# Oxford Handbooks Online

## Language and Culture a

Yoshihisa Kashima, Emiko Kashima, and Evan Kidd The Oxford Handbook of Language and Social Psychology Edited by Thomas M. Holtgraves

Print Publication Date: Sep 2014 Subject: Psychology, Social Psychology

Online Publication Date: Mar 2014 DOI: 10.1093/oxfordhb/9780199838639.013.010

### **Abstract and Keywords**

This chapter argues that language and culture have a bidirectional causal link: linguistic practices emphasizing context (contextualizing practices) may encourage people to process a visual stimulus as a bounded figure-ground configuration (field dependent), whereas linguistic practices emphasizing the separation of an object from its context (decontextualizing practices) may encourage people to abstract figure from ground (field independent). Once a certain cognitive style is in place, people are likely to use their language in the way congruent with their cognition. Linguistic practices thus act as an important medium through which culture is transmitted and maintained. In support of this analysis, the authors show that the geographical distribution of linguistic practices overlaps with that of cognitive style, with contextualizing linguistic practices/field-dependent style in East Asia and decontextualizing linguistic practices/field-independent style in Western European-derived cultures. Bilinguals show default cultural accommodation, exhibiting a cultural pattern congruent with the norm of the linguistic community/language they are using.

Keywords: culture, linguistic practice, contextualizing, decontextualizing, field independent, field dependent, holistic cognitive style, analytic cognitive style, bilingualism, biculturalism

Culture consists of a set of nongenetically transmitted information that can potentially influence human action. In this chapter, the term *meaning* is used to refer to information that can potentially influence human action. So, culture can be understood as a set of nongenetically transmitted meaning. When such meaning is widely shared within a population and transmitted from one generation to another, it is said to be part of culture. In many ways, language is an integral part of culture thus broadly defined. Language is presumably unnecessary to transmit cultural information if nonhuman primates and other animals are capable of having a culture (e.g., Whiten & van Schaik, 2007); however, the type of cultures that humans have is inconceivable without language. Imagine a world without a language, then try to build a parliamentary democracy, a legal system, a stock exchange, a banking system, and myriad other infrastructures of everyday life that we have come to take for granted. Given that these institutions are cultural products, it is easy to see the role that language must have played in the constitution of human culture. In short, humans use language to form, maintain, and transform their cultures. Language is a critical semiotic tool with which humans construct and exchange meaning (Holtgraves & Kashima, 2008).

Without a doubt, humans use language to produce desired social effects and to avoid undesirable ones. As speech act theorists have suggested (e.g., Austin, 1964; Searle, 1969; see Holtgraves, 2002), language use is a social action. That is to say, language is used with an intention to produce desired end results. Nonetheless, using a tool has (p. 47) consequences that the tool was not designed to produce. When cutting a tree with a saw, we do not typically intend to make sawdust. Sawdust is a side effect or an unintended consequence of using a saw. Likewise, using a language can also have its unintended consequences, consequences that can make up those aspects of cultures of which people are not necessarily aware.

Such unintended consequences may stem from two sources. First, we typically use language with an audience in mind. In other words, language is used not necessarily for the speaker, but for the listener. The way in which the speaker uses language—choice of words, grammatical construction, perspective, and the like—is bound to influence the way the recipient of the description understands what is described. This is because the listener usually constructs a mental or "situation model" of the object of description (e.g., Zwaan, 2004; Zwaan & Radvansky, 1998). Language can be used to describe an object or event from a variety of perspectives, each of which will typically invite the listener to construct a certain mental model. Consequently, language use may end up shaping the listeners' cognition as an unintended consequence of language as a semiotic tool. Second, when the speaker uses language for communication, the process of linguistic encoding itself can help shape the mental model that the speaker ends up making for him- or herself. There is plenty of evidence of the cognitive impact of language use on the speaker as well (for a review, see Holtgraves & Kashima, 2008). As we take turns in conversation, the listener and speaker effects of language use can compound and

reinforce each other. Once a certain cognitive style is in place, this can drive language use. Thus, language and culture are tightly connected.

In this chapter, we argue that the ways in which people use their language, which we call linguistic practices, may act as one of the important mediums of cultural transmission; that is, language serves as a medium through which cultural information about how to use one's mind is transmitted. In other words, we argue that by learning to use a language in a certain way, we may also learn to use our minds in a certain way. We first define what we mean by linguistic practice and then review the literature to show that there are a number of linguistic practices that direct listeners' attention differently. Some linguistic practices direct listeners' attention to the focal object at the expense of the context in which it is embedded (decontextualizing), whereas others tend to direct listeners' attention to the context in which the object is the figure against the contextual ground (contextualizing). Then, we suggest that the geographical distributions of linguistic practices and cognitive styles appear to overlap. In particular, linguistic practices that tend to contextualize (contextualizing linguistic practices) are more prevalent in East Asian countries. In contrast, linguistic practices that tend to decontextualize (decontextualizing linguistic practices) are more prevalent in Western European-based societies. Interestingly, the geographical distribution of what Nisbett, Peng, Choi, and Norenzayan (2001) called analytic and holistic cognitive processing styles appear to coincide with the distribution of linguistic practices: holistic and analytic styles appear to be prevalent in Western European-based and East Asian societies, respectively. We examine the association between linguistic practices and social perception in monolingual populations, and then we investigate their links further by reviewing the literature on bilinguals' cognition and behavior when they use different languages.

# Language Use and Linguistic Practice

Let us first illustrate what is meant by a linguistic practice. Suppose that you hear the following utterance:

(1) The ham sandwich has just spilled the beer all over himself.

What do you make of it? Probably this doesn't make much sense. Let us then put some context around it. So, imagine an ordinary diner. A customer orders a ham sandwich and a beer. The waitress delivers the order. The customer begins to attack his supper...and an accident! She runs back to the kitchen and makes this utterance to her colleagues. Now, does it make sense?

The utterance was in fact concocted by a cognitive linguist, George Lakoff (1987, p. 77) as an example of *metonymy*, a form of figurative speech in which a part is used to refer to the whole. So, the ham sandwich is used to refer to the man who ordered it at the diner. Other examples of metonymy include The White House for the US government, The Kremlin for the government of Russian Republic, and so on. Nonetheless, the point we wish to make is not so much about metonymies, but that an utterance like this is possible as an exemplar of language use, even though it is an unusual nonstandard English usage. We call such a particular, and possibly one-off, instance of language use a token (p. 48) language use. However, this type of language use, or a type language use—using a customer's order to refer to the customer—could become a prevalent mode of reference in this diner (e.g., The Milkshake on table 7). If most waiters and waitresses used these metonymic extensions frequently, then the next generations of waiters and waitresses might do so as well and subsequently pass on this mode of speech to further generations who work at the diner. We call such repeated and widespread employment of type language use a linguistic practice (Holtgraves & Kashima, 2008; Kashima, Kashima, Kim, & Gelfand, 2006). Whereas a token language use clearly belongs to Saussure's (1966) parole, a linguistic practice is arguably part of language as a system (Saussure's langue).

# Contextualizing Versus Decontextualizing Linguistic Practices

The social psychological literature has identified several linguistic practices that can be summarized under the general dimension of contextualizing versus decontextualizing. To explain this dimension, imagine a scene in a corporate board room. A middle-aged man in a business suit is enthusiastically talking to a group of men and women who are intently listening and taking notes. In verbally describing a concrete scene of this sort, social

psychology has identified at least three general categories of information that people use: actor, action, and context. Roughly corresponding to these elements, there are three elements in a sentence: subject, predicate, and context. For instance, the event can be described by a sentence as:

(2) He enthusiastically talks to people in the board room.

