24 items. Half of the items are concerned with independence (e.g., "I am comfortable with being singled out for praise or rewards") and the other half are related to interdependence (e.g., "It is important for me to maintain harmony within my group). The items were presented in a random order. Participants rated how much they agreed or disagreed with each of the statements on 5-point scales (1: strongly disagree, 5: strongly agree).

Translation. All the materials were originally developed in English. Two Japanese-English bilinguals and two German-English bilinguals translated and back-

translated the materials, respectively, in order to ensure that the English, Japanese, and German versions were comparable and equivalent in meaning.

#### Procedure

The study was conducted in small group sessions. Upon arrival at the lab, participants were told that the study was about social relationships and cognitive style. Then, each of them was given a booklet for the FLT. The experimenter delivered detailed instructions, which were followed by practice and actual trials. Following the FLT, each participant was given another booklet for the remaining tasks. They performed the sociogram task first, which they had 5 minutes to complete. They completed the rest of the tasks at their own pace in the following order: the attribution and counterfactual judgment task, the ISOQ, and the Singelis self-construal scale. Due to time constraints, the ISOQ was omitted in Japan. Upon completion of the study, the participants were fully debriefed about the goal of the study and thanked for their participation.

#### RESULTS

It was expected that overall Americans and Germans would be more independent (or less interdependent) than Japanese in all the implicit tasks. Of greater relevance to the present study, it was expected that Americans would be more extreme in the direction of independence than Germans in the tasks that measured motivational and normative domains. In comparison, it was expected the variation between Americans and Germans to be smaller or even non-existent in epistemic domain. In addition, given the aforementioned measurement artifacts and theoretical considerations, no strong *a priori* prediction was made for the explicit attitudinal measure of self-orientation. The ISOQ was included in the battery used for both the American and German participants, but it

was omitted from the battery given to the Japanese participants because of time constraints. For comparison purposes, comparable data published in an earlier study by Kitayama et al. (2006) were included in the following analysis. The current version of the ISOQ used only subsets of the situations and the emotion terms examined by Kitayama et al. We recalculated all the measures by using the same set of situations and emotion terms.

## Motivational Independence

Motivational independence was assessed with two indices drawn from the ISOQ: the when-do-I-feel-happy index and the relative salience of disengaging over engaging emotions index

When-do-I-feel-happy index. The first measure of motivational independence is based on the assumption that if one is strongly motivated to achieve a certain goal state, the person will experience strong happiness when he or she has achieved it. It would follow that people motivated toward independence should strongly feel happy when they have achieved independent goals and, thus, when they experience disengaging positive emotions. By contrast, people motivated toward interdependence should strongly feel happy when they have achieved interdependent goals and, thus, when they experience engaging positive emotions.

For each participant, the average intensity for general positive emotions was regressed on both the average intensity for disengaging positive emotions and the average intensity for engaging positive emotions over the 10 situations. The mean standardized regression coefficients ( $\beta$ s) for engaging positive emotions and disengaging positive emotions were submitted to a 2 (emotion type: disengaging vs. engaging) X 3 (country)

X 2 (gender) mixed ANOVA with the emotion type as a within-subjects factor.

Both the emotion type main effect and the emotion type X country interaction were highly significant: F(1, 304) = 19.09, p < .001 and F(2, 304) = 18.62, p < .001. Gender showed no main effect: F(1, 306) = .29, ns. Nor did it qualify any other effects. As can be seen in Figure 1.1, the mean  $\beta$  was significantly stronger for engaging positive emotions than for disengaging positive emotions for Japanese: t(52) = 5.47, p < .001. This means that Japanese are motivationally oriented more toward interdependence than toward independence. The same trend was evident for Germans: t(124) = 5.16, p < .001. The contrast representing the interactive pattern between country (Japan vs. Germany) and emotion type was negligible: F(1, 172) = 1.19, ns. By contrast, Americans showed an opposite pattern, with the mean  $\beta$  for disengaging positive emotions significantly greater than the one for engaging positive emotions: t(133) = 2.14, p < .05. This indicates that Americans are motivationally oriented more toward independence than toward interdependence. The American pattern was significantly different from both the German pattern and the Japanese pattern: F(1, 253) = 24.51 and F(1, 183) = 22.97, respectively, ps < .001.

The mean  $\beta$  for engaging positive emotions was strongest for the Japanese. It was somewhat weaker for Germans although the Japanese-German difference did not reach statistical significance: t (178) = .99, ns. The mean  $\beta$  for Americans was significantly weaker than either the mean of Germans or the one for Japanese: t (257) = 4.21 and t (187) = 4.05, respectively, ps < .001. A mirrored pattern was observed for the mean  $\beta$  for disengaging positive emotions. It was strongest for Americans. The mean  $\beta$  for Germans was significantly weaker than that for Americans: t (257) = 5.30, p < .001.

The Japanese  $\beta$  was weakest. It was marginally weaker than the mean of Germans: t (176) = 1.92, p = .06.

Relative salience of disengaging over engaging emotions index. Motivational independence and interdependence were also indexed by the intensity of experiencing disengaging emotions and engaging emotions in the valence-matched situations. Psychological investment in independent goals should give rise to a relatively strong experience of disengaging emotions, whereas psychological investment in interdependent goals should result in a relatively strong experience of engaging emotions. To capture the relative intensity, for each participant we subtracted the intensity for engaging emotions from the intensity for disengaging emotions. Positive scores show a motivational propensity toward independence, and negative scores show a motivational propensity toward interdependence. These difference scores were submitted to a 3 (country) X 2 (gender) factorial ANOVA, which yielded a significant country main effect: F(2, 306) = 29.24, p < .001.

As can be seen in Figure 1.2, the Japanese mean was significantly negative, that is, different from 0 (M = -.26): t (54) = 3.77, p < .001. Japanese were thus motivationally inclined toward interdependence. In contrast, both German and American means were significantly positive (Ms = .16 and .51): t (124) = 2.34, p < .025 and t (133) = 9.49, p < .001, for Germans and Americans, respectively. Thus, they were motivationally inclined toward independence. The German mean was significantly higher than the Japanese mean, t (178) = 3.88, p < .001, providing support for the prediction that Germans are higher in independence (or lower in interdependence) than Japanese. Of greater importance, there was a significant difference between the German mean and the

American mean, t (257) = 4.49, p < .001, providing support for the hypothesis that Americans are higher in motivational independence than Germans. No gender effect was found.

## Normative Independence

Who-are-happier-in-this-society index. If independence is sanctioned at the societal level, those in the society who routinely succeed in achieving independence (which might be signified by a strongly high intensity of experiencing positive disengaging emotions) should be happier than those who do not. Conversely, if interdependence is sanctioned at the societal level, those in the society who routinely succeed in achieving interdependence (which might be signified by a chronically high intensity of experiencing positive engaging emotions) should be happier than those who are not. For each participant, over the 10 situations, we computed mean intensity ratings for general positive emotions, disengaging positive emotions, and engaging positive emotions. Then we regressed the mean general positive emotion on the mean disengaging positive emotion and the mean engaging positive emotion. The regression was performed for each of the three countries.

Results are summarized in Figure 1.3. The regression coefficient for engagement was greatest in Japan and smallest in the US, with Germany falling in between. The reverse pattern is evidence for the regression coefficient for disengagement. That is, it was largest in the US and smallest in Japan, with Germany falling in between. We dummy-coded Japan as 0 and Germany as 1 and examined whether the interaction between country and disengagement and the interaction between country and engagement was significant. An analogous analysis was carried out for the comparison between

Germany and the US. In the comparison between Japan and Germany the interaction between country and engaging emotions was significant:  $\beta$  = -.35, p < .005, indicating that engagement was more closely associated with happiness in Japan than in Germany. This indicates that normative interdependence is reliably stronger in Japan than in Germany. The corresponding difference for disengagement fell short of statistical significance (t < 1). In the comparison between Germany and the US, the interaction between country and disengaging emotions was significant:  $\beta$  = .18, p < .025. This indicates that disengagement was more closely associated with happiness in the US than in Germany. In support of our prediction, normative independence was significantly stronger in the US than in Germany. The corresponding difference for engagement fell short of statistical significance (t < 1). Overall, engagement is more strongly normative than disengagement in Japan, but the reverse is true in the US. Germany appears slightly interdependent (with a strong effect for engagement), but not to the degree that Japan is interdependent.

### Epistemic Independence

Epistemic independence was assessed with dispositional bias in both attribution judgment and counterfactual judgment.

Dispositional bias in attribution. The mean scores for dispositional and situational attributions are summarized in Table 1.1-A. Across all the four stories, dispositional scores were consistently higher than situational scores especially in Germany and the US. In Japan, by contrast, such a pattern was present only in half of the four stories (Stories 3 and 4); in the remaining two stories the pattern was reversed.

Because the country differences are consistent across the four stories, we collapsed across

the stories to yield one dispositional attribution score and one situational attribution score for each participant. These scores were submitted to a 2 (causal locus: dispositional vs. situational) X 3 (country) X 2 (gender) mixed ANOVA with the causal locus as a within-subjects factor.

As expected, we found a significant main effect of causal locus along with a significant interaction between causal locus and country: F(1, 325) = 238.54, p < .001 and F(2, 325) = 14.83, p < .001. As summarized in Figure 1.4-A, there was a strong dispositional bias in both Germany and the US, with the dispositional score significantly higher than the situational score: t(124) = 12.12, p < .001 and t(93) = 11.08, p < .001, respectively. The same tendency was evident in Japan: t(116) = 4.80, p < .001. The contrast testing the interaction between country and causal locus was significant both when comparing Japan and Germany and when comparing Japan and the US: F(1, 233) = 21.50 and F(1, 204) = 22.18, ps < .001, respectively. Importantly, the comparable contrast testing the difference between Germany and the US was negligible: F(1, 213) = .09, ns. Hence, in this measure of epistemic independence, Americans were no different from Germans. This is in stark contrast to the pattern we obtained in the measures of motivational independence and normative independence.

Counterfactual judgment. The mean scores for dispositional and situational counterfactual judgment are summarized in Table 1.1-B. As in the attribution judgment, across all the four stories, dispositional scores were consistently higher than situational scores especially in Germany and the US. In Japan, in contrast, the pattern is quite inconsistent across stories. We computed one dispositional counterfactual judgment score and one situational counterfactual judgment score over the four stories for each

participant. An ANOVA performed on these scores showed a significant main effect of causal locus, F(1, 325) = 190.55, p < .001, along with a significant interaction between causal locus and country: F(2, 325) = 11.41, p < .001.

As summarized in Figure 1.4-B, there was a strong dispositional bias in both Germany and the US, with the dispositional score significantly higher than the situational score: t(124) = 11.31, p < .001 and t(93) = 10.20, p < .001. Although the same tendency was evident in Japan, t(116) = 4.19, p < .001, the difference was significantly smaller than the difference found in the two Western countries (Japan vs. Germany and Japan vs. the US: F(1, 233) = 14.33 and F(1, 204) = 17.05, respectively, ps < .001). As in the attribution measure, the comparable contrast testing the difference between Germany and the US was negligible: F(1, 213) = .64, ns.

## Additional Implicit Measures

For exploratory purposes, two additional implicit measures (the FLT and the sociogram task) were included in the study. These tasks were assumed to tap into both motivational and epistemic domains of independence.

Attention focus. Performance errors in the FLT were measured in millimeters and averaged for the relative and the absolute tasks, respectively. A preliminary analysis showed that the effect of task order (relative task first vs. absolute task first) was not significant. The mean error size for each task type was submitted to a 2 (task type: relative vs. absolute) X 3 (country) X 2 (gender) mixed ANOVA with the task type as a within-subjects factor.

We found a significant main effect of task type: F(1, 321) = 87.46, p < .001. Overall, the performance error was greater in the absolute task than in the relative task. Of greater importance, as displayed in Figure 1.5, the main effect of task type was qualified by the interaction between task type and country: F(2, 321) = 16.17, p < .001. As predicted, the greater accuracy of performing the relative rather than the absolute task was quite pronounced for Japanese: t(121) = 12.05, p < .001. The finding suggests that the attention focus of Japanese is likely to be holistic, attending both to the focal object and to the contextual information. It was also statistically significant for Germans, t(122) = 7.07, p < .001, but the effect was significantly weaker for Germans than for Japanese: F(1, 231) = 11.45, p = .001. In comparison, the effect did not exist for Americans: t(91) = 1.63, p = .11. Furthermore, the American effect was significantly smaller than the effect for Germans: F(1, 209) = 7.29, p < .01.

Symbolic self size. The width of circles was measured in millimeters. The width of the circles used to designate one's friends was averaged for each participant and then subtracted from the width of the self-circle so that higher numbers on this relative self size measure should represent greater symbolic self-inflation (Duffy et al., 2007). The relative self size was submitted to a 3 (country) X 2 (gender) factorial ANOVA.

As expected, we found a significant main effect of country: F(2, 320) = 15.46, p < .001. Relevant means are displayed in Figure 1.6. The Japanese mean was no different from 0 (M = .30): t(114) = .34, ns. In contrast, the German (M = 4.78) and the American means (M = 6.22) were significantly greater than from 0: t(122) = 5.87, p < .001 and t(92) = 6.53, p < .001, respectively. The pattern replicates previous work (Duffy et al., 2007). Although the relative self size tended to be bigger for Americans than for Germans, the difference did not reach statistical significance: t(214) = 1.16, ns. *Explicit Attitudinal Measure of Self-Orientation* 

Participants' responses to the Singelis' self-construal scale were averaged for each scale type to form an index for independence and another index for interdependence. The internal reliability of the scale was in the range of moderate to high: the Cronbach's alpha for independence and interdependence, .70 and .71 in Japan, .63 and .59 in Germany, and .69 and .56 in the US, respectively. When the mean scores for independence and interdependence were then submitted to a 2 (scale type: independence vs. interdependence) X 3 (country) X 2 (gender) mixed ANOVA with the scale type as a within-subjects factor, the interaction between scale type and country was significant: F (2, 325) = 17.97, p < .001. Yet, the pattern of the means was anomalous. As shown in Table 1.2, Germans proved to be most independent of the three groups, whereas

#### DISCUSSION

The Voluntary Settlement Hypothesis Evaluated

Overall, the results are consistent with the voluntary settlement hypothesis, suggesting that the frontier still remains on the mind of people in contemporary American culture. Consistent with expectations, in all the implicit measures, overall Americans and Germans were found to be more independent (or less interdependent) compared with Japanese. Of importance, four of the five implicit measures of motivational and normative independence showed the predicted variation between the US and Germany. In addition, the two measures of epistemic independence, as expected, showed the absence of any difference between the two countries. Not only are the findings consistent with the hypothesis, but they are also in line with the previous research in a different sociohistorical context (Ishii & Kitayama, 2007; Kitayama, Ishii et al., 2006). In a series of

Hokkaido, Kitayama and colleagues found that the ethos of independence is fostered by settlement even in a more encompassing backdrop of interdependence. Thus, it appears that the voluntary settlement hypothesis has attained a fair degree of plausibility.

Discrepancy between Implicit and Explicit Attitudinal Measures of Self-Orientation

The explicit, attitudinal measure of self-orientation showed a theoretically anomalous pattern. In particular, it indicated that among the three groups of people, Americans and Germans assessed themselves to be most interdependent and independent, respectively, which was not only inconsistent with expectations, but also contradicted what all the other implicit measures indicated. In recent years, the use of explicit, attitudinal measures of self-orientation in the context of cross-cultural comparisons has been criticized as invalid for measurement artifacts (e.g., acquiescence bias, extremity or moderacy bias, reference group effect; See Heine, in press, for review). The present study would add support to the claim that explicit attitudinal measures are problematic. The present study also suggests that these measures of self-orientation should be supplemented with implicit measures of self-orientation.

#### Future Directions

As no single study would suffice to provide definitive evidence for broad sociohistorical analyses such as the one presented here, further research is called for with cultural groups that have undergone a process of voluntary settlement into frontier regions. Future studies should include other countries that have a history of settlement, such as Australia, New Zealand, and South Africa.

Second, language should be controlled for in testing the voluntary settlement

hypothesis. More often than not, psychological investigations heavily rely on language. Even though caution has been taken to include non-language-mediated tasks (i.e., the FLT and the sociogram task), in the present study it is not prudent to completely rule out the possibility that variation found between Americans and Germans is due to differences in language itself or linguistic routines. To control for language, it is necessary to test a group of individuals who speak English but with no history of voluntary settlement in the modern times (i.e., British).

Third, factors unique to or more prominent in the US than in Europe (e.g., higher social mobility, greater economic disparity, etc) should be examined to see if they can be potential explanations for the higher level of independence in Americans. One way to gauge the impact of socio-cultural factors unique to the US relative to the influence of the history of voluntary settlement, would be to examine regional variations in the US, comparing more frontier-oriented regions to some other regions in the US.

Finally, it should be noted that it is yet unclear if primitive and harsh frontier environments enhance independent mentalities (acculturation) or if those who launch a journey to a new place have a more pronounced orientation toward independence to begin with (i.e., self-selection). It might be necessary to compare natives and settlers within one region, thereby controlling for environmental factors, in order to examine to what extent self-selection may account for the higher level of independence found in settlers. All these may be conducive to explicating how voluntary settlement in frontiers influences the human mind in ever-changing cultural contexts.

# Footnote

<sup>1</sup> In the study only 23 items were used. One item ("I feel comfortable using someone's first name soon after I meet them, even when they are much older than I am") was dropped because the item would be invalid in Japan where addressing people by their first name occurs in nearly any circumstance.

Table 1.1-A

Mean attribution judgment scores by causal locus and country

	Causal locus	Japan	Germany	US
Story 1	Dispositional	5.45 (1.26)	5.87 (1.03)	5.89 (1.07)
	Situational	5.88 (1.07)	5.06 (1.11)	5.30 (1.11)
Story 2	Dispositional	5.28 (1.39)	5.75 (1.25)	6.04 (1.04)
	Situational	5.74 (1.25)	5.09 (1.40)	5.49 (1.60)
Story 3	Dispositional	5.87 (1.17)	5.89 (.99)	6.12 (.80)
	Situational	5.12 (1.44)	4.21 (1.58)	4.41 (1.69)
Story 4	Dispositional	6.40 (.85)	6.24 (.85)	6.48 (.65)
	Situational	4.42 (1.66)	4.84 (1.42)	4.64 (1.57)

*Note*: Relevant standard deviations are presented in the parentheses above.

Table 1.1-B

Mean counterfactual judgment scores by causal locus and country

	Causal locus	Japan	Germany	US
Story 1	Dispositional	4.53 (1.51)	5.59 (1.17)	5.64 (1.14)
	Situational	5.25 (1.51)	4.89 (1.30)	5.07 (1.38)
Story 2	Dispositional	5.39 (1.22)	5.67 (1.23)	5.90 (1.05)
	Situational	5.28 (1.39)	4.91 (1.33)	5.06 (1.54)
Story 3	Dispositional	5.72 (1.26)	5.79 (1.04)	6.09 (.84)
	Situational	5.08 (1.49)	4.38 (1.58)	4.28 (1.65)
Story 4	Dispositional	6.20 (.96)	6.02 (1.02)	6.06 (1.01)
	Situational	4.32 (1.77)	4.63 (1.46)	4.48 (1.55)

*Note*: Relevant standard deviations are presented in the parentheses above.

Table 1.2

Mean self-orientation scores by Singelis's scale type and country

Independence	Interdependence
3.34 (.53)	3.04 (.52)
3.68 (.47)	3.11 (.43)
3.48 (.50)	3.49 (.38)
	3.34 (.53) 3.68 (.47)

*Note*: Relevant standard deviations are presented in the parentheses above.

Figure 1.1 Mean standardized regression coefficient for disengaging and engaging positive emotions in predicting general positive emotions as a function of country.

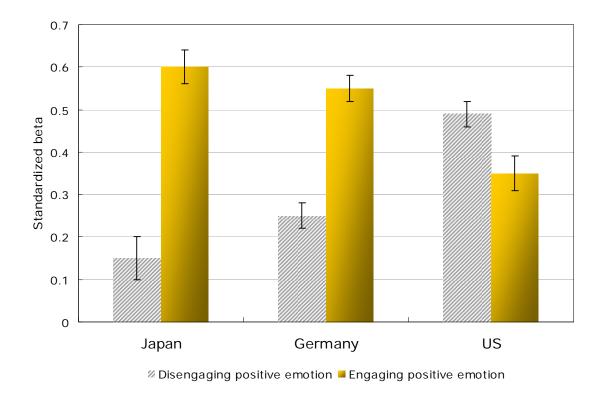


Figure 1.2 Mean relative intensity of disengaging vs. engaging emotions as a function of country.

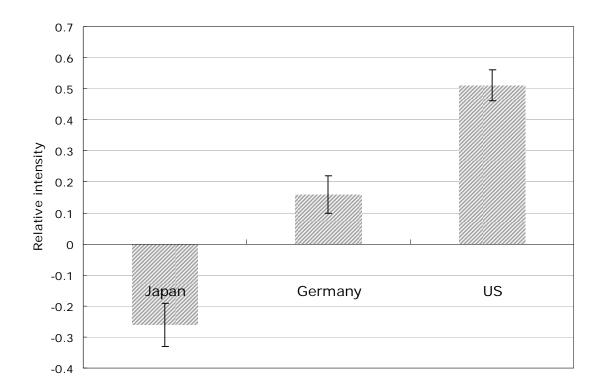


Figure 1.3 Standardized regression coefficient for grand means of disengaging and engaging positive emotions in predicting general positive emotions at the country level.

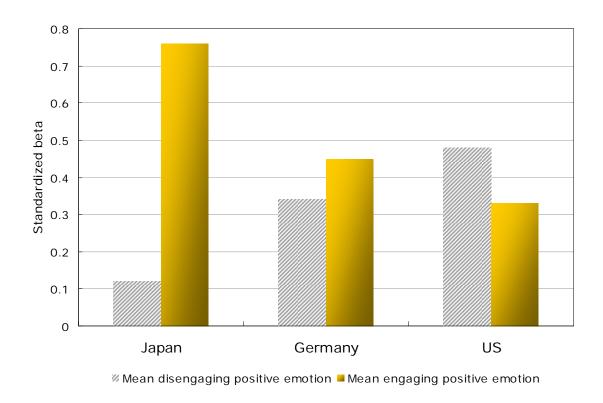


Figure 1.4-A Mean attribution judgment score by causal locus and country.

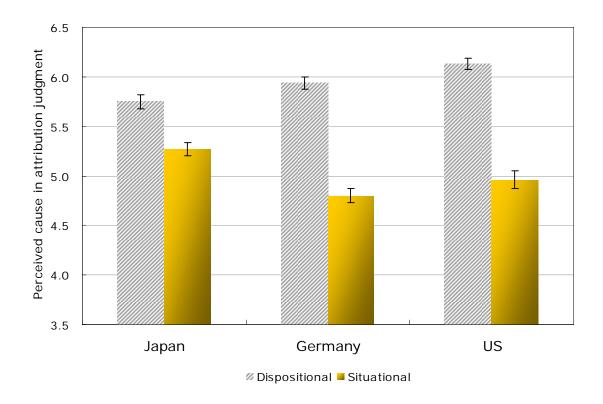


Figure 1.4-B Mean counterfactual judgment score by causal locus and country.

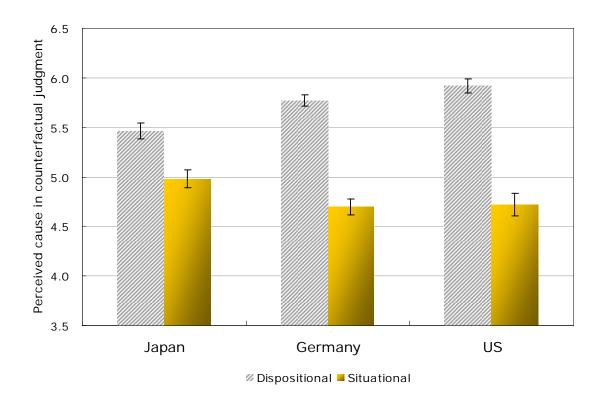


Figure 1.5 Mean error size by task type and country.

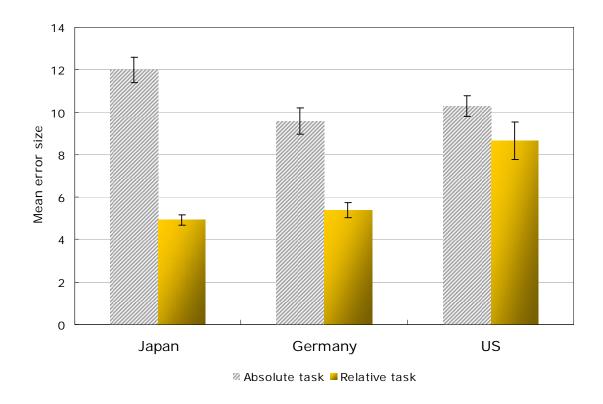
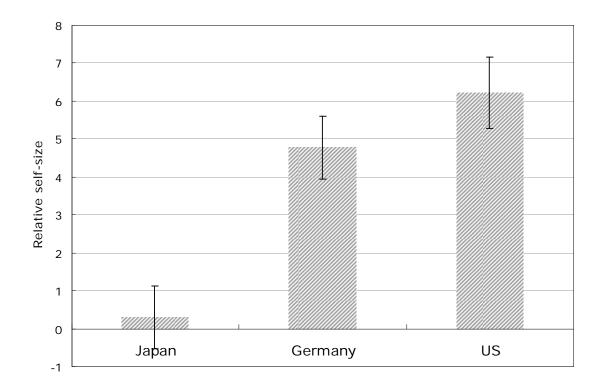


Figure 1.6 Mean relative self size by country.