"He" is the subject of the sentence, "enthusiastically talks to people" is a predicate, and "in the board room" describes a physical context in which the action is carried out. Following Langacker's (1987, 1991) cognitive linguistic analysis, we can say that the sentence profiles the event as a figure against its background, bringing out the actoraction-context configuration as a focal object of construal. The actor, "he," is the focal object about which this sentence invites a reader to construct a mental model (also see Langacker, 1991). Nevertheless, one could use different linguistic devices to contextualize or decontextualize the actor. We will discuss how different linguistic constructions of context, predicate, and subject can contextualize or decontextualize the focal object and review empirical studies that examined them.

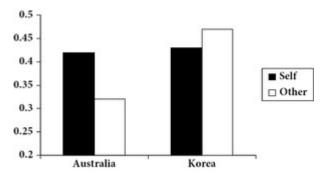
#### Context

A first set of devices is probably most obvious and has to do with the linguistic treatment of the context. Compare the following three sentences:

- (3a) He enthusiastically talks to people.
- **(3b)** He enthusiastically talks to people in the board room.
- (3c) In the board room, he enthusiastically talks to people.

Relative to (3b), which is the same as (2), (3a) de-emphasizes the context by dropping the reference to the context. In contrast, (3c) emphasizes the context more than (3b) by placing the context at the beginning. The sentence in (3c) is somewhat awkward in English, but it is a very common construction in other languages, for instance, in Japanese. Arguably, (3a) is a more decontextualizing, but (3c) is a more contextualizing linguistic practice than (3b).

#### **Distribution of Contextual Qualifications**



#### Click to view larger

Fig. 3.1 Mean percentages of contextual qualifications among English and Korean speakers.

From figure 4 in Kashima, Y., Kashima, E. S., Kim, U., & Gelfand, M. (2006). Describing the social world: Object-centered versus process-centered descriptions. Journal of Experimental Social Psychology, 42, 388–396.

The linguistic practices of using contextual qualifications appear to be distributed differently in different regions of the world. Kashima, Kashima, Kim, and Gelfand (2006) conducted a cross-cultural,

cross-linguistic study of verbal descriptions of social objects in Australia and Korea and examined the likelihood of English and Korean speakers using contextual qualifications in their written descriptions. In their study, participants were asked to verbally describe themselves and a friend in the individual condition, their own and their friend's relationships in the relationship condition, and their own and their friend's families in the group condition. They were asked to make up to 10 open-ended statements to describe each target. In describing the self (regardless of whether in the individual, relationship, or family condition), there was no difference in the use of contextual qualifications between English and Korean speakers. However, in describing the other, Koreans used contextual qualifications more than did English speakers (Figure 3.1).

Although contextual qualifications may be more prevalent in East Asian languages than in English specifically in the context of describing others, there may be an even subtler difference in the way contextual qualifications are used in East Asia. Masuda and Nisbett (2001) presented American and Japanese students with graphical clips of swimming fish. After viewing each clip twice, they were asked to orally describe what they saw. Verbal protocols were carefully coded in terms of salient focal (p. 49) objects (e.g., swimming fish) and peripheral background objects (e.g., seaweed, rocks). Although there were no differences in the likelihood of mentioning the salient focal objects, Japanese described more peripheral objects and mentioned time more than did Americans. Furthermore, Japanese participants were more likely to start their first utterance with a description of the scene by mentioning the peripheral objects, whereas Americans were more likely to start their first utterance with a description of the focal object. Here, (4) is an exemplar English utterance; (5), Japanese (Masuda & Nisbett, 2001, p. 928):

- **(4)** I saw three big fish swimming from right to left.
- (5) At the beginning, a big fish was swimming towards the green seaweed.

In oral language use too, Japanese appear to use more contextualizing linguistic practices than do Americans by referring to the context of a focal object first.

#### **Implications for Cognition**

The linguistic practice of not adding contextual qualifications may be linked to a fundamental attribution error (Ross, 1977) or a correspondence bias (Gilbert & Malone, 1995)—a well-known tendency for those with European-based cultural backgrounds to underuse contextual information in making a judgment about an individual. It was Jones

and Davis's (1967) classic study on attitude attribution that identified this tendency among American students. When they read an essay expressing a positive (vs. negative) attitude toward Castro's Cuba, they tended to attribute the corresponding attitude to the essay writer even when they were told that the essay writer had no choice about the type of essay he or she wrote. Although East Asians (Japanese in Kashima, Siegal, Tanaka, & Kashima, 1992; Koreans in Choi & Nisbett, 1998) show a similar tendency, relative to their American counterparts, they were more likely to take the contextual information into consideration when the context was made salient (Choi & Nisbett, 1998). Context appears to be more cognitively accessible for East Asians than for Westerners.

#### **Predicate**

Another linguistic device used to contextualize or decontextualize the actor is the predicate of an utterance. According to Semin and Fiedler's (1988, 1991; Fiedler & Kruger, this volume) linguistic category model (LCM), different types of predicates (e.g., nouns, adjectives, verbs) have different degrees of contextual information. Take the following four examples:

- (6a) He is a chatter box.
- **(6b)** He is talkative.
- (6c) He likes to talk.
- (6d) He talks a lot.

In order to refer to the focal actor's action, (6a) uses a noun phrase, "chatter box"; (6b) uses an adjective, "talkative"; (6c) adds a state verb "likes"; and (6d) uses an action verb, "talks." LCM suggests that nouns and adjectives are most abstract and do not imply the context in which an actor's action is carried out. A noun phrase tends to essentialize the referent (e.g., Gelman & Heyman, 1999), and adjectives tend to abstract specific behaviors into a broader dispositional category. Some noun phrases have been shown to imply an even more stable and generalizing characteristic than adjectives (e.g., Gelman & Coley, 1990; Hall & Moore, 1997). In contrast, verbs tend to be more contextualizing. Action verbs describe concrete actions such as "talk," "run," and "walk"; state verbs describe the state of the actor such as "like," "abhor," and "envy." Action verbs are more contextualizing than state verbs because they typically imply a concrete action in context, whereas state verbs imply that the action reflects the state the actor is in, which is presumably more enduring than a dynamic action. Thus, (6a) to (6d) order the utterances from the most decontextualizing to the most contextualizing practice.

#### **Distribution of Predicate Use**

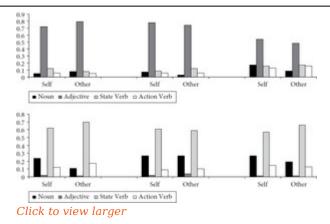


Fig. 3.2 Percentages of different types of predicates used by Australians and Koreans.

From figure 1 in Kashima, Y., Kashima, E. S., Kim, U., & Gelfand, M. (2006). Describing the social world: Object-centered versus process-centered descriptions. Journal of Experimental Social Psychology, 42, 388–396.

The prevalence of different types of linguistic practices for predicates was examined by Kashima (p. 50) et al. (2006), which we described earlier. Figure 3.2 shows the percentages of the four types of predicates used by English and Korean speakers in Australia and Korea, respectively. There was an obvious and very large difference. Basically, English speakers (top panel) used adjectives most to characterize any

social object, regardless of whether it was an individual, relationship, or group. In contrast, Korean (lower panel) speakers used state verbs most and noun phrases somewhat. Overall, English speakers used adjectives more and state verbs less than did Korean speakers. Kashima et al. computed an objectification index, which indicated the extent to which the target social object was objectified (proportion of nouns and adjectives—proportion of state and action verbs). Australians objectified the target more (M=.54) than did Koreans (M=-.51). Although there was some contextual variations (Australians objectified individuals and groups more than relationships), this overall language difference was significant throughout.

Maass, Karasawa, Politi, and Suga (2006) also found similar differences in their comparisons of Italian and Japanese speakers. In their study 1, they had their participants describe 10 aspects of their acquaintance (male and female) or gender groups (men and women in general). Consistent with Kashima et al. (2006), Italians used adjectives more, but verbs less, than did Japanese. In study 2, they compared Italian and Japanese individual and group descriptions (again, acquaintance and gender groups) in general and in specific contexts (at home and at school/work). Again, they found Italians used adjectives more, but verbs less, than did Japanese for both individuals and groups. Thus, the tendency to use decontextualizing predicates was observable regardless of the type of social objects.

The difference in prevalence of verb use in describing objects may be responsible for an analogous difference in patterns of children's first language acquisition. The vocabulary of children learning East Asian languages such as Korean (Choi & Gopnik, 1995) and Chinese (Tardif, 1996; Tardif, Fletcher, Liang, Zhang, Kaciroti, & Marchman, 2008; Tardif, Gelman, & Xu, 1999) tend to have a higher proportion of verbs than the vocabularies of

children learning European languages such as English, whose vocabularies tend to be dominated by nouns. Indeed, Chan, Brandone, and Tardif (2009) found a greater prevalence of verbs in Chinese mothers' speech in their interaction with their children when compared to English-speaking mothers' speech.

Not only social objects, but also social events appear to follow a similar pattern. Semin, Gőrts, Nandram, and Semin-Goossens (2002) examined Hindustani, Turkish, and Dutch. Hindustani and Turkish appear to be similar to East Asian languages, and Dutch, to other European languages, in linguistic (p. 51) practice surrounding predicate use. In study 1, they asked Dutch and Hindustani (common parts of Hindi and Urdu languages spoken widely in North India and Pakistan) speakers living in Amsterdam to generate as many emotion words that came to their minds first and then to describe five "critical events" in one condition or "critical experiences" in the other condition. First, Dutch speakers were found to use fewer state verbs to name emotions than were Hindustani speakers, although there was no difference in adjective use, and Dutch speakers used more nouns than did Hindustani speakers. Second, Dutch speakers used more nouns and fewer verbs to describe critical events or experiences than did Hindustani speakers. In study 2, Semin et al. compared Dutch and Turkish speakers' descriptions of their own or friend's positive and negative life events. In this study, level of abstractness was indexed using the linguistic categories—adjective and noun were coded as most abstract and action verbs as least abstract. Dutch emotion terms and event descriptions were more abstract than Turkish ones.

All in all, there appears to be differences in prevalence of contextualizing and decontextualizing linguistic practices between European-based and East Asian or South Asian cultural groups. Dutch, English, and Italian speakers appear to use more decontextualizing predicates of adjectives for social objects and events and nouns for emotions (but not for social objects). Chinese (mainly Mandarin), Hindustani, Korean, Japanese, and Turkish speakers appear to use more contextualizing, verb-based predicates, but tend not to use decontextualizing, adjective-based predicates.

#### **Implications for Cognition**

Prevalence of adjective as opposed to verb use in social description may have a significant implication for cultural differences in social cognitive processes. In particular, this may be closely linked to a correspondence bias (Gilbert & Malone, 1995), a tendency for those with European-based cultural backgrounds to use personality traits (e.g., generous, kind) in explaining social behavior. A large number of studies have shown that Americans often automatically encode a person's concrete behavior in terms of personality traits (e.g., Uleman, Winborne, Winter, & Shechter, 1986; Winter & Uleman, 1984), whereas it has been shown that East or South Asians have a weaker tendency for characterizing people by their dispositions. This has been most clearly documented in open-ended descriptions of an individual (see Choi, Nisbett, & Norenzayan, 1999, for a review). Shweder and Bourne's (1984) pioneering research showed that North American English speakers tend to use personality traits, whereas people in Orissa, India, tend not to use personality traits in describing an acquaintance. Similarly, examining selfdescriptions of European Americans and Koreans, Rhee, Uleman, Lee, and Roman (1995) showed that Americans were more likely to use traits than were Koreans. Analogous cultural differences have been replicated in studies of person descriptions regardless of whether the self or other was described (e.g., Bochner, 1984; Cousins, 1989; Dhawan, Roseman, Naidu, Thapa, & Rettek, 1995; Trafimow, Triandis, & Goto, 1991), although some researchers examined the underlying psychological meaning more closely than others (e.g., Miller, 1984, 1987).

The correspondence bias goes with the preference for adjectives in the following way. Personality traits are concepts that are used to characterize individuals and their underlying dispositions. Someone who is said to be deceptive is presumed to perform deceptive acts (e.g., lying), often in multiple contexts. It is interesting to note, however, that personality traits are often verbally described by using adjectives (e.g., "deceptive"), although this is not always the case (e.g., liar). This observation suggests that the Western tendency to use personality traits in person description may be explained by the Western linguistic practice of using adjectives in object descriptions (see Kashima et al., 2006; Maass et al., 2006). Evidence consistent with this line of reasoning comes from Kashima et al. (2006). They replicated the previous findings to show that English-speaking Australians tended to use personality traits more than did Koreans, but when participants' linguistic practices (likelihoods of using adjectives and verbs) were statistically controlled, the cultural difference in personality trait ascription became nonsignificant.

The habitual tendency to use adjectives to describe a social object, and consequently to habitually attribute personality traits to an individual, may have judgmental and perceptual consequences. There is evidence to suggest that, given the same information about a social action, Westerners are more likely to attribute its causes to internal, dispositional characteristics and less likely to attribute them to external, situational factors. Miller (1984) showed that American children and students were more likely to explain social events by references to internal, dispositional characteristics than were

their counterparts from Orissa, India. Kashima et al. (1992) found that Australian students tended (p. 52) to attribute the attitude expressed by an essay more strongly to the essay writer than did Japanese students (also see Choi & Nisbett, 1998; Krull et al., 1999; Miyamoto & Kitayama, 2002). Morris and Peng (1994) described an American and a Chinese murder case to physics graduate students from the United States and Chinese-speaking countries (Mainland, Hong Kong, and Taiwan) and asked them to rate the importance of personal dispositional factors and situational factors as causes of the murder. In both cases, Chinese students rated situational causes as more important than did American students, suggesting the tendency to make stronger attributions to context. For the Chinese murder case, however, Americans showed a stronger tendency to attribute it to the murderer's dispositions than did their Chinese counterparts.

Morris and Peng (1994) extended this phenomenon to visual perception. They presented visual information about movement patterns of animate objects (a school of fish) and inanimate objects (circles and squares) to high school students and graduate students from the United States and from areas with Chinese cultural backgrounds (e.g., Hong Kong, Mainland, Taiwan) and asked them to explain the movements. American high school students tended to make stronger dispositional and weaker contextual attributions for animate objects than did their Chinese counterparts, although little differences were found among graduate students or for explanations of inanimate objects.

Finally, Maass et al. (2006) reported that Italians and Japanese showed a memory bias congruent with the suggestion that Westerners are more likely to encode social information with adjectives than are Easterners. In their study 3, they presented Italian and Japanese students with two versions of letters of recommendation, one that used adjectives to describe the person and the other that used verbs. After a 5-minute distractor task, they were instructed to list all the information verbatim. Italians correctly recalled adjectives more than verbs, whereas the Japanese recalled more verbs than adjectives. Maass et al. replicated this with more controlled stimulus material in study 4. Sixteen verb-adjective pairs that share the same word stem were constructed in Italian and Japanese (e.g., "Marco/Hideo dominates others" vs. "Marco/Hideo is dominant"). Participants received a list of person descriptions, half of which included adjectives and the other half verbs. After a 10-minute distractor task, they performed a recognition task in which they had to indicate whether they had read the exact same word earlier or not. Again, Italians recognized adjectives more accurately than verbs, whereas Japanese recognized verbs more accurately than adjectives. In all, linguistic practices may facilitate the processing of practice-congruent stimuli.