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#### **CHAPTER 3**

#### HOW ARE CULTURALLY NORMATIVE SELF-VIEWS INTERNALIZED?

It is commonly assumed that people form a private self-view that corresponds with the normative self-view that is shared in their culture. Consistent with this assumption, since the very beginning of psychological inquiries into the self, it has been often noted that the self is a socio-cultural product that is made possible only through symbolically mediated collaborative interactions with others in the given cultural community (Baumeister, 2005; Cooley, 1902; Goffman, 1959; Kitayama, Duffy, & Uchida, 2007; Mead, 1934). Cooley (1902) has put forth the term looking-glass self to suggest that others serve as a mirror in which we see ourselves. Mead (1934) has expanded on this notion to suggest that our self-knowledge is often obtained from imagining what others think of us and incorporating these perceptions into our own selfconcepts. Goffman (1959) used the metaphor of the theater to underscore the interactive nature of the process of self-concept formation. According to him, every human being is a social actor performing on a stage where he is being watched by an audience, but at the same time he is an audience for his viewers' play. All these suggestions boil down to the notion that individuals form a view of themselves through interactions with others in their cultural community.

As reviewed above, the importance of socio-cultural factors in shaping the self

has been continuously acknowledged. Yet, relatively little is known about specifically how culturally normative self-views are internalized and incorporated into one's selfconcepts so that people across cultures endorse the independence or the interdependence of the self to varying degrees. In Chapter 3, I focus on identifying a mechanism underlying the internalization of culturally normative self-views. In particular, I propose that public self-presentation plays a key role in the internalization process. Given that most people are motivated to uphold cultural norms (Asch, 1955; Deutsch & Gerard, 1955; Homans, 1961; Monane, 1967; Sherif, 1937), it is likely that in public, people present themselves more in line with normative expectations about what it means to be a "good" person in their cultural context, compared to what they privately believe themselves to be. If people routinely and repeatedly present themselves in public view using culturally sanctioned terms, over time associations between publicity and culturally sanctioned self-concepts should emerge. As a consequence, what might initially seem to be merely public self-presentations are likely to provide a basis for genuine selfperceptions in the long run.

Even though the underlying mechanism for the internalization of culturally normative self-views may be the same across cultures, we should expect the consequences to vary cross-culturally. As has been well-documented, cultures differ with regard to the normative self-view that they sanction (Kitayama et al., 2007; Markus & Kitayama, 1991; Triandis, 1995). North American cultural contexts reward and reinforce the view of the self as independent while East Asian cultural contexts reward and reinforce the view of the self as interdependent. If in public settings people are likely to present themselves in accordance with the culturally normative self-view, North

Americans should present themselves as personally defined and thus unique, whereas East Asians should present themselves as socially grounded and thus connected with others. Additionally, as previous research suggests, cultures value positive self-regard (or absence thereof) to varying degrees. Positivity about the self is socially sanctioned and thus adaptive in North American cultural contexts, whereas modesty about the self is socially valued in East Asian cultural contexts (e.g., Heine, Lehman, Markus, & Kitayama, 1999; Taylor & Brown, 1988). If in public settings people are likely to present themselves in accordance with the culturally normative self-view, North Americans should present themselves favorably, perhaps more so than they privately believe themselves to be, whereas such a pattern should be absent in East Asians. Therefore, I anticipated that though a common mechanism may apply to the internalization of culturally normative self-views, the consequences should vary as a function of culture.

In Chapter 3, the following hypotheses were tested with a group of Americans and a group of Japanese. First, consistent with past research (Bochner, 1994; Bond & Cheung, 1983; Cousins, 1989; Kanagawa, Cross, & Markus, 2001; Rhee, Uleman, Lee, & Roman, 1995; Wang, 2001), I expected that as a default people across cultures would differ in describing the self: Americans as compared with Japanese would refer more to inner psychological attributes and personal characteristics, whereas Japanese as compared with Americans would refer more to social roles, group memberships, and other socially defined status. Of greater relevance to the present study, I expected that the default cultural difference would be magnified in public settings. In particular, I expected that American participants would provide more attributive self-descriptions in public than private. On the other hand, I expected that Japanese participants would generate more

social self-descriptions in public than in private.

Second, given the cultural variation in expectations about positive self-regard, I predicted that American participants would provide more positive self-descriptions in public than in private. By contrast, I expected that such a variation across conditions would be absent or even reversed in Japanese such that Japanese participants would provide less positive self-descriptions in public than in private.

Finally, I predicted that cultural variations in perceived self-orientation would be more pronounced in public than in private. Specifically, I expected that Americans in public would assess themselves to be more independent or less interdependent than their Japanese counterparts. Such a cultural difference was expected to be weaker or non-existent in private.

#### **METHOD**

### **Participants**

Forty seven undergraduate students from the University of Michigan (21 men and 26 women; M age = 18.51; 37 Caucasian Americans and 10 ethnic minorities) and 40 undergraduate students from Kyoto University, Japan (23 men and 17 women; M age = 19.48) participated in the study for partial fulfillment of a course requirement. The study was carried out in their respective native language.

#### Materials

Self-description task. A modified version of the Twenty Statements Test (Kuhn & McPartland, 1954) was used. In the modified version, the word stem "I am" was not given because personal pronoun dropping is common in Japanese (Kashima & Kashima, 1998, 2003) and the word stem is likely to lead to unusually frequent use of trait

adjectives in describing selves in English (See Cousins, 1989, for research that has addressed the same concern). Participants were asked to provide, in an open-ended fashion, twenty different statements about their selves. In particular, they were given the following instructions:

In the twenty blanks below please make twenty different statements about yourself, which describe who you are, what kind of person you are, characteristics you have, and the like. Answer as if you are giving the answers to yourself, not to somebody else. Write your answers in the order they occur to you. Don't worry about logic or importance. Go along fairly fast.

Participants were given up to 15 minutes for the self-description part of the study.

Self-orientation measure. A modified version of the Singelis's (1994) self-construal scale was used. The modified scale assesses the extent to which an individual explicitly endorses the independence or the interdependence of the self. The scale includes a total of 20 items, half of which represents the independence of the self (e.g., "I am comfortable with being singled out for praise or rewards") and the other half represents the interdependence of the self (e.g., "I think it is important to keep good relations among one's acquaintances") (See Table 2.1 for details). Participants were asked to indicate, on 5-point scales, to what extent they think each of the items describes themselves (1: doesn't describe me at all, 5: describes me very much). The order of scale items was counterbalanced so that half of the participants completed the independence part first.

*Translation.* All materials were originally developed in English. Two Japanese-English bilinguals translated and back-translated the materials to make sure both versions

were equivalent and comparable in meaning.

Design

The study used a 2 (condition: public vs. private) X 2 (order of self-orientation measure: independence first vs. interdependence first) X 2 (culture: US vs. Japan) factorial design.

#### Procedure

The study was conducted individually. Upon arrival each participant was randomly assigned to one of the 2 (condition: public vs. private) X 2 (order of selfconstrual scale: independence first vs. interdependence first) conditions. In the public condition, a subtle social priming procedure was used in order to induce perceived public scrutiny (for information on the social context priming procedure, see Kitayama, Snibbe, Markus, & Suzuki, 2004). In particular, the participants in the public condition were exposed to a poster that depicted schematic human faces (See Figure 2.1). The poster represents a pattern of "eyes of others" that is likely to be experienced in everyday life when people are watched by others. In the public condition, the poster was hung on the wall right in front of the participants at their eye level so that the eyes in the poster were gazing at the participants. Thus, it was rendered that the participants under this particular condition would subjectively experience public scrutiny, in other words, the psychological effect of being in public. The participants in the private condition were not exposed to the poster. Otherwise, the procedure for the private condition was identical to the procedure for the public condition.

All participants provided 20 descriptions of their selves for up to 15 minutes.

Then they completed the modified version of the self-construal scale. Upon completion

of the study participants were asked whether they had noticed anything unusual about the study or the lab, whether they had paid attention to the poster, and if so, whether they thought the poster had affected their responses in any ways.<sup>2</sup> Afterward, participants were fully debriefed about the goal of the study and thanked.

#### RESULTS

Ethnic minorities were excluded from the following analyses.

Self-Description

The content and valence of the self-descriptions were analyzed. The unit of analysis was an independent clause consisting of no more than one verb-object, verb-predicative nominative or verb-predicate adjective sequence. Thus, even though a participant provided 20 self-statements, the total number of meaning units could be greater than 20. A preliminary analysis showed that cultures differed in terms of the number of meaning units generated. In particular, the results showed that on average the American participants provided a greater number of self-descriptions than the Japanese participants did:  $M_{\rm US}$  vs.  $M_{\rm JP} = 23.70$  vs. 20.88, F(1, 69) = 9.26, p < .005. To control for variation across cultures in the number of meaning units, all analyses were based on proportions. That is, for each participant, the number of meaning units that belonged to each content or valence category was divided by the total number of meaning units generated by the participant and submitted to analyses.

Content. The contents of self-descriptions were coded using the concrete-abstract spectrum adapted from Cousins (1989; See Table 2.2 for details). The proportion of the self-descriptions that fell under each content category was submitted to a 12 (content category) X 2 (condition: public vs. private) X 2 (culture: US vs. Japan) X 2

(gender) MANOVA. First of all, the multivariate test showed a significant main effect of culture: F(9, 61) = 7.92, p < .001, indicating that people across cultures differed in terms of the way they described their selves. The main effect discussed above was qualified by a marginally significant interaction between condition and culture, F(9, 61) = 1.76, p = .09, suggesting that the cultural differences in self-description tended to vary across conditions as well.

Of particular importance to the present investigation, it was expected that in the public more than in the private condition, Americans would be more likely to describe their selves with reference to situationally or contextually unqualified psychological traits (content category C5 from Table 2.2). In contrast, it was expected that Japanese would be more likely in the public than private condition to describe their selves in terms of social roles, institutional memberships, or another socially defined status (content category B from Table 2.2). Consistent with expectations, it was found that an interaction between condition and culture was significant for the category C5: F(1, 69) = 9.66, p < .005(Figure 2.2). The results showed that in describing the self the American participants in the public condition (M proportion = .448, SD = .275) were more likely to refer to situationally or contextually unqualified psychological attributes compared with those in the private condition (*M* proportion = .241, SD = .241): t(35) = 2.44, p < .025. By contrast, the Japanese participants in the public condition (M proportion = .180, SD = .104) were less likely to do so compared with their counterparts in the private condition (M proportion = .289, SD = .187): t(38) = 2.24, p < .05.

In addition, as displayed in Figure 2.3, the results showed a significant interaction effect between condition and culture for category B: F(1, 69) = 4.45, p < .05.

The result indicated that again consistent with the expectation, the Japanese participants in the public condition as opposed to those in the private condition tended to refer more to social roles, institutional memberships, or another socially defined status in describing their selves (in the public condition M proportion = .040, SD = .048 vs. in the private condition M proportion = .023, SD = .046); on the other hand, the opposite was the case for the American participants (in the public condition M proportion = .015, SD = .020 vs. in the private condition M proportion = .036, SD = .060).

*Valence*. Participants' self-descriptions were also analyzed with respect to valence (positive vs. negative vs. neutral). The proportions of positive, negative, and neutral responses were submitted to a 3 (valence category) X 2 (condition) X 2 (culture) X 2 (gender) MANOVA. The multivariate test revealed a main effect of culture and a main effect of condition: F(3, 67) = 29.40, p < .001 and F(3, 67) = 3.20, p < .05, respectively, indicating that the valence of self-description varied both across cultures and across conditions.

Consistent with these expectations, the results showed a significant condition X culture interaction effect for positive self-statements: F(1, 69) = 5.68, p < .025. As displayed in Figure 2.4, the American participants in the public condition than those in the private condition were more likely to describe their selves positively (in the public condition M proportion = .61, SD = .23 vs. in the private condition M proportion = .40, SD = .19: t(35) = 3.14, p < .005) while there was no such pattern for the Japanese participants (in the public condition M proportion = .14, SD = .13 vs. in the private condition M proportion = .12, SD = .16).

In addition, the results revealed a significant condition X culture interaction

effect for neutral self-statements: F(1, 69) = 3.93, p = .05. As displayed in Figure 2.5, the American participants in the public condition tended to describe themselves less neutrally than those in the private condition (in the public condition M proportion = .28, SD = .18 vs. in the private condition M proportion = .41, SD = .21: t(35) = 1.94, p = .06); on the other hand, the Japanese participants tended to show the opposite pattern (in the public condition M proportion = .72, SD = .17 vs. in the private condition M proportion = .67, SD = .16).