All in all, the linguistic practice of adjective use appears to be prevalent in European-based linguistic communities, whereas that of verb use seems to be distributed widely across Asia and the Middle East. Although there is no direct evidence for linking this with correspondence biases in cognition, there is circumstantial evidence for this possibility. Given that there is a correlation between the likelihood of using an adjective and the

likelihood of not using a contextual qualification (Kashima et al., 2006), some aspects of correspondence bias may be partly due to linguistic practices of adjective use.

## **Subject**

A third set of linguistic devices for contextualization and decontextualization has to do with the treatment of the subject of a sentence. Although the explicit mention of a subject is obligatory in some languages (e.g., English, French, German), it is possible to drop a subject in a sentence in other languages (e.g., Chinese, Japanese, Korean). Consider the following two sentences:

- (7a) He is talking to people in the board room.
- **(7b)** Is talking to people in the board room.

Although (7b) is an ungrammatical sentence in English, something like this is grammatical in other languages, such as Japanese. Relatively speaking, (7a) profiles the actor more than (7b) by explicitly mentioning the actor. In contrast, (7b) does not even mention the actor, suggesting the low prominence placed on the actor; instead, it highlights the action and the process of "talking" in situ, rather than the actor that carries out the action.

This phenomenon is called a *pronoun drop* (e.g., Chomsky, 1981), the situation in which a pronoun that may be used as the subject of a sentence is dropped (e.g., Kashima & Kashima, 1998). To illustrate, consider an utterance used by a Japanese housewife who was talking about Hilary Clinton in a study conducted by Kashima and Kashima (1997):

(8) *E (watashi-wa)					
Sonna,	atta	koto	mo	hanashita	koto
mo	nai		kara		
like	met	NOM	also	spoke	NOM
also	NEG-BE		because		
'Because (I've) never met (her) nor spoken (to her)'					

(p. 53) In the original Japanese utterance, the first person singular pronoun, "watashi," is dropped as indicated by \*E in front of the parentheses, which represents ellipsis. In fact, there are three places where a pronoun could have been used had it been an English sentence (indicated by the parentheses in the English translation); however, no pronoun was used at all in the Japanese original. There are some languages (e.g., Spanish) in which verb forms change depending on the subject, thereby providing information about the subject of the sentence; however, verbs do not change forms in other languages, such as Japanese. Still, pronoun drops can occur. For instance, Kashima and Kashima (1997) reported that Japanese housewives dropped the pronominal subject 87 percent of the time when they conversed with a stranger. In contrast, English-speaking Australians never dropped the pronominal subject regardless of whom they conversed with.

More recently, a systematic research on language typology distinguished five types of pronoun use (Dryer, 2011). Of Kashima and Kashima's (1998) non-pronoun-drop languages, there appear to be two subtypes: one in which a pronominal subject is a separate word used in the same sentential position as a nominal subject (e.g., English), and the other in which a distinct pronominal word is used in a location different from a nominal subject (e.g., Hausa). Of pronoun-drop languages, Dryer distinguished three types: one that adds verb affixes to disambiguate the subject (e.g., Spanish), one that uses clitics associated with various words in a sentence (not necessarily verbs) to do so (e.g., Polish), and one that does neither (e.g., Japanese). In the last type, the subject needs to be discerned from the context of an utterance. It was also noted that there are some languages that have a mixture of these different types.

#### **Distribution of Pronoun Drop**

Pronoun drop is a widespread linguistic practice in many parts of the world. The World Atlas of Language Structure Online (WALS Online; Dryer & Haspelmath, 2011) shows that a large number of languages—some spoken by small numbers of people, others by very large numbers—indeed show a pronoun drop. In fact, many languages in East Asia, Southeast Asia, and South Asia, as well as the Spanish and Portuguese spoken in Latin and Central America, drop pronominal subjects.

#### **Psychological Implications of Pronoun Drop**

E. S. Kashima and Y. Kashima (1998) suggested that this type of pronoun drop tends to contextualize the actor by reducing the prominence of the actor within the context of action. In addition, they suggested that Hofstede's (1980, 1991) dimension of individualism may be related to pronoun drop. Individualism is one of the dimensions that Hofstede used to characterize different cultures in the world. Using surveys of work values at a multinational corporation (IBM), Hofstede found that workers from different countries or regions of the world tend to value different aspects of the work. Individualism was measured by items that tapped the extent to which workers valued their own work or leisure time as opposed to the physical and social condition of their work. Hofstede interpreted it as an opposition between the valuing of the individual and that of the organization. Generalizing from this, he argued that countries with high individualism scores tend to emphasize personal identity rather than collective identity, and, in those countries, it is normative to look after oneself and one's own nuclear family, rather than one's extended family. The most individualistic countries included the United States, Australia, and other Anglophone countries, as well as mainly Western European countries; the least individualistic countries were from East and South Asia (e.g., Hong Kong, India), as well as Latin America (e.g., Venezuela, Colombia). Hofstede also found that his individualism index correlated with per capita gross national product (GNP) in 1970 at. 82; in other words, richer countries tend to be more individualistic.

Because Hofstede's individualism index highlights the individual worker's wishes and desires as opposed to the context in which the worker finds him- or herself as an important aspect of work, Kashima and Kashima (1998) conjectured that the absence of pronoun drop, or high prominence of the person, may be related to individualism. To examine this, the language spoken by the majority in a country was used to code each country for its language. Consistent with this reasoning, non-pronoun drop correlated with individualism at. 75 across 60 countries. An analogous analysis was conducted using language as a unit of analysis. For this purpose, each language was given a score of individualism by averaging the individualism scores of countries whose major languages were the same. The correlation of, 64 was obtained across 30 languages. After a correction (Kashima & Kashima, (p. 54) 2005) partialling out other linguistic characteristics (i.e., number of first-person and second-person pronouns available in a language) did not alter these correlations appreciably. It is also important to note that correlations of non-pronoun drop with other dimensions of cultural values (e.g., Schwartz, 1994) became nonsignificant when individualism was statistically controlled for, thus suggesting the centrality of individualism as a correlate of linguistic practice of pronoun drop.

Y. Kashima and E. S. Kashima (2003) extended this analysis to examine whether pronoun drop can account for country-level individualism in conjunction with societal factors (1970 GNP per capita; base 10 log transformed due to skewness) and environmental factor (climate as indexed by the latitude of a country's capital city). It was surmised that these societal and environmental factors represented material aspects of the environment

in which a cultural group is embedded, whereas pronoun drop reflects a symbolic aspect of the culture. Gross national product, climate, and pronoun drop were all significant predictors of individualism in a multiple regression analysis. In addition, pronoun drop was a moderator of the relationships of GNP and climate with individualism. In pronoundrop countries, climate was the only correlate of individualism, whereas in non-pronoundrop countries, GNP was the only significant correlate. Overall, this pattern of findings suggests that material and symbolic aspects of culture can interact to have a significant impact on cultural values.

In a similar vein, Tabellini (2008) examined the implications of linguistic practices for cultural values and governance indicators. Pronoun drop may be related to the valorization of a particularistic interpersonal relationship (i.e., drawing a strong distinction between those who are close to the speaker and those who are not) rather than a universalistic stance to people. Similarly, distinction between formal and informal second-person pronouns (e.g., tu and vu as in French) may also contribute to the persistence of a particularistic value orientation. His analysis indeed showed higher levels of generalized trust ("most people can be trusted") and respect ("high tolerance and respect for other people"; universally treating all humans as trustworthy or respectable, rather than only close others), in countries where their languages did not drop pronouns or did not have differentiated second-person pronouns. This was, in fact, generalized to individual-level analyses, showing that speakers of languages without pronoun drop and with no differentiated second-person pronouns were also found to value trust and respect more highly. Furthermore, the quality of governance (effectiveness of law enforcement and quality of bureaucracy) was higher in those countries whose languages do not permit pronoun drop and do not differentiate secondperson pronouns. Licht, Goldschmidt, and Schwartz (2007) also found that norms of governance that emphasize the rule of law, lower levels of corruption, and democratic accountability were more prevalent in countries where pronouns are not dropped.

Intriguingly, Fincher, Thornhill, Murray, and Schaller (2008) examined prevalence of pathogens as an ecological cause of cultural practices that emphasize the maintenance of a tight ingroup boundary (i.e., collectivism). They surmised that if an ecological environment has widespread human infectious diseases that are detrimental to human reproductive fitness (e.g., malaria, leprosy, dengue, typhus, tuberculosis), a culture that restricts outsiders' contact with an ingroup (for fear of unknown infection) may evolve as an adaptation to this environment. Fincher et al. used a variety of indices of individualism and collectivism to index these cultural practices. Using pronoun drop as one such index, they reported that historical prevalence of pathogens predicted the linguistic practice of pronoun drop (r = .63). Consistent with their reasoning, contemporary pathogen prevalences correlated with pronoun drop (r = .44) at a lower level than did the past levels of pathogens, suggesting that it was past ecology that set a stage for cultural adaptation. All in all, the linguistic practice of pronoun drop—de-emphasizing the actor in a linguistic construction of a social event—may be related to cultural values. Only time

can tell whether the empirical relationship between pronoun drop and individualism is a timeless phenomenon that transcends the historical context or one that holds only at this point in human history.

#### **Summary**

Different linguistic practices can make use of different elements in utterances to contextualize or decontextualize the actor. By adding a contextual qualification, using a verb rather than an adjective or dropping the pronominal subject that refers to the actor, the prominence of the actor can be reduced and the actor's action and therefore agency can be embedded within the context of the activity. The foregoing discussion suggests that many of the contextualizing linguistic practices are more widely distributed in East Asia, and more decontextualizing (p. 55) linguistic practices are more prevalent in Western European linguistic communities.

The notion of contextualizing versus decontextualizing linguistic practices is related to but different from Hall's (1976) high- versus low-context communication. According to Hall, a low-context communication codes as much explicit information as possible in the message or the linguistic utterance. In contrast, a high-context communication leaves much of the information in the physical context or the communicators' minds, expecting that the listener can decode its meaning without explicit references. In some sense, pronoun drop can be thought of as a kind of high-context communication; however, verb and context uses are not. In the latter, more explicit information is coded in the utterance. Conceptually, our analysis of linguistic practices focuses on whether the surface form of the linguistic construction encodes or emphasizes the context, whereas high-versus low-context communication is more to do with whether the context of communication is used to decode it. Nonetheless, it is important to recognize that lowcontext communication and decontextualizing linguistic practices are related phenomena in that they both de-emphasize the importance of context. Given that Hall suggests many East Asian countries (e.g., Japan, China) are high-context cultures, it would be useful to further explore the relationship between the two.

# **Linguistic Practice and Cognitive Style**

The geographical distribution of contextualizing and decontextualizing linguistic practices appears to overlap with that of holistic and analytic cognitive styles, as shown by Nisbett and his colleagues (Nisbett, 2003; Nisbett et al., 2001). Holism considers an object to be embedded within a whole; analyticism takes objects to be isolates with distinct properties. They include as significant aspects what Witkin and his colleagues called field-dependent and field-independent perceptual and cognitive styles (e.g., Berry, 1979; Witkin & Goodenough, 1977). Field dependents perceive an object as embedded in a background, whereas field independents perceive an object as a standalone. Arguably, the correspondence bias in person perception discussed earlier is an instance of analytic, field-independent cognitive style. Because there is an obvious similarity between contextualizing versus decontextualizing linguistic practices and field-dependent and field-independent cognitive styles, it raises a question about the psychological relationship between the two. Do analytic field independents (vs. holistic field dependents) use decontextualizing (vs. contextualizing) linguistic practices, and vice versa?

There is some evidence to link the two. Klein, Ventura, Fernandes, Garcia Marques, Licata, and Semin (2010) examined Portuguese-speaking literate, illiterate, and exilliterate (people who have grown up illiterate, but learned written language as adults) people's linguistic practice (particularly predicate use) and cognitive style. To measure linguistic practice, they had their participants describe drawings of people performing personal and interpersonal behaviors and coded the predicates in terms of the LCM; then, an index of abstractness was computed. Cognitive style was measured by a modified version of the framed-line task (Kitayama, Duffy, Kawamura, & Larsen, 2003). In the original version, a square frame with a vertical line was presented, and then another square frame of a different size was shown. Participants' task was to draw a vertical line of the same length (absolute task) or a line whose proportional length relative to the square equals the original line length relative to the original square (relative task). Amount of error for absolute tasks indexed analytic style, whereas that for relative tasks indexed holistic style. Klein et al. modified this to make it into a reaction time (RT) task. In this version, an original framed line is presented first, and a second framed line with a different size is presented next. Participants are asked to respond as quickly as possible whether the second line had the same length or not (absolute task) and whether the second line relative to its frame was proportionally equal to the first relative to its frame or not (relative task). The average RT for relative tasks was subtracted from the average RT for absolute tasks to index analytic (vs. holistic) cognitive style. They reported substantial correlations between abstract predicate use and analytic cognitive style: .67 for literates, .83 for illiterates, and .75 for ex-illiterates. Regardless of literacy, linguistic practice and cognitive style were highly related. In addition, they reported that literates used more abstract predicates and more analytic cognitive style than did illiterates or ex-

illiterates. Although this study shows an intriguing correlation between cognitive style and linguistic practice, future research is needed to see if there is any causal link from one to the other.

# Bilinguals, Biculturals, and Language-Culture Dynamics

If, in fact, language and culture are linked together in some sense, what happens to people (p. 56) who can speak two (or more) languages and know the cultures of those linguistic groups (bilingual/bicultural individuals)? Hereafter, we call these individuals bilinguals; however, it is important to keep in mind that these individuals not only speak two languages, but also are bicultural; that is, they can think and act in ways that are acceptable to both linguistic communities. So, the question is, for instance, do Chinese-English bilinguals think and act more like English speakers when they use English relative to when they use Chinese or vice versa? *Cultural accommodation* (Chen & Bond, 2010) is a phenomenon in which bilinguals think and act more like a typical person of the linguistic community that speaks the language they are using at the time (e.g., Chinese-English bilinguals acting like English speakers when speaking English; cf. Giles, Coupland, & Coupland, 1991). In contrast, the opposite phenomenon may be called *cultural affirmation* (cf. Yang & Bond, 1980), in which bilinguals think and act more like a typical person of the linguistic community that speaks the language they are not using at the time (e.g., Chinese-English bilinguals acting like Chinese when speaking English).