### Self-Orientation Measure

A preliminary analysis showed no significant effect of scale order, and thus it was excluded from analysis. Participants' responses to the modified Singelis's (1994) scale were averaged for each scale type.<sup>3</sup> Then the mean scores were submitted to a 2 (scale type: independence vs. interdependence) X 2 (condition: public vs. private) X 2 (culture: US vs. Japan) X 2 (gender) mixed ANOVA with the scale type as a within-participants factor. No effects involving gender proved significant, and thus will not be further discussed hereafter.

The results showed a marginally significant three-way interaction of scale type, condition, and culture: F(1, 69) = 3.44, p = .07. To take a closer look at the three-way interaction, I further conducted a separate 2 (scale type) X 2 (culture) mixed ANOVA for each condition. Again, as expected, there was no significant interaction of scale type and culture in the private condition, F(1, 37) = 2.63, p > .10, and it was only in the public condition that the interaction proved significant: F(1, 36) = 30.25, p < .001. Recall that it was expected that people would present themselves in the culturally congruent way (being independent in the US and being interdependent in Japan) more in public than in

private. Consistent with this expectation, the results indicated that only in the public condition did the American participants assess themselves to be more independent and less interdependent ( $M_{\text{ind}} = 3.99$ , SD = .50;  $M_{\text{int}} = 3.44$ , SD = .27) compared with their Japanese counterparts ( $M_{\text{ind}} = 3.04$ , SD = .60;  $M_{\text{int}} = 3.75$ , SD = .38).

#### DISCUSSION

The results were generally consistent with the hypothesis that social cues would magnify cultural variations in describing oneself and assessing one's self-orientation.

First of all, it was shown that Americans were more likely to provide attributive self-descriptions when social cues were present than when absent. By contrast, Japanese were more likely to provide social self-descriptions when social cues were present than when absent. In addition, Americans described themselves in a positive light more in the public than private condition, while such a pattern was absent in Japanese. Finally, it was found that only in the public condition did Americans assess themselves to be more independent and less interdependent compared with the Japanese. The findings suggest that in public settings, individuals may attempt to present themselves in the culturally rewarded and reinforced way, namely, promoting personal uniqueness and thus affirming the independence of the self in North American cultural contexts but emphasizing relational aspects and thus affirming the interdependence of the self in East Asian cultural contexts. Self-Presentation and Internalization

The results suggest that in the public view people may routinely present themselves using culturally sanctioned terms. One consequence of such routine self-presentations would be a build-up of associations between publicity and culturally sanctioned self-concepts. Over time, what may initially seem to be merely public self-

presentations are likely to provide a basis for genuine self-perceptions.

Indeed, there is a body of empirical evidence demonstrating that people use selfpresentation to construct an identity for themselves (Baumeister, 1998). Baumeister and Tice (1984) have shown, using the forced compliance paradigm of cognitive dissonance, that public self-presentation is as effective as choice in producing attitude change. In particular, those who were induced to publicly enact a counter-attitudinal behavior later aligned their attitude to the behavior. The degree of their attitude change was comparable to the degree of the attitude change that those who freely chose to enact the counterattitudinal behavior showed. Furthermore, Jones, Rhodewalt, Berglas and Skelton (1981) found that the way people presented themselves in public had an impact on their selfesteem as measured in a separate context. Specifically, those who were instructed to selfenhance in a mock job interview subsequently showed elevated self-esteem, whereas those instructed to self-deprecate in the interview subsequently showed lowered selfesteem. Another case in point is found in Tice (1992). In her study, participants were asked to perform a certain behavior either publicly (showing the behavior to another person who could identify them) or privately (performing the behavior anonymously). The results revealed that the relevant self-concept was more likely to change when the behavior was performed publicly rather than privately, even if the behavior itself was identical across conditions. In addition, the effect of the self-concept change extended to the realm of behavior; participants in the public condition were more likely to act in accordance with the self-concept that had been shaped by previous public selfpresentation (e.g., those who publicly presented themselves in an extroverted fashion, as compared with those who presented themselves in an introverted fashion, sat relatively

close to a confederate while waiting to be debriefed about the study). Together with Jones et al. (1981), the findings suggest that self-concepts are more likely to change by internalizing public behavior rather than by internalizing behavior that lacks any interpersonal context.

Still, the issue may not have been fully resolved. A question remains why people are more likely to internalize public rather than private behavior. One suggestion in the literature is that the cognitive load may be heavier while engaging in public rather than private behavior. If so, when enacting a certain public behavior, there is not much room left for further reflecting on how indicative the behavior is of oneself. Baumeister, Hutton and Tice (1989) demonstrated that those who were induced to present themselves modestly when engaging in a dyadic interaction later showed impaired memory of the interaction. They suggested that deliberate, unfavorable self-presentation might consume cognitive resources that otherwise would have been available. Just as people settle on internal attributions for another person's behavior when they are short of cognitive resources for considering situational factors, it may be that people are more likely to take their own public rather than private behavior at face value as deliberate public self-presentation consumes cognitive resources.

### Conclusion

In Chapter 3, I proposed that public self-presentation facilitates the internalization of culturally normative self-views. As an initial test of the notion, I have shown that people are more likely in public than in private to describe and assess themselves in the way that is typical of their culture. Based on the findings, I suggest that via iterative public self-presentations, people come to align their self-view in accordance

with the normative self-view in their culture. Perhaps this is one of the ways that cultures are maintained and transmitted from generation to generation.

Goffman (1959) said, "All the world is not, of course, a stage, but the crucial ways in which it isn't are not easy to specify." People, regardless of their cultural background, engage in public self-presentation quite frequently. The role of public self-presentation in shaping the self merits further research as its impact on the construction of the self has not been fully explored. Future studies need to examine if repeated public self-presentations indeed lead to the internalization of culturally normative self-views in the long run. For example, using a longitudinal design, one could investigate how long and to what extent the effects of public self-presentation are carried over and maintained.

# Footnotes

<sup>&</sup>lt;sup>1</sup> In order to minimize potential effects of extraneous social cues, the experimenter stayed outside of the lab at all times except when delivering task-related instructions.

<sup>&</sup>lt;sup>2</sup> No participants expressed any suspicion.

<sup>&</sup>lt;sup>3</sup> The internal reliability of the independence part of the scale was .79 for Americans and .66 for Japanese. The internal reliability of the interdependence part of the scale was .37 for Americans and .71 for Japanese.

### Table 2.1

### Modified Singelis's self-construal scale

- 1. I always try to have my own opinions.
- 2. I am comfortable with being singled out for praise or rewards.\*
- 3. The best decisions for me are the ones I made by myself.
- 4. In general I make my own decisions.
- 5. I act the same way no matter who I am with.\*

I am not concerned if my ideas or behavior are different from those of other

- 6. people.
- 7. I always express my opinions clearly.
- 8. Being able to take care of myself is a primary concern for me.\*
- 9. I enjoy being unique and different from others in many respects.\*
- 10. I do my own thing, regardless of what others think.
- 11. I am concerned about what people think of me.
  - In my own personal relationships I am concerned about the other person's status
- 12. compared to me and the nature of our relationship.
- 13. I think it is important to keep good relations among one's acquaintances.
- 14. I avoid having conflicts with members of my group.
- When my opinion is in conflict with that of another person's, I often accept the
- 15. other opinion.
- 16. I respect people who are modest about themselves.\*
- 17. I will sacrifice my self-interest for the benefit of the group I am in.\*
- 18. I often have the feeling that my relationships with others are more important than

my own accomplishments.\*

- 19. I feel my fate is intertwined with the fate of those around me.
- Depending on the situation and the people that are present, I will sometimes 20. change my attitude and behavior.

*Note*. The items that appear in the original Singelis's (1994) self-construal scale are marked with asterisks (\*).

#### Table 2.2

# Outline of coding scheme

A. *Physical*: References to observable, physical attributes to self, which do not imply social interaction, such as the information one finds on a driver's license

B. *Social*: References to social role, institutional membership, or other socially defined status

C. *Attributive*: References to self as a situation-free agent characterized by personal styles of acting, feeling, and thinking

- 1. Preferences, interests
- 2. Wishes, aspirations
- 3. Activities, habits
- 4. Qualified psychological attributes: Any psychological attribute is regarded as qualified if it includes reference to other people, to time, or to locale.
  - 5. Pure psychological attributes: Free from contextual qualifications
  - 6. Personal values

D. *Global*: Self-references that are so comprehensive or vague as to transcend social role and social interaction, and which therefore do not convey individual characteristics of the respondent

- 1. Existential individuating
- 2. Universal oceanic

E. *Object*: Descriptions of other persons or objects in which there is no reference to self

O. Other: Responses not readily fitting into the above scheme

Figure 2.1 The social-context priming poster adapted from Kitayama et al. (2004).

Figure 5. The different features that resulted in significant main effects in Experiment 2.

Note: Each of the features in a composition gave effects in the same direction (high or low) on a semantic dimension as the other features in the same composition.

	Semantic Dimension		
Impression	Activity	Positive Val	ence Potency
High	22		2323
Low	36	5< 5<	9622

Figure 2.2 Mean proportion of attributive descriptions (C5) by condition and culture.

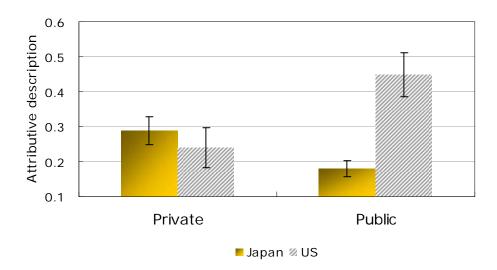


Figure 2.3 Mean proportion of social descriptions (B) by condition and culture.

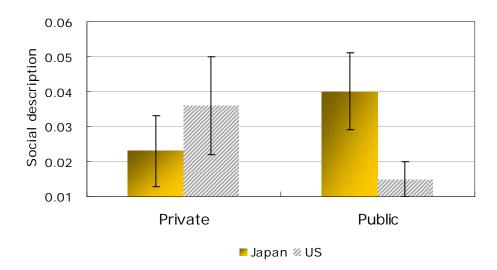


Figure 2.4 Mean proportion of positive descriptions by condition and culture.

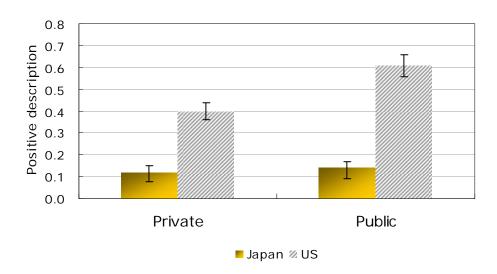


Figure 2.5 Mean proportion of neutral descriptions by condition and culture.

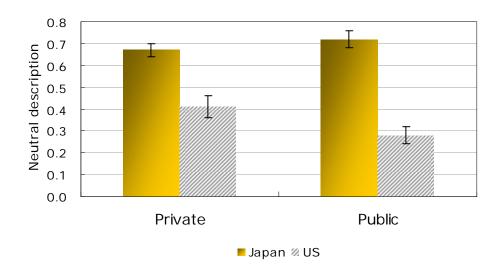
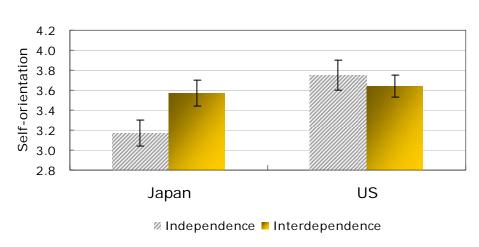
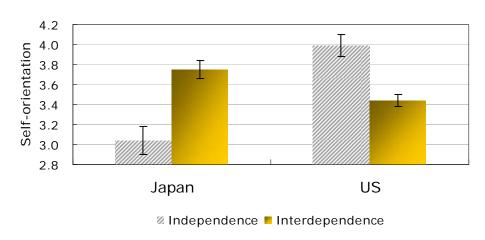


Figure 2.6 Mean self-construal score as a function of scale type and culture: private condition (top panel) and public condition (bottom panel).





# Public condition



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#### **CHAPTER 4**

# WHEN DO PEOPLE ACT ON THEIR OWN ATTITUDES? A CULTURAL INVESTIGATION

Many observers of Minjoon may rather be surprised. Betraying all expectations that Korean men are cooperative, subdued, and interdependent, he is quite assertive and talkative at home. He does what he wants to do even when it is in conflict with plans and desires of his parents and siblings. Yet, at work he is highly regarded as a good group member, always putting the group first, never insisting on his personal preferences or desires. Within a theoretical framework developed by Markus, Kitayama, and many others, Minjoon is extremely interdependent in public although he is rather independent in private. Now, consider Tom. Like many of his colleagues at a silicon-valley venture business, he is a leader, an inventor, and an entrepreneur, keen on taking advantage of any new opportunities. Yet, at home he is a good father and a husband. He is a warm, caring, and loving person. Tom, in other words, is independent in public, yet, in private he is rather interdependent.