There is evidence of both cultural accommodation and cultural affirmation. Early evidence of cultural accommodation came from Ervin's (1964) study of French-English bilinguals who lived in the United States. She had the same English-French bilingual interviewers administer thematic apperception tests for each participant and recorded their oral responses for content analysis. Based on previous ethnographic work, cultural differences were hypothesized, and the bilinguals' narratives were examined relative to the culturally typical responses. Although the bilinguals did not show language-congruent narrative differences for all dimensions hypothesized, they did show cultural accommodation for three of the eight dimensions examined. Narratives were found to be less achievement oriented for women, contain more themes of withdrawal and autonomy, and were more verbally aggressive to peers in French than in English. Together with Ervin's (1961) earlier research on color naming by Navaho-English bilinguals, these pioneering studies showed the importance of language in bilinguals' communicative activities (narrating and naming).

Similarly, there is evidence of cultural accommodation in the area of values and self-cognitions. Ralston, Cunniff, and Gustafson (1995) had Chinese-English bilingual managers in Hong Kong respond to Schwartz's value survey using Chinese and English and compared their responses to monolingual US managers. They reported cultural

accommodation in four of the ten dimensions, including achievement, hedonism, tradition, and security when the bilinguals used English. Trafimow, Silverman, Fan, and Fun Law (1997) found that Hong Kong Chinese-English bilinguals generated more collectivist and less individualist self-cognitions when they described themselves in Chinese than in English. Likewise, Ross, Xun, and Wilson (2002) also found evidence for cultural accommodation. Chinese-born Chinese Canadians tended to endorse more Chinese worldviews, described themselves less positively, and reported lower levels of self-esteem in Chinese than in English. Furthermore, they did not find accommodation on interdependence. Ramirez-Esparza, Gosling, Benet-Martinez, Potter, and Pennebaker (2006) compared English-Spanish bilinguals' self-report of Big Five personality characteristics, again finding a cultural accommodation pattern in extraversion, agreeableness, and conscientiousness.

Other researchers have reported more complex patterns of findings. Watkins and Gerong (1999) compared Filipino English-Cebuano bilingual high school students' verbal descriptions of themselves in the two languages. Male bilinguals were influenced more by the school context when using English than Cebuano, their local language. However, females did not show any effect of language. In contrast, Kemmelmeier and Cheng (2004) reported that female Hong Kong Chinese-English bilinguals showed a cultural accommodation in terms of independent self-construal; namely, more independent in English than in Chinese. However, there was no evidence of accommodation for men.

Cultural accommodation appears to occur for other cognitive domains. Alvarado and Jameson (2011) compared Vietnamese-English bilinguals' judgments of similarity in emotion terms, especially those of shame and anguish, within the context of other emotion terms such as excitement, happy, sad, fear, anger, and the like. They reported that their judgments shifted in line with the monolingual speakers of the language that they were using at the time. Lechuga and Wiebe (2011) found greater overconfidence in probability judgment among Mexicans than Americans and reported an analogous difference in overconfidence when Mexican-American (Spanish-English) bilinguals were asked to perform probability judgments in Spanish and English. Nonetheless, Ji, Zhang, and (p. 57) Nisbett (2004) found that bilinguals from Mainland China and Taiwan showed cultural accommodation in the domain of holistic cognitive style; however, Hong Kong and Singaporean bilinguals did not show any effect of language.

Finally, cultural accommodation was observed in behavior. Sussman and Rosenfeld (1982) examined interpersonal distance when Japanese and Venezuelan participants used English or their native language in their conversations. Here, too, they found cultural accommodation—Venezuelan bilinguals increased their distance when using English than when using Spanish, whereas Japanese bilinguals decreased their distance when speaking English than when speaking Japanese.

Chen and Bond (2010) conducted an elaborate study in which Hong Kong Chinese-English female bilinguals were interviewed by Caucasian and Chinese male interviewers in English and Cantonese. Note that this enabled them to examine the joint effects of

interviewer identity and language. The participants' own self-perceptions and observers' ratings of behavioral patterns were examined in terms of extraversion, openness, and assertiveness, the dimensions on which native speakers of English and Cantonese were perceived to differ significantly, with English native speakers rated higher on all three. They reported a cultural accommodation for behavioral patterns as rated by observers only when the interviewer was Chinese; there was no accommodation with Caucasian interviewers, where the participants' behaviors were rated as more extraverted, open, and assertive than when interacting with the Chinese interviewers. They did not find a systematic accommodation or affirmation on self-perceptions, however.

In contrast, evidence of cultural affirmation was reported by Yang and Bond (1980; Bond & Yang, 1982). Hong Kong Chinese bilinguals were asked to respond to a questionnaire that was designed to tap respondents' endorsement of more Chinese or Western attitudes. Each item had two options, one of which was stereotypically Chinese and, the other, stereotypically Western. English and Chinese versions of the questionnaire were constructed and administered by Chinese Cantonese and Caucasian American English speakers. The responses were more Chinese for the English than for the Chinese version. Bond and Yang (1982) replicated this finding using the same instrument, as well as another questionnaire that measured people's endorsement of Chinese traditional sayings. Again, Hong Kong Chinese bilinguals responded in a more Chinese way when the questionnaire was in English than in Chinese. Interestingly, however, they found that this tendency was reversed in some items. Some quarter-century later, Chen and Bond (2007) similarly found cultural affirmation among Cantonese speakers in Hong Kong and Mandarin speakers in Beijing. In both samples, they found that the bilinguals exhibited a more Chinese normative pattern when responding to the English than Chinese version of a questionnaire, namely, a higher level of Chinese identification, a lower level of Western identification, and a lower level of self-esteem.

All in all, the language used by bilinguals does not appear to be the only determinant of psychological processes. Indeed, Oyserman and Lee's (2008) meta-analysis of studies that examined the effect of language priming on participants' endorsement of cultural attitudes and values reported that, of the 10 studies they examined, the 95 percent confidence interval of their effect sizes was –.02 and .21 with the mean of .10, suggesting that there was fairly large variability and there was not clear evidence of cultural accommodation overall. It is likely that bilinguals who are also bicultural have default tendencies to go along with the cultural pattern associated with the language; however, under some sociocultural circumstances, they may form communicative intentions to emphasize the culture associated with the other language that they are not using at the time, so as to exhibit cultural affirmation.

A number of potential factors can trigger affirmation. One is the type of bilinguals. *Compound bilinguals* have learned two languages (or potentially more than two) in the same social settings, mixing them at the same time; *coordinate bilinguals* have learned two or more languages in distinct social settings, using one in one setting while using the other language in the other setting (Ervin & Osgood, 1954). The latter type of bilinguals

may show clearer accommodation as a function of language used (e.g., Ervin's studies). Another factor is an interactant's identity. As Chen and Bond (2010) found, language may have an effect when bilinguals interact with an actor whose identity is associated with one of the languages (in their case, Chinese). The interactant's identity may exert an effect separate from language itself. A third factor is the content domain. Bond and Yang (1982) reported that Hong Kong Chinese bilinguals showed accommodation and affirmation depending on the item content of questionnaires. Marin, Triandis, Betancourt, and Kashima (1983) found some evidence of more socially desirable (p. 58) response styles in some cases. Apparently, bilinguals' psychological processes at any one time are a result of complex interactions among different social factors. Future research needs to investigate these complexities.

# **Conclusion**

Language is a critical tool with which humans construct their cultures. The infrastructure of everyday life that we have come to take for granted has largely been enabled by the human ability to use language to construct and exchange meaning. Nonetheless, language as a tool can have psychological consequences that language users do not necessarily intend to produce. Linguistic practices are types of language well established and in widespread use in a population, so much so that they may be considered an aspect of language as a system. They can have unintended consequences as well, which make up those aspects of human culture that their makers are not always aware of.

We argued that some linguistic practices are contextualizing, tending to contextualize an object of description within its surroundings, whereas others are decontextualizing, tending to abstract an object from its background and treating it like a transferable entity. We pointed out that the geographical distribution of these linguistic practices seems to overlap with the distribution of different cognitive styles. In processing the figure-ground compound stimuli, the field-independent style tends to focus attention on the figure of perception and construal at the expense of its ground, whereas the field-dependent style processes it while binding the figure and ground together as a configuration. Contextualizing (decontextualizing) linguistic practices appear to go with field dependence (field independence). Those with one cognitive style may use the corresponding linguistic practice, which in turn may reinforce the corresponding cognitive style.

To investigate further the connection between language and culturally informed social perception, we reviewed the literature on bilinguals' (multilinguals') social cognitive processes as a function of the language that they are using. Do bilinguals exhibit a social cognitive pattern that is congruent with the culture associated with the language they are using at the time (cultural accommodation)? Although there is a significant amount of evidence for this, there are some occasions in which bilinguals, under some circumstances, show the opposite pattern, namely, exhibiting a tendency to express the style that is congruent with the culture and language that they are not using at the time (cultural affirmation). This suggests that bilingual individuals are not at the complete mercy of the language that they use—they are capable of regulating their own thoughts and actions if they so wish due to the circumstances at hand.

# **Future Directions**

One of the obvious areas of future research is to explore the link between language and culturally informed social cognition. In particular, do contextualizing and decontextualizing linguistic practices influence field-dependent and -independent

cognition, or does social cognition drive linguistic practice? There may very well be bidirectional influences. On the one hand, there is plenty of evidence to suggest that processing a narrative that describes group-based (vs. individual) activities written using first-person plural (vs. singular) pronouns can lead readers to act more collectivistically (vs. individualistically) not only in European-based cultures (e.g., Brewer & Gardner, 1996; Kühnen, Hannover, & Schubert, 2001), but also in East Asian cultures (e.g., Oyserman et al., 2009; also see Oyserman & Lee, 2008, for a meta-analytic review). On the other hand, there is evidence that cultural orientations drive language use. Na and Choi (2009) showed that Korean participants who have more collectivist inclinations tend to show a greater tendency to use a first-person plural, rather than a first-person singular pronoun, so that they may call their brother *wuri* brother, for instance. Although there is correlational evidence for a relationship between linguistic practices and cognitive style, this requires much further investigation.

Another area of future exploration concerns research on bilinguals. Multilingualism is the rule rather than the exception worldwide. Even in traditionally monolingual cultures (e.g., United States, Australia), more individuals are now operating in a multilingual environment or using multiple languages in their everyday life. At work, they may use their national language to communicate with their colleagues; yet, in interacting with clients, they may use another language, such as English, as a common language. However, when they go home, they use their ethnic language or dialect, which is distinct from their national tongue. How do people manage this complex sociocultural mosaic? As we concluded in the brief literature review on bilingual cognition and action, although their default may be cultural accommodation—to go along with the norm of (p. 59) the linguistic community—they flexibly adapt their style under some circumstances. Under what circumstances can they regulate their thoughts and actions? Such intentional adjustments would surely require their knowledge about their own tendencies and their ability and motivation to control their thoughts and actions. How are such self-regulations performed? These represent at least two major areas of research that await further exploration.

Language is one of the most versatile psychological tools that humans have acquired during the course of their evolution. Its social and cultural implications are enormous; the nexus of language, culture, and social behavior is an important area of study. Yet, surprisingly little attention has been paid to this critical issue in the area of culture and psychology. Given that there is some fertile ground for future research, we hope to see a further growth in the area of language and culture in the near future.

## References

Alvarado, N., & Jameson, K. A. (2011). Shared knowledge about emotion among Vietnamese and English bilingual and monolingual speakers. *Journal of Cross-Cultural Psychology*, 42, 963–982.

Austin, J. L. (1962). *How to do things with words*. Cambridge, MA: Harvard University Press.

Berry, J. W. (1979). A cultural ecology of social behaviour. *Advances in Experimental Social Psychology*, 12, 177–206.

Bochner, S. (1984). Cross-cultural differences in the self-concept: A test of Hofstede's individualism/collectivism distinction. *Journal of Cross-Cultural Psychology*, 25, 273–283.

Bond, M. H., & Yang, K. -S. (1982). Ethnic affirmation versus cross-cultural accommodation: The variable impact of questionnaire language on Chinese bilinguals from Hong Kong. *Journal of Cross-Cultural Psychology* 13, 169–185.

Brewer, M. B., & Gardner, W. (1996). Who is this "we"? Levels of collective identity and self-representations. *Journal of Personality and Social Psychology*, 71, 83–93.

Chan, C. C. Y., Brandone, A. C., & Tardif, T. (2009). Culture, context, or behavioral control?: English- and Mandarin-speaking mothers' use of nouns and verbs in joint book reading. *Journal of Cross-Cultural Psychology*, 40, 584–602.

Chen, S. X., & Bond, M. H. (2007). Explaining language priming effects: Further evidence for ethnic affirmation among Chinese-English bilinguals. *Journal of Language and Social Psychology*, *26*, 398–406.

Chen, S. X., & Bond, M. H. (2010). Two languages, two personalities? Examining language effects on the expression of personality in a bilingual context. *Personality and Social Psychology Bulletin*, *36*, 1514–1528.

Choi, S., & Gopnik, A. (1995). Early acquisition of verbs in Korean: A cross-linguistic study. *Journal of Child Language*, 22, 497–529.

Choi, I., & Nisbett, R. E. (1998). Situational salience and cultural differences in the correspondence bias and actor-observer bias. *Personality and Social Psychology Bulletin*, 24, 949–960.

Choi, I., Nisbett, R. E., & Norenzayan, A. (1999). Causal attribution across cultures: Variation and universality. *Psychological Bulletin*, 125, 47-63.

Chomsky, N. (1981). *Lectures on government and binding*. Dortrecht, The Netherlands: Foris.

Cousins, S. D. (1989). Culture and self-perception in Japan and the United States. *Journal of Personality and Social Psychology*, 56, 124–131.

Dryer, M. S. (2011). Expression of pronominal subjects. In M. S. Dryer & M. Haspelmath (Eds.), *The world atlas of language structures online*. Munich: Max Planck Digital Library, chapter 101. Accessed August 3, 2012. http://wals.info/chapter/101

Dryer, M. S., & Haspelmath, M. (Eds.). (2011). *The world atlas of language structures online*. Munich: Max Planck Digital Library. Accessed August 3, 2012. http://wals.info/

Dhawan, N., Roseman, I. J., Naidu, R. K., Thapa, K., & Rettek, S. I. (1995). Self-concepts across two cultures: India and the United States. *Journal of Cross-Cultural Psychology*, 26, 606-621.

Ervin, S. M. (1961). Semantic shift in bilingualism. *American Journal of Psychology*, 74, 233–241.

Ervin, S. M. (1964). Language and TAT content in bilinguals. *Journal of Abnormal and Social Psychology*, 68, 500–507.

Ervin, S. M., & Osgood, C. E. (1954). Second language learning and bilingualism. *Journal of Abnormal and Social Psychology*, 49, 139–146.

Fiedler, K., & Kruger. (this volume). Language and attribution: Implicit causal and dispositional information contained in words. *Handbook of language and social psychology*.

Fincher, C. L., Thornhill, R., Murray, D. R., & Schaller, M. (2008). Pathogen prevalence predicts human cross-cultural variability in individualism/collectivism. *Proceedings of Royal Society, B*, *275*, 1279–1285.