These examples illustrate the fundamental fact that human behaviors are very complex and, among others, culture's influences can never be monolithic. Korean culture is generally considered interdependent, whereas American culture is generally considered independent. Thus, in the examples above, if observed in public both Minjoon and Tom

would be judged to be good products of their respective cultural groups. If observed in private situations (i.e., at home), however, their behaviors will betray any simple-minded expectations that are based on the general tendencies ascribed to the respective cultural groups.

In this chapter, I will argue that the complexity alluded to above is not only quite general, but also is at the very basis of acquisition and internalization of culture. The basic hypothesis is that individuals acquire and internalize their culture in part by regulating their public behaviors in accordance with the culture's normative requirements. That is to say, most individuals are compelled to behave in compliance with pervasive cultural norms especially when they act in public situations. Not surprisingly, then, Minjoon is highly interdependent and Tom is highly independent at work (i.e., in public situations). With repeated exposure to public situations, these behaviors will be automatized and thus become largely habitual, defining the part and parcel of the person himself or herself. One might wonder, then, why both Minjoon and Tom fail to act in a norm-congruous fashion at home. In response, I borrow from Bargh and colleagues the notion of conditional automaticity and argue that the automaticity that is achieved through routinized public behavior is fully conditional to the situations in which the pertinent behaviors typically take place (Bargh & Chartrand, 1999; Bargh & Morsella, in press; Bargh & Higgins, 1987). Thus, at work Minjoon is likely to engage in interdependent behaviors quite automatically and routinely, without any active effort of consciously regulating them. To this extent, he is highly interdependent, yet, this interdependence is conditional to a particular subset of his life, namely, public situations. Likewise, at work Tom is likely to engage in independent behaviors quite automatically

and routinely, without any conscious monitoring of his behaviors. To this extent, Tom can be said to be highly independent. Yet, as in Minjoon's case, Tom's independent is also conditional to public situations.

One important implication of the current analysis comes from the fact that the conditionality of conditionally automatic behaviors is also likely to be automatic. What this means is that people may show norm-congruous patterns of behavior when exposed to cues indicating public situations even when the exposure is entirely surreptitious and thus happening subconsciously, outside of focal attention. If true, such a phenomenon would go a long way to make a point that people acquire and internalize their culture by regulating their public behaviors. In the current work, I will apply this general idea to cultural norms regarding consistency of a certain behavior vis-à-vis an attitude or alternatively flexibility of the behavior vis-à-vis the attitude. As I shall argue, there is a strong cultural norm toward consistency in Western cultural contexts, but the norm is more in favor of flexibility in Eastern cultural contexts. I will argue, then, that in Western cultural contexts the attitude-behavior consistency would be especially strong when the attitude is surreptitiously perceived as public. In contrast, in Eastern cultural contexts, the attitude-behavior flexibility is especially strong (or, the consistency especially weak) under comparable conditions.

Attitude-Behavior Consistency and Culture

It might be a cultural universal that people form a certain attitude and endorse it as their own. Nevertheless, there is a burgeoning body of evidence suggesting that the condition in which people form potent attitudes varies as a function of cultural background.

The literature has suggested that cultures differ with regard to the norm for public behavior, that is, public manifestation of the private self. In North American cultural contexts, internal consistency of the self across time and situations is highly valued. By contrast, in East Asian cultural contexts, flexibility and appropriate modification of the self depending on the immediate situation is highly valued. One case in point is found in Tafarodi and colleagues (Tafarodi, Lo, Yamaguchi, Lee, & Katsura, 2004). They asked participants with either North American or East Asian cultural backgrounds to indicate whether their inner self was usually expressed through their actions within a variety of activity domains (e.g., time with close friends, coursework and attending classes, participating in sports and other physical activities). The results showed that Japanese and Chinese claimed to experience self-expression in fewer activity domains than did Canadians. The finding suggests that East Asians' public behavior might be constrained by the cultural norm for the contextual adjustment of the private self. Additional support for this notion is threefold.

First, the level of self-consistency as well as the level of self-flexibility has been shown to vary considerably across cultures (Choi & Choi, 2002; Kanagawa, Cross, & Markus, 2001; Spencer-Rodgers & Peng, 2005; Suh, 2002; Tafarodi et al., 2004).

Research has shown that the self-concepts of East Asians are more flexible, context-dependent, and dialectical than those of North Americans (Choi & Choi, 2002; Kanagawa et al., 2001; Spencer-Rodgers & Peng, 2005; Suh, 2002) and that pan-situational self-consistency was lower for East Asians than for Americans (Suh, 2002). On the flip side, the immediate situation (i.e., whom they were with at the moment) had a greater influence on the self-descriptions of East Asians than of Americans (Kanagawa et al.,

2001). In particular, the self-descriptions of East Asians varied across specific situations under which they provided those descriptions (i.e., alone, in the presence of an authority figure, in a large non-interactive group, and interacting with a peer) to a greater degree than those of Americans. Moreover, for East Asians, inconsistencies across different aspects of the self do not appear to be experienced as psychological discomfort as evidenced by the research showing that subjective well-being is less dependent on self-consistency in Korea than in the US (Suh, 2002).

Second, people with different cultural backgrounds also vary in the degree to which they expect others to be consistent (Kashima, Siegal, Tanaka, & Kashima, 1992) and in the extent to which they appreciate and approve of others being consistent across situations (Suh, 2002) or between private thoughts and overt behavior (Fu, Lee, Cameron, & Xu, 2001). Kashima and colleagues (1992) found that people in independentlyoriented cultures (as opposed to those in interdependently-oriented cultures) held a stronger belief in consistency between attitudes and behavior, which may account for why people in independently-oriented cultures tend to make more internal attributions for another person's behavior compared with those in interdependently-oriented cultures. Furthermore, self-consistency is differently acknowledged and socially approved across cultures. In particular, East Asians were found to be more tolerant than North Americans of inconsistencies between others' private thoughts and overt behavior (Fu et al., 2001). While Canadians categorized lies concealing one's prosocial deeds as lies, Chinese did not. On the contrary, Chinese rated deception in such situations positively, and rated truth-telling in those situations negatively. Moreover, self-consistency proved to be positively correlated with social approval in the US but not in Korea (Suh, 2002). In the

study, two informants (one family member and one friend) assessed each participant on the following dimensions: (a) how well the participant deals with social situations and (b) how likeable the target person is. The ratings provided by the informants were analyzed in relation to the level of self-consistency of the participant. The results showed that the informants' evaluations of the participant were significantly correlated with the participant's self-consistency (the more consistent, the more favorably evaluated by others) only in the US but not in Korea. Taken together, these findings suggest that beliefs in and normative expectations of self-consistency are stronger in independently-oriented cultures than in interdependently-oriented cultures.

Finally, empirical findings as well as anthropological observations point to the importance of upholding culturally varying norms for public consistency vis-à-vis public flexibility (Ambady, Koo, Lee, & Rosenthal, 1996; Choi, 2000; Cialdini, Wosinska, Barrett, Butner, & Gornik-Durose, 1999; Doi, 1986; Holtgraves & Yang, 1992). If people in independently-oriented cultures indeed attempt to be consistent across time and situations, they would accept a certain request more readily when they themselves have complied with a similar request in the past (i.e., evidence of internal consistency of the self) rather than when their peers have complied (i.e., evidence of social consensus). This proved to be the case in a comparison between Americans and Poles (Cialdini et al., 1999). Americans were more likely to comply with a second request when they considered their own history of compliance as opposed to their peer's history of compliance, but the reverse was the case for Poles (see also Barrett, Wosinska, Butner, Petrova, Gornik-Durose, & Cialdini, 2004 and Petrova, Cialdini, & Sills, 2007 for similar results).

On the contrary, in East Asian cultural contexts, it is of central importance to attune the private self to the demands of the situation. There is the Japanese folk distinction between *Omote* (in front, surface appearance, and socially acceptable aspect of the self) and Ura (in back, what is kept hidden from others, and aspect of the self hidden from the public) (Doi, 1986). Japanese recognize both of them and highly value the appropriate use of them. Likewise, in Korea there is a cultural emphasis on *Nunchi* in social settings. It is expected that one attends carefully to demands of various situations and behave appropriately to meet the demands (Choi, 2000). Accordingly, one should expect that in East Asian cultural contexts, apparent inconsistencies of the self across time and situations are not only tolerated but also highly valued and rewarded; aptly and adroitly switching across multiple aspects of the self is a critically important skill for a smooth social life for East Asians. East Asians' frequent use of honorific language and adjusting the politeness of their speech to the relationship (e.g., how old the interaction partner is) rather than to the content of the message (e.g., how demanding the request is) is one of the many examples of situational attunement of the self (Ambady et al., 1996; Holtgrave & Yang, 1992).

In sum, the evidence reviewed in this section suggests that people have a strong norm toward attitude-behavior consistency in West, but people have a strong norm toward attitude-behavior flexibility in East. If so, it is likely that European Americans are motivated to show behavior that is consistent with their attitude, especially if they have formed the attitude in public rather than in private settings. On the contrary, Asian Americans are likely to show such attitude-behavior consistency to a lesser degree and thus leave room for flexibly adjusting their behavior to the situation, especially if they

have formed the attitude in public rather than in private.

Conditional Automaticity and Cues of Public Situations

The attitude-behavior norms discussed above are most likely to come into play when the attitude at issue is formed in public. In the examples above, Minjoon might be especially prepared to be flexible in his subsequent behaviors when he has formed his attitude in public and, thus, he knows that the attitude is publicly known. Likewise, Tom might be especially prepared to be consistent in his subsequent behaviors under comparable conditions. Moreover, all this complexity in behavior may be predicted to be quite automatic and thus consciously unmonitored. This prediction is based on the notion of conditional automaticity proposed by Bargh and colleagues (Bargh & Chartrand, 1999; Bargh & Morsella, in press; Bargh & Higgins, 1987).

They argue that goals and motives can become automatically activated by situations. An individual has in his or her memory a representation of motivations. Each of the motivations is associated with goals that are conducive to fulfilling it. Each of the goals is in turn related to various action plans and strategies that can be used to accomplish the goal. These action plans and strategies are associated with specific behavioral tendencies through which the particular plan is carried out. Given that one's motivation, such as being a good person in their cultural context, is fairly stable over time, in many situations a given individual will frequently and repeatedly pursue the same goal (i.e., attaining independence for individuals in Western cultural contexts and achieving interdependence for individuals in East Asian cultural contexts). If the same goal is repeatedly pursued within the same situation, over time one no longer needs to consciously think of what goal to pursue. The situational features directly put the goal

into action. The reasoning above translates into the prediction that with repeated exposure to public situations, people may become to associate publicity and culturally sanctioned patterns of behavior. Thus, in the long run, they become to act automatically and without any conscious effort in the way that their culture sanctions, even when very subtle social cues are given.

In the present study, I utilized the subtle social-context priming procedure as in Chapter 3 in order to bring public situations in mind. The face poster was expected to serve as a potent cue indicating that the situation at hand was public.

## Present Study

The goal of the present investigation is to examine when people with different cultural backgrounds form strong and personally committed, or *potent*, attitudes (Krosnick & Schuman, 1988). As in Chapter 3, in the present study a public condition and a private condition were juxtaposed. In particular, European American and Asian American participants were induced to form attitudes toward novel objects either in public or in private depending on condition, and the potency of the attitude was assessed. It was hypothesized that the participants from different cultural backgrounds would show attitude potency (indexed by attitude accessibility, attitude ambivalence, and attitude-behavior consistency) to a varying degree, depending on the condition in which the attitude was initially formed (Fazio & Zanna, 1981). It was expected that attitude potency would be greater for European Americans when they formed their attitude in public rather than in private. By contrast, the level of attitude potency would be higher for Asian Americans when they formed their attitude in private rather than in public.

#### **METHOD**

# **Participants**

One hundred eighteen students from the University of Michigan (54 European Americans, 46 Asian Americans, and 18 ethnic minorities) were recruited for the study. Each participant received monetary compensation of \$8.1

### Design

The study used a 2 (condition: public vs. private) X 2 (ethnic background: European American vs. Asian American) factorial design.

#### Materials

Study 3 involved three measures of attitude potency, namely, *attitude accessibility* (Fazio, Sanbonmatsu, Powell, & Kardes, 1986), *attitude ambivalence* (or the absence thereof) (Priester & Petty, 1996; Thompson, Zanna, & Griffin, 1995), and *attitude-behavior consistency* (Fazio, 1986; Fazio & Zanna, 1981). Greater attitude potency is indicated by higher accessibility (responding relatively faster to the favorite rather than to non-favorite attitude objects), lower ambivalence (generating fewer negative thoughts about the favorite object), and greater attitude-behavior consistency (the attitude being better at predicting relevant future behavior).

Attitude formation. Participants were provided with five cookies, each of different type (chocolate chip, cranberry walnut, fruit fling, ginger, and oatmeal raisin). They were asked to try each cookie and then complete a post-experience consumer questionnaire. In the questionnaire, they made a taste rating for each cookie using an 11-point scale (–5: extremely unsavory, +5: extremely delicious). In addition, they indicated how much they would be willing to pay to purchase a box of 10 cookies of each kind. Finally, they ranked the five cookies in the order of their preference.

Attitude accessibility. Attitude accessibility was measured with a computer-based response time task. The task involved seven blocks of actual trials along with a block of practice trials. In each block, participants were presented with a set of attitude objects on a computer screen and were asked to indicate their attitude toward each object by pressing the relevant button on the keyboard. Participants were instructed to maximize the speed and the accuracy of their responses.

In the practice block, participants were asked if they liked different music genres that were briefly presented on the screen (i.e., "Do you like the following music genre?"). They were to press the key labeled "Yes" or "No" depending on their attitude toward the particular music genre. Subsequently, five names for music genre (blues, classical, hip hop, jazz, and rock) appeared one by one and remained on the screen until a response was made. The presentation of the music genres was separated by a '+' which alerted participants that a new trial was about to begin. Participants were to press the space bar whenever they were ready to proceed to the next trial. The order of the music genres presented was randomized across participants.

The task structure for each actual block was identical to the task structure for the practice block. In the actual blocks, participants were asked about their attitudes toward the five cookies. A different question was given in each block, which resulted in a total of seven questions. Among them, five questions were phrased positively (i.e., "Do you like the following cookie?", "Do you find the following cookie tasty/flavorful/appetizing/satisfying?"). Two of the questions were worded negatively (i.e., "Do you find the following cookie *bland/unappealing?*") and presented in the third and the sixth blocks in order to prevent participants from responding non-

discriminatively by giving affirmative answers all the time. In each block, the question was followed by the five cookie names. The order of the cookie names presented was completely randomized across blocks and across participants. Again, in order to prevent non-discriminative responses, participants were asked to use the yes and the no keys equally often. The yes or no response to each cookie as well as the response time was recorded. The response latency in the actual trials constitutes the measure of attitude accessibility.

Attitude ambivalence. Attitude ambivalence was assessed by measuring positive and negative components of the attitude toward one's favorite object.

Participants were asked to think about and describe both positive and negative aspects of their favorite cookie. In particular, they wrote down things that they liked about their favorite cookie and things that they didn't like about it or that they thought could be done to make the cookie even more tasty and enjoyable. They were provided with space to list up to ten positive and negative thoughts, respectively. The valence of the description was counterbalanced across participants so that about half completed the positive description first and that the other half completed the negative description first. The ratio of positive to negative thoughts constitutes the measure of attitude ambivalence.

Attitude-behavior consistency. The measure of attitude-behavior consistency was obtained by seeing whether participants chose their favorite cookies when given a chance. Toward the end of the study session, participants were provided with a plate of 12 assorted cookies, selected so that three of them were their favorite, another three of them were their third favorite, and the rest of them were novel cookies of two different kinds. Participants were casually asked to take some cookies home and left alone in the

lab for two minutes while they picked cookies. After the study session was over, the experimenter recorded which cookies and how many of them were taken. Whether the participant took his or her favorite cookie constitutes the main measure of attitude-behavior consistency.

Measures of self-orientation. Three measures of self-orientation involving the ISOQ (Kitayama et al., 2006), the TST (Kuhn and McPartland, 1954), and the modified version of the Singelis's self-construal scale were used. As in Study 2, the scale items for the modified Singelis's scale were counterbalanced so that half of the participants answered independent items first and the other half answered interdependent items first.

Demographic questionnaire. Participants were asked to indicate their gender, age, and ethnic and cultural backgrounds including ethnic identity, native language, how long they have lived in the US, and number of parents and grandparents born in the US.

Procedure

Participants were recruited through fliers posted around campus. All study sessions were run individually. While the study was in session, participants were alone in the lab except when the experimenter delivered task-related instructions.

Cover story. The study was conducted in the guise of a consumer survey.

Participants were told that the survey was to investigate how direct experience with novel commercial products would affect consumers' preference judgments.

*Manipulation of social cues*. Participants were randomly assigned to either the public condition or the private condition. Upon arrival participants were escorted to the lab and seated. As in Study 2, at this point social cues were given to the participants in the public condition. When seated, the participants in the public condition found the

poster of simplified human eyes (Kitayama et al., 2004) hung at their eye level.

Attitude formation. Participants were reminded that as the goal of the survey was to investigate the effect of direct experience with novel commercial products on preference judgments, it would be very important for them to try the products themselves. Shortly afterward, they were provided with the five cookies and the post-experience consumer questionnaire. They were asked to try each of the cookies, and rate and rank those cookies so that they would form attitudes toward them.

Attitude accessibility. When finished with attitude formation, participants were asked to move to another table where the computer-based response time task was administered. Participants were told that the task was to develop a new technique to measure how consumers perceive a variety of commercial products and that their job was to respond, as quickly and accurately as possible, to evaluative questions regarding the cookies they tried earlier in the study.

Attitude ambivalence. After the attitude accessibility task, participants completed the questionnaire in which they described positive as well as negative aspects of their favorite cookie.

Measures of self-orientation and demographic questionnaire. The ISOQ, the TST, and the modified Singelis's self-construal scale were completed in this order. Then participants provided demographic information.

Attitude-behavior consistency. When participants were finished with the selforientation measures and the demographic questionnaire, they were informed that the study session was over. The experimenter told participants that she would go see the lab manager to get the subject fee. When the experimenter came back, she brought them a plate of cookies as described above. The experimenter told participants that she happened to have some extra cookies. The experimenter casually asked them to take some cookies home. The experimenter stayed in the back room for two minutes, ostensibly preparing a subject fee receipt, in order to leave participants alone while deciding whether and which cookies to take.

Probing. Participants were questioned after the cookie choice. In particular, they were asked (a) if they had any questions about the survey; (b) what they thought the goal of the survey was; (c) if they had noticed anything unusual about the survey (if so, they were further questioned); and (d) approximately how many hours ago they had eaten. Participants' responses along with the experimenter's observation of how the particular study session was carried out were recorded. Participants were then fully debriefed about the goal of the study and thanked.

#### **RESULTS**

Data analysis was limited to European Americans and Asian Americans. In addition, six participants were excluded from analysis due to either procedural issues in conducting the study or participants' suspicions about the experimental manipulation. It is noted below when additional participants have been excluded from analysis.

Attitude Accessibility

Four additional participants were excluded from analysis: three of them used the wrong response keys and one of them did not complete the task in the right way (the participant repeated the first half of the task as he missed a question half way through and thus had to go back and restart). Preliminary analyses were conducted in six different ways: using raw scores, scores with three different cutoff values (1SD, 2SDs, & 3SDs),

converted scores (any responses under 300 or over 3000 milliseconds were converted to 300 and 3000 ms, respectively; see Greenwald, McGhee, & Schwartz, 1998), and medians. I strongly suspect the presence of outlier responses as the data distribution was extremely skewed to the right, which, in turn, called for data trimming. In what follows, I present results based on the 1SD cutoff procedure (any response time of 1SD above a subject's mean was eliminated; see Ratcliff, 1993 for rationales in favor of using this particular cutoff).

For each participant, a mean response time to his/her favorite cookie across blocks was calculated. The response latencies to the other, non-favorite cookies were collapsed and averaged for each participant to form a single index of accessibility to nonfavorite attitude objects. The mean scores (mean response time to the favorite and mean response time to the non-favorites) were submitted to a 2 (target: favorite vs. nonfavorite) X 2 (condition: no poster vs. poster) X 2 (ethnic background: European American vs. Asian American) X 2 (gender) mixed ANOVA with the target as the within-subjects factor. First of all, a main effect of the target proved significant: F(1, 82)= 19.23, p < .001, indicating that overall participants responded faster to their favorite object (M = 789.81, SD = 235.99) compared to non-favorite objects (M = 872.61, SD =216.70). In addition, a target X condition X ethnic background interaction was found significant: F(1, 82) = 4.19, p < .05 (Figure 3.1). In particular, the Asian American participants in the no poster condition were relatively faster at responding to their favorite (M = 763.20, SD = 223.35) than to their non-favorites (M = 958.98, SD = 311.65), t (16) = 2.81, p < .025, while their counterparts in the poster condition didn't show any difference across targets in response latency ( $M_{\text{fav}} = 865.23$ ,  $SD_{\text{fav}} = 358.77$  vs.  $M_{\text{non-fav}} =$ 

873.02,  $SD_{\text{non-fav}} = 244.46$ : t (22) = .20, n.s.). Note that for the Asian American participants, a target X condition interaction was significant: F (1, 36) = 5.96, p < .025. No target X condition interaction was significant for the European American participants: F (1, 46) = .72, ns.

#### Attitude Ambivalence

Participants were prompted to generate both positive and negative thoughts toward their favorite target. The proportion of negative descriptions to total descriptions was calculated so that the higher the score, the more negative the attitude toward the favorite target should be (the score ranges from 0.00 to 1.00). Considering that the participants had picked the target as their favorite, it is reasonable to assume that they generally held positive attitudes about the target. Thus, it makes sense to expect that the more they described negative aspects of their favorite object, the more likely they had an ambivalent attitude (i.e., the presence of both positive and negative components in the attitude toward the favorite). In short, I expected the proportion of negative descriptions of the favorite object to be a measure of attitude ambivalence. Note that four additional participants were left out of the analysis below because they didn't follow task instructions correctly (they commented on either one of their non-favorite cookies or all the cookies provided).

First of all, it was found that the proportion of negative descriptions (M = .41, SD = .14) was significantly lower than the statistical midpoint (.50), t (89) = 6.21, p < .001, supporting the assumption that overall participants had positive attitudes toward their favorite cookie. The proportion of negative descriptions was submitted to a 2 (condition) X 2 (order: positive description first vs. negative description first) X 2 (ethnic

background) X 2 (gender) factorial ANOVA. A condition X ethnic background interaction proved marginally significant: F(1, 74) = 3.63, p = .06. The results indicated that the European Americans in the poster condition were less ambivalent about their favorite attitude object (M = .38, SD = .11) than the European Americans in the no poster condition (M = .44, SD = .12): t(48) = 2.08, p < .05. By contrast, the Asian Americans in the poster condition tended to be more ambivalent (M = .43, SD = .16) than the Asian Americans in the no poster condition (M = .38, SD = .16): t(38) = .91, ns. Attitude-Behavior Consistency

Six participants were excluded from analysis due to procedural issues (e.g., wrong cookies provided). In addition, participants who took either the whole plate or none of the cookies were also excluded from analysis. Each of the remaining participants was assigned a score of zero or one depending on their cookie choice (0 = favorite cookienot taken, 1 = favorite cookie taken).<sup>2</sup> A condition X ethnic background X gender ANOVA was conducted on those scores to see if the proportion of participants who took their favorite cookies varied as a function of condition and ethnic background.<sup>3</sup> The results showed that the European American participants in the poster condition were more likely to take their favorite cookies than their counterparts in the no poster condition (82% vs. 64%). This finding is consistent with the notion that in public settings, European Americans form more potent attitudes that are predictive of their future behavior than they do in private settings. However, such a difference was not observed in the Asian American participants (70% in the poster condition vs. 67% in the no poster condition). No interaction between condition and ethnic background was found significant: F(1, 49) = .19, n.s.

The self-orientation measures were analyzed (a) as a function of ethnic background and condition, and (b) as individual difference measures in relation to the attitude potency measures. First, a main effect of ethnic background was anticipated in such a way that European Americans would be more independent and less interdependent than Asian Americans. However, no strong *a priori* prediction was made as to differences across conditions in self-orientation, nor was any interaction expected between ethnic background and condition. All participants completed the self-orientation measures in the absence of the poster: right after participants formed their attitude toward target objects, they moved to another table, where no poster was presented, to complete the rest of the tasks. Thus, the effect of the poster manipulation on the self-orientation measures must have been minimal or non-existent. Second, those with independent self-orientation were expected to show greater attitude potency than those with interdependent self-orientation (faster response time, lower ambivalence, and higher attitude-behavior consistency).

*ISOQ*. As in Study 1, two indices of self-orientations were drawn from the ISOQ, namely, the when-do-I-feel-happy measure and the relative intensity of disengaging over engaging emotions.

1. The when-do-I-feel-happy measure: The mean unstandardized regression coefficient for disengaging emotions in predicting happiness and the mean unstandardized regression coefficient for engaging emotions in predicting happiness were submitted to a 2 (emotion type: disengaging vs. engaging) X 2 (condition) X 2 (ethnic background) X 2 (gender) mixed ANOVA with the emotion type as a within-subjects factor. As expected, the condition did not have any impact on the degree to which

different types of emotions predicted happiness across ethnic groups (emotion type X condition X ethnic group: F(1, 86) = 1.35, ns). However, contrary to expectations, ethnic groups did not differ in the extent that disengaging and engaging emotions predicted happiness: F(1, 86) = .30, n.s. (For European Americans mean beta for disengaging and engaging emotions = .46 and .46, respectively; for Asian Americans mean beta for disengaging and engaging emotions = .51 and .34, respectively.)

2. The relative intensity of disengaging over engaging emotions: The mean relative intensity of disengaging over engaging emotions was submitted to a 2 (condition) X 2 (ethnic background) X 2 (gender) factorial ANOVA. Again, consistent with expectations, the relative intensity of experiencing disengaging over engaging emotions did not vary as a function of ethnic background and condition: F(1, 86) = .01, n.s. Importantly, in line with expectations, a main effect of ethnic background was marginally significant: F(1, 86) = 2.97, p = .09. The results indicate that European Americans, compared with Asian Americans, tended to experience disengaging emotions more strongly than engaging emotions ( $M_{EA} = .56$ ,  $SD_{EA} = .48$  vs.  $M_{AA} = .40$ ,  $SD_{AA} = .60$ , where higher scores represent a stronger experience of disengaging over engaging emotions).

TST. Participants' self-descriptions were analyzed along two dimensions: level of self-construal (personal vs. relational/interpersonal vs. collective; Brewer & Gardner, 1996; see Table 3.1 for an outline of the coding scheme) and valence (positive vs. neutral vs. negative). Two judges who were blind to the hypothesis independently analyzed the self-description data for each dimension. Disagreements between the two were resolved by a third judge. The data analysis was done on each independent clause consisting of no

more than one verb-object, verb-predicate nominative or verb-predicate adjective sequence. Thus, even if a participant generated twenty statements, the total number of meaning units for the participant could be greater than 20.

The data analyses were two-fold. The first data analysis involved examining differences across ethnic backgrounds and as a function of ethnic background and condition with regard to the proportion of the self-descriptions that fell into each category (i.e., the number of meaning units in each category divided by the total number of meaning units generated by the participant). In addition, the first five meaning units were tested separately, with the assumption that those prompt responses might reflect the most characteristic aspects of the self. In other words, the number of meaning units that belonged to each category was counted and submitted to another analysis. For each dimension, I expected that the European American participants, as compared with the Asian American participants, would be more independent and less interdependent (greater number of personal and positive self-descriptions).

1. Level of self-construal: The proportions of the personal, interpersonal/relational and collective self-descriptions were subjected to a 3 (self-construal: personal vs. relational/interpersonal vs. collective) X 2 (condition) X 2 (ethnic background) X 2 (gender) mixed ANOVA with the self-construal as the within-subjects factor. A main effect of self-construal proved significant, F(2, 172) = 1480.91, p < .001, indicating that overall participants' self-descriptions pertained predominantly to the personal self (M = .90, SD = .13) rather than to the relational/interpersonal (M = .06, SD = .08) or to the collective self (M = .05, SD = .07). The level of self-construal did not vary across ethnic groups (self-construal X ethnic background: F(2, 172) = .45, n.s.) nor

as a function of ethnic background and condition (self-construal X condition X ethnic background: F(2, 172) = .80, n.s.).

The data from the first five responses were submitted to another 3 (self-construal: personal vs. relational/interpersonal vs. collective) X 2 (condition) X 2 (ethnic background) X 2 (gender) mixed ANOVA. Again, a main effect of self-construal proved significant, F(2, 172) = 362.38, p < .001, indicating that participants' first five self-descriptions mostly concerned the personal self (M = 4.28, SD = 1.20) rather than the relational/interpersonal (M = .23, SD = .56) or the collective self (M = .48, SD = 1.02). Importantly, and different from the analysis above, the level of self-construal tended to vary across ethnic groups when only the first five self-descriptions were considered; self-construal X ethnic background: F(2, 172) = 3.06, p < .05. As expected, European Americans and Asian Americans tended to differ in the number of personal self-descriptions ( $M_{EA} = 4.48$ ,  $SD_{EA} = .97$  vs.  $M_{AA} = 4.05$ ,  $SD_{AA} = 1.38$ : t(92) = 1.78, p = .08) and in the number of collective self-descriptions ( $M_{EA} = .30$ ,  $SD_{EA} = .79$  vs.  $M_{AA} = .68$ ,  $SD_{AA} = 1.22$ : t(92) = 1.83, p = .07). A self-construal X condition X ethnic background interaction was not significant: F(2, 172) = .40, n.s.

2. *Valence*: The proportions of the positive, neutral and negative self-descriptions were submitted to a 3 (valence: positive vs. neutral vs. negative) X 2 (condition) X 2 (ethnic background) X 2 (gender) mixed ANOVA with the valence as the within-subjects factor. The valence of self-descriptions did not vary across ethnic groups (valence X ethnic background: F(2, 172) = .25, n.s.) nor as a function of condition and ethnic background (valence X condition X ethnic background: F(2, 172) = 1.71, n.s.). The data from the first five responses were subjected to another 3 (valence: positive vs. neutral vs.

negative) X 2 (condition) X 2 (ethnic background) X 2 (gender) mixed ANOVA. Again, no effect of ethnic background nor any ethnic background X condition interaction proved significant: F(2, 172) = 1.99, p > .10 and F(2, 172) = .51, n.s.

Singelis's self-construal scale – modified version. The internal reliability of the scale items was in the acceptable range (standardized Cronbach's alpha = .72 for the independence items and .64 for the interdependence items). Responses to the scale items were averaged to form a single index for independence and another index for interdependence. The mean scores were then submitted to a 2 (scale type: independence vs. interdependence) X 2 (scale order: independence first vs. interdependence first) X 2 (condition) X 2 (ethnic background) X 2 (gender) mixed ANOVA with the scale type as the within-subjects factor. There was a marginally significant main effect of scale type: F(1,77) = 2.97, p = .09. The results indicated overall that, as expected, participants tended to score higher on independence than on interdependence ( $M_{ind} = 3.70$ ,  $SD_{ind} = .51$  vs.  $M_{int} = 3.56$ ,  $SD_{int} = .51$ ). Responses to the scale did not vary as a function of scale type and ethnic background, F(1,77) = .05, n.s., nor as a function of scale type, condition, and ethnic background: F(1,77) = .09, n.s.

#### Correlations Across Measures

All the measures above were put into a correlation analysis. It was expected that the three measures of attitude potency (accessibility, ambivalence, and consistency) would be correlated with each other in the following ways: (a) the higher the accessibility, the less ambivalent was the attitude; (b) the higher the accessibility, the more likely that the attitude predicted the behavior; and (c) the more ambivalent the attitude, the less likely that it predicted the behavior. Regarding the self-orientation measures, it was

expected (a) that those whose happiness was better predicted by the experience of disengaging than engaging emotions would generate a greater number of personal and positive self-descriptions; (b) that those whose happiness was better predicted by the experience of disengaging than engaging emotions would score higher on the independence items in the modified Singelis's self-construal scale and lower on the interdependence items; and (c) that those who provided more personal and positive self-descriptions would score higher on the Singelis's independence and lower on the Singelis's interdependence. It was also anticipated that the attitude potency measures would be correlated with the self-orientation measures in the theoretically predicted direction; in particular, higher independent self-orientation was expected to be positively related to greater attitude potency.

Inter-correlations among attitude potency measures. Different from expectations, the three measures of attitude potency did not correlate with each other; r (81) = .08 between accessibility and ambivalence, r (51) = -.03 between accessibility and consistency, and r (51) = -.13 between ambivalence and consistency, all n.s.

Inter-correlations among self-orientation measures. In the self-orientation measures, it was found (a) that the more strongly one experienced disengaging over engaging emotions, the lower the person scored on the Singelis interdependence scale, r (80) = -.26, p < .025; and (b) that the more that one provided positive self-descriptions, the higher the person scored on the Singelis independence scale: r (80) = .22, p < .05. Additionally, as may be expected, (a) the proportion of personal self-descriptions in the TST was correlated with the proportion of positive descriptions in the TST, r (81) = .30, p < .01; and (b) the levels of Singelis independence and interdependence were negatively

correlated with each other: r(80) = -.27, p < .025.

Correlations between attitude potency and self-orientation measures. The proportion of positive self-descriptions was negatively correlated with the measure of attitude ambivalence: r(81) = -.30, p < .01. Consistent with expectations, the findings indicate that the more independent, the less likely one had an ambivalent attitude. No other correlations were found significant.

#### DISCUSSION

Where consistency is the norm in public settings (Western cultures), people are likely to form relatively more potent attitudes in public than in private. On the contrary, where flexibility and appropriate modification of the self is the norm in public settings (East Asian cultures), people tend to form more potent attitudes in private than in public. Though not yet conclusive, the findings of the present study support the above notion that cultural norms have an impact on attitude formation.

First, the results for the attitude accessibility measure showed that as expected, the Asian Americans in the no poster condition responded relatively faster to their favorite object than to non-favorite objects while their counterparts in the poster condition did not show any such differences in response latency as a function of target type (favorite vs. non-favorite). The findings suggest that Asian Americans form more readily accessible attitudes in contexts where social cues are absent than present.

Replicating past research, European Americans responded faster to their favorite object than non-favorite objects, yet the response latency of European Americans did not vary across conditions. Thus, the hypothesis as to the interaction between condition and ethnic background was partially supported.

Second, consistent with expectations, the results for the attitude ambivalence measure demonstrated that the attitude of the European Americans was less ambivalent when it had been formed in the poster condition compared to the no poster condition. By contrast, the attitude of the Asian Americans was less ambivalent when formed in the no poster than in the poster condition. Third, the results for the attitude-behavior consistency measure indicated that the European Americans, when they formed their attitudes in the public than private setting, were more likely to show attitude-consistent behavior later in the study. No difference as a function of condition was found for the Asian Americans. Methodological issues may account for the null findings in the Asian Americans as will be discussed in detail shortly. Finally, inconsistent with expectations, overall the Asian Americans in the study were no less independent nor more interdependent than the European Americans, which will be discussed further below.

## Ethnic Identification of Asian Americans

No clear evidence was found that the Asian Americans in the study were less independent and more interdependent than the European Americans, with the exception of the following two indices: (a) the relative intensity of disengaging over engaging emotions and (b) the number of personal as opposed to relational/interpersonal or collective self-descriptions out of the first five descriptions in the TST. (As expected, on both measures the Asian Americans tended to show a more interdependent pattern, compared with the European Americans.) The level of ethnic identification of this particular Asian American sample may account for the null findings. It has been noted that there are individual differences among ethnic minorities in the degree to which they identify themselves with their culture of origin (Berry, 1980; Berry, Trimble, & Olmedo,

1986; Hutnik, 1986; Phinney, 1990). As such, it may be reasonable to assume that some of the Asian Americans in this study were more motivated toward independence than expected, or it may even be that the Asian Americans generally had a low level of ethnic identification.

To examine the possibility, I divided the Asian American participants into ethnically identified (ID) and unidentified groups (UID) based on the TST (Rhee, Uleman, Lee, & Roman, 1995). Those who mentioned their ethnicity or culture of origin in completing the TST were classified into the ID group (n = 16) and those who didn't were classified into the UID group (n = 28). The two groups were compared with regard to the proportion of personal self-descriptions and the proportion of positive self-descriptions in which higher numbers represent stronger independent orientation. The results showed that on average, the UIDs were significantly more likely than the IDs to provide personal self-descriptions (M = .96, SD = .07 vs. M = .76, SD = .15; t (42) = 5.80, p < .001) as well as positive self-descriptions (M = .53, SD = .23 vs. M = .39, SD = .20; t (42) = 2.01, p = .05).

A further analysis showed that the UIDs may have been even more independent than the European Americans in the study. The UIDs not only tended to provide a greater number of positive self-descriptions than the European Americans (M = .53, SD = .23 vs. M = .48, SD = .22; t (76) = .93, n.s.), but they also generated a significantly greater number of personal self-descriptions than did the European Americans (M = .96, SD = .07 vs. M = .90, SD = .13; t (76) = 2.04, p < .05). The findings would imply that there were substantial variations in the degree of ethnic identification in the Asian American sample to the extent that some were even more independent than the European

Americans.<sup>4</sup> In addition, prestigious universities such as the University of Michigan might attract ethnic minorities who are especially well-adjusted to the mainstream culture and also highly goal-oriented to the extent that they are no different from European Americans with regard to motivation toward independence. The fact that the Asian American sample in the present study is mainly comprised of those who were ethnically unidentified is in line with this speculation.

## Attitude Formation vs. Attitude Change

The present study seems contradictory to research on cognitive dissonance in social settings, which demonstrates that Westerners experience no dissonance in some social circumstances while East Asians experience dissonance under some situations where social cues are involved. Typically, individuals with Western cultural backgrounds show a strong cognitive dissonance effect (Festinger, 1957). They attempt to reduce dissonance by aligning their attitude with their behavior (e.g., Festinger & Carlsmith, 1959) or by increasing their liking for the chosen item relative to the rejected alternative (e.g., Brehm, 1956). However, Zanna and Sande (1987) have found that Westerners experienced no dissonance about freely chosen counter-attitudinal behavior if they enacted the behavior as a group and thus were not personally held responsible for the group's choice (See Cooper & Mackie, 1983 for similar findings). As such, the study suggests that for Westerners, personal accountability is the key to the experience of cognitive dissonance. Recent cross-cultural examinations of the interpersonal (vis-à-vis personal) dissonance effect shows, different from what had been formerly believed (i.e., lack of dissonance effect in East Asians; e.g., Heine & Lehman, 1997), that individuals with East Asian cultural backgrounds exhibit post-decisional dissonance when they make

a choice for a friend as opposed to for themselves (Hoshino-Browne, Zanna, Spencer, Zanna, Kitayama, & Lackenbauer, 2005). Another study has found that even the presence of very subtle social cues sufficed to induce dissonance in East Asians (Kitayama et al., 2004). Taken together, both studies suggest that for East Asians, worries about interpersonal aspects of the self may bring about cognitive dissonance.

If cognitive dissonance is taken as a proxy for attitude potency (i.e., people experience cognitive dissonance when they act contrary to clearly defined attitudes), some might infer from the dissonance research that for Westerners attitudes would be more potent when formed in private than in public since they are known to experience dissonance in private but not in public. Likewise, some might also suggest that Easterners would form more potent attitudes in public rather than in private as they experience dissonance only in social situations but not in private contexts. However, the present study indicates the opposite. It is unclear what brings about the seemingly inconsistent results, but I suggest that they could be combined. Think about the typical post-decisional justification study in which people have to decide between two similarly attractive, yet not their favorite, items. If one's attitude toward two similarly attractive objects is ambivalent (i.e., seeing both positive and negative outcomes that would result from choosing one over the other), then one can't help having hard time deciding. According to the present study, this should be more so for European Americans in private than in public and Asian Americans in public than in private. Thus, the European Americans in private, compared with those in public, would feel the need to justify their choice more strongly and subsequently make a greater effort for dissonance reduction. The reverse would be the case for Asian Americans. Then the critical test would be to examine if

European Americans in private and Asian Americans in public settings, as compared with their respective counterparts, (a) indeed hold more ambivalent attitudes and (b) thus take longer in making a choice between two options.

Methodological Issues and Future Directions

Regarding the attitude-behavior consistency measure, a couple of methodological issues should be noted. First of all, quite a few participants were able to point out the link between the consistency measure and the main part of the study (e.g., "Did you want to see how consistent I was with the things I liked?"). As specified in the Results section, some participants expressed suspicion about the measure or directly pointed out how the measure would relate to the study. Given the number of participants who made correct guesses, I would assume that there might have been some other participants who had suspicions yet did not express anything. Thus, unfortunately the measure seems to have been more obtrusive than desired. Second, quite independent from attitude potency, culture-specific expectations for compliance with the authority could have affected the cookie choice (Petrova et al., 2007). In particular, it may have been the case that regardless of their attitudes toward the cookies provided, the Asian American participants across conditions were more compliant and thus felt more obliged than the European American participants to take cookies as the experimenter offered them. Indeed, the data suggest that overall a greater proportion of the Asian American participants than the European American participants took some cookies, including both favorite and nonfavorite ones (proportion of the participants who took at least one cookie of any kind = .80 for Asian Americans vs. .62 for European Americans, F(1, 86) = 3.41, p = .07). In sum, the attitude-behavior consistency measure appears not to have been sensitive

enough to reflect variations in attitude potency. Thus, methodological refinements are called for in future research. For instance, one should consider having an interval between the initial attitude formation and the attitude-behavior consistency measure so that the purpose of the measure is not so transparent. Also, future studies should attempt to measure spontaneously enacted behavior as opposed to requested behavior that may entail unwanted cultural confounds.

## Footnotes

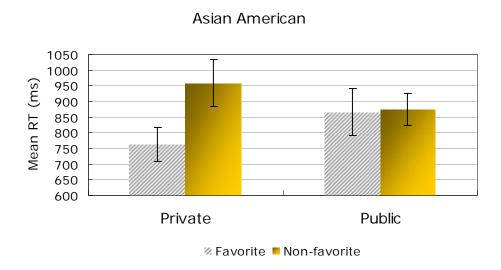
- <sup>1</sup> Those who identified themselves as Asian American and have spent at least half of their lifetime in the US were classified as Asian American.
- <sup>2</sup> A total of 9 participants expressed suspicion or directly pointed out how the measure would relate to the study. Excluding them from the analysis did not change the data pattern above.
- <sup>3</sup> It is well documented that when proportions are not too extreme (e.g., between .15 and .85), it is appropriate to use the standard ANOVA methods (D'Agostino, 1971; Lunney, 1970; Rosenthal & Rosnow, 1985).
- <sup>4</sup> There is a suggestion in the literature that in the course of acculturation some ethnic minorities may overshoot the norm of the dominant culture (Triandis, Kashima, Shimada, & Villareal, 1986).

Table 3.1

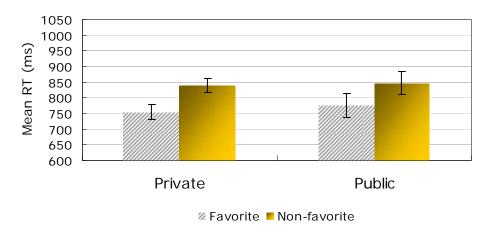
Coding scheme for level of self-construal

	The personal self is the representation of the self as a unique being,
Personal  Relational / Interpersonal  Collective	differentiated from other individuals. Descriptions of the personal self usually contain references to individual physical qualities, personality
	and other traits, attitudes, or activities.
	The relational/interpersonal self is the aspect of the self defined in
	terms of social roles and relationships with significant others such as
	family members.
	The collective self is the aspect of the self defined in terms of
	prototypical features that are shared among members of an ingroup. It
	is closely related to social identity. Descriptions of the collective self
	include references to institutional memberships and other socially
	defined status.
Other	Responses that don't readily fit into the classification system above

Figure 3.1 Mean response latency as a function of target (favorite vs. non-favorite), condition and ethnic background: Asian American (top panel) and European American (bottom panel).



# European American



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#### **CHAPTER 5**

#### CONCLUSION

The self is a socio-cultural product, as has been often acknowledged since the beginning of psychological inquiries into the self (Baumeister, 2005; Cooley, 1902; Mead, 1934; Kitayama, Duffy, & Uchida, 2007). Yet, a number of questions have been left unexplored, including (a) how culturally normative expectations toward independence or interdependence of the self are internalized, and (b) how those normative expectations in cultures guide and alter the way people across cultures construe of the self.

In order to address the American emphasis on independence, Chapter 2 drew on the voluntary settlement hypothesis (Kitayama, Ishii, Imada, Takemura, & Ramaswamy, 2006) and compared Americans to Western Europeans. Despite their common cultural heritage that acknowledges the independence of the self, North Americans were expected to be more extreme in their orientation toward independence than Western Europeans as the United States has a history of voluntary settlement on the frontier. The history of voluntary settlement might have given rise to a cultural emphasis on strongly personal forms of success and achievement. I expected that differences between Americans and Western Europeans would be especially pronounced in psychological features that are closely associated with survival in and adaptation to harsh and primitive frontier environments. In a tri-cultural comparison involving the US, Germany, and Japan, I

found that as expected, Americans and Germans are higher than Japanese in all the three facets of independence. Of greater importance to the present investigation, I found that consistent with expectations, Americans are higher than Germans especially in motivational independence (personal rather than communal goal orientation) and that the US is higher than Germany in normative independence (societal reward contingency sanctioning independence vis-à-vis interdependence). However, Americans were no different from Germans in epistemic independence (dispositional bias in social judgment).

Whereas Chapter 2 demonstrated an impact of a socio-historical factor on individuals' motivational propensities as well as on societal normative expectations, Chapter 3 identified a mechanism underlying how normative expectations toward independence or interdependence are internalized and personally endorsed. In Chapter 3, I proposed that public self-presentation would lay the groundwork for the internalization of normative self-views. In particular, I hypothesized that in public rather than in private settings, people are more likely to describe and assess themselves in line with the normative self-view in their cultural context. As expected, it was found that Americans were more likely in public than in private to describe themselves by reference to inner attributes and assess themselves to be independent, thereby endorsing to a greater degree the culturally normative view of the self as an independent and bounded entity. By contrast, it was shown that Japanese were more likely in public than in private to describe themselves by reference to social roles and status and assess themselves to be interdependent, thereby endorsing to a greater degree the culturally normative view of the self as an interdependent and relational entity. The results suggest that in public, people routinely present themselves more in line with the culturally normative way than they

privately believe themselves to be. As a consequence of such routine public self-presentations, associations between publicity and culturally sanctioned self-attributes may emerge. If so, what might seem to be merely public self-presentations are likely to provide a basis for genuine self-perceptions in the long run.

While Chapter 3 examined a culturally common mechanism for the internalization of culturally varied normative expectations, Chapter 4 sought to illuminate culture-specific consequences that those normative expectations would bring about. Cultures vary with regard to the norm for the public manifestation of the private self. Whereas public consistency is highly valued in North American cultural contexts, public flexibility is highly valued in East Asian cultural contexts. Thus, it was expected that forming attitudes in public settings would differentially affect, as a function of culture, the potency of those attitudes. In particular, it was anticipated that European Americans would show greater attitude potency if they have formed attitudes in the public rather than in the private condition. On the contrary, it was expected that Asian Americans would show lower attitude potency and thus leave room for flexibly adjusting their behavior to the situation if they have formed the attitude in the public rather than in the private condition. The results from Chapter 4 gave partial support for this hypothesis.

As expected, Asian Americans in the private condition responded relatively faster to their favorite attitude object than to non-favorite objects, whereas Asian Americans in the public condition did not show any such variation in response latency as a function of target type. The findings suggest that Asian Americans form more readily accessible attitudes in contexts where social cues are absent than present. Second, in support of the hypothesis, the attitude ambivalence measure revealed that the attitude of

European Americans was less ambivalent and thus more potent when the attitude had been formed in the public than private condition. In contrast, the attitude of Asian Americans was found to be less ambivalent when it had been formed in the private than public condition. Third, the attitude-behavior consistency measure demonstrated that European Americans tended to show attitude-consistent behavior more frequently when they had formed their attitudes in the public than private condition. Taken together, the findings indicate that attitude potency varies as a function of culture and condition.

As a whole, the present dissertation delineated the intricate interplay of sociohistorical factors, culture's normative expectations toward the independence or the
interdependence of the self, and the individual's self-orientations. Such an attempt
resonates not only with the ongoing research on the socio-cultural construction of the self,
but also suggests promising directions for future research. For example, there is a
burgeoning body of data demonstrating that there are considerable variations within the
US along the dimension of independence and interdependence (Plaut, Markus, &
Lachman, 2002; Vandello & Cohen, 1999). Albeit there have been attempts to account
for those variations in light of various historical and environmental factors, this line of
inquiry has been largely descriptive and no effort has been made to theoretically predict
and systematically explicate those variations. As has proven fruitful in Chapter 2,
drawing further on the voluntary settlement hypothesis to predict regional variations in
the US and compare more frontier-oriented regions to other regions in the US may
advance our understanding of the socio-cultural construction of the self.

It should be also noted that there are questions yet to be resolved. Some of the issues specific to each study were discussed in each chapter. In Chapter 3, I suggested

that an implication of public self-presentation would be a build-up of associations between publicity and culturally sanctioned self-attributes in the mind, which in turn would provide a basis for genuine self-perception in the long run. If so, future studies should examine the effect of public self-presentation longitudinally. Another issue concerns the influence of cultural norms in constituting attitudes and other aspects of the self. Chapter 4 suggests that the potency of the attitude formed in public settings reflects culturally varying norms for the public manifestation of the private self. If so, one might expect that in domains where there are culturally universal norms (e.g., helping, cooperation), the presence of social cues enhance attitude-behavior consistency, regardless of cultural background. Together with the findings of Chapter 4, such exploration will provide us with a clearer picture how cultural norms guide and shape the self.

Emil Durkheim (1964) once analogized culture for humans to water for fish.

Culture is powerful in shaping a number of human experience and psychological processes, not to mention the self. Taking cultural psychological perspectives further is crucial in explicating and understanding the self in dynamically changing and ever becoming diverse social conditions. I hope that my endeavor to delineate, from a cultural psychological perspective, the interplay of socio-historical factors, norms, and self-orientations will advance our understanding of the self and promote future research on this topic.

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