Gelman, S. A., & Coley, J. D. (1990). The importance of knowing a dodo is a bird: Categories and inferences in 2-year-old children. *Developmental Psychology*, 26, 796–804.

Gelman, S. A., & Heyman, G. D. (1999). Carrot-eaters and creature-believers: The effects of lexicalization on children's inferences about social categories. *Psychological Science*, 10, 489–493.

Gilbert, D. T., & Malone, P. S. (1995). The correspondence bias. *Psychological Bulletin*, 117, 21–38.

Giles, H., Coupland, J., & Coupland, N. (1991). *Contexts of accommodation*. Cambridge, UK: Cambridge University Press.

Hall, D. G., & Moore, C. E. (1997). Red bluebirds and black greenflies: Preschoolers' understanding of the semantics of adjectives and count nouns. *Journal of Experimental Child Psychology*, 67, 236–267.

Hall, E. T. (1976). Beyond culture. New York: Anchor Press/Doubleday.

Hofstede, G. (1980). Culture's consequences. Thousand Oaks, CA: Sage.

(p. 60) Hofstede, G. (2001). Culture's consequences (2nd ed.). Thousand Oaks, CA: Sage.

Holtgraves, T. (2002). Language as social action. Mahwah, NJ: Erlbaum.

Holtgraves, T., & Kashima, Y. (2008). Language, meaning, and social cognition. *Personality and Social Psychology Review*, 12, 73–94.

Ji, L.-J., Zhang, Z., & Nisbett, R. E. (2004). Is it culture or is it language? Examination of language effects in cross-cultural research on categorization. *Journal of Personality and Social Psychology*, 87, 57–65.

Jones, E. E. & Harris, V. A. (1967). The attribution of attitudes. *Journal of Experimental Social Psychology*, 3, 1–24.

Kashima, E. S., & Kashima, Y. (1997). Practice of the self in conversations: Pronoun drop, sentence co-production and contextualization of the self. In K. Leung, U. Kim, S. Yamaguchi, & Y. Kashima (Eds.), *Progress in Asian social psychology* (vol. 1, pp. 165–179. Singapore: Wiley.

Kashima, E. S., & Kashima, Y. (1998). Culture and language: The case of cultural dimensions and personal pronoun use. *Journal of Cross-Cultural Psychology*, 29, 461–486.

Kashima, E. S., & Kashima, Y. (2005). Erratum to Kashima and Kashima (1998) and reiteration. *Journal of Cross-Cultural Psychology*, *36*, 396–400.

Kashima, Y., & Kashima, E. S. (2003). Individualism, GNP, climate, and pronoun drop: Is individualism determined by affluence and climate, or does language use play a role? *Journal of Cross-Cultural Psychology*, 34, 125–134.

Kashima, Y., Kashima, E. S., Kim, U., & Gelfand, M. (2006). Describing the social world: Object-centered versus process-centered descriptions. *Journal of Experimental Social Psychology*, 42, 388–396.

Kashima, Y., Siegal, M., Tanaka, K., & Kashima, E. S. (1992). Do people believe behaviours are consistent with attitudes? Towards a cultural psychology of attribution processes. *British Journal of Social Psychology*, 31, 111–124.

Kemmelmeier, M., & Cheng, B. Y.-M. (2004). Language and self-construal priming: A replication and extension in a Hong Kong sample. *Journal of Cross-Cultural Psychology*, *35*, 705–712.

Kitayama, S., Duffy, S. A., Kawamura, T., & Larsen, J. T. (2003). Perceiving an object and its context in different cultures: A cultural look at new look. *Psychological Science*, 14, 201–206.

Klein, O., Ventura, P., Fernandes, T., Garcia Marques, L., Licata, L., & Semin, G. R. (2010). Effects of schooling and literacy on linguistic abstraction: The role of holistic vs. analytic processing styles. *European Journal of Social Psychology*, 40, 1095–1102.

Krull, D. S., Loy, M. H.-M., Lin, J., Wang, C.-F., Chen, S. X., & Zhao, X. (1999). The fundamental attribution error: Correspondence bias in individualist and collectivist cultures. *Personality and Social Psychology Bulletin*, *25*, 1208–1219.

Kühnen, U., Hannover, B., & Schubert, B. (2001). The semantic- procedural-interface model of the self: the role of self-knowledge for context-dependent versus context-independent modes of thinking. *Journal of Personality and Social Psychology*, 80, 397–409.

Lakoff, G. (1987). *Women, fire, and dangerous things*. Chicago, IL: University of Chicago Press.

Langacker, R. W. (1987). Foundations of cognitive grammar (vol. 1): Theoretical prerequisites. Stanford, CA: Stanford University Press.

Langacker, R. W. (1991). Foundations of cognitive grammar (vol. 2): Descriptive application. Stanford, CA: Stanford University Press.

Lechuga, J., & Wiebe, J. S. (2011). Culture and probability judgment accuracy: The influence of holistic reasoning. *Journal of Cross-Cultural Psychology*, 42, 1054–1065.

Licht, A. N., Goldschmidt, C., & Schwartz, S. H. (2007). Culture rules: The foundations of the rule of law and other norms of governance. *Journal of Comparative Economics*, *35*, 659–688.

Maass, A., Karasawa, M., Politi, F., & Suga, S. (2006). Do verbs and adjectives play different roles in different cultures? A cross-linguistic analysis of person representation. *Journal of Personality and Social Psychology*, 90, 734–750.

Marin, G., Triandis, H., Betancourt, H., & Kashima, Y. (1983). Ethnic affirmation versus social desirability: Explaining discrepancies in bilinguals' responses to a questionnaire. *Journal of Cross-Cultural Psychology*, 14, 173–186.

Masuda, T., & Nisbett, R. E. (2001). Attending holistically versus analytically: Comparing the context sensitivity of Japanese and Americans. *Journal of Personality and Social Psychology*, 81, 922–934.

Miller, J. G. (1984). Culture and the development of everyday social explanation. *Journal of Personality and Social Psychology*, 46, 961–978.

Miller, J. G. (1987). Cultural influences on the development of conceptual differentiation in person description. *British Journal of Developmental Psychology*, *5*, 309–319.

Miyamoto, Y., & Kitayama, S. (2002). Cultural variation in correspondence bias: The critical role of attitude diagnosticity of socially constrained behaviour. *Journal of Personality and Social Psychology*, 83, 1239–1248.

Morris, M. W., & Peng, K. (1994). Culture and cause: American and Chinese attributions for social and physical events. *Journal of Personality and Social Psychology*, 67, 949–971.

Na, J., & Choi, I. (2009). Culture and first-person pronouns. *Personality and Social Psychology Bulletin*, *35*, 1492–1499.

Nisbett, R. E. (2003). The geography of thought. and why. New York: Free Press.

Nisbett, R. E., Peng, K. P., Choi, I., & Norenzayan, A. (2001). Culture and systems of thought: Holistic versus analytic cognition. *Psychological Review*, 108, 291–310.

Oyserman, D., & Lee, S. W. S. (2008). Does culture influence what and how we think? Effects of priming individualism and collectivism. *Psychological Bulletin*, 134, 311–342.

Oyserman, D., Sorensen, N., Reber, R., & Chen, S. X. (2009). Connecting and separating mind-sets: Culture as situated cognition. *Journal of Personality and Social Psychology*, 97, 217–235.

Ralston, D. A., Cunniff, M. K., & Gustafson, D. J. (1995). Cultural accommodation: The effect of language on the responses of bilingual Hong Kong Chinese managers. *Journal of Cross-Cultural Psychology*, 26, 714–727.

Ramírez-Esparza, N., Gosling, S. D., Benet-Martínez, V., Potter, J. P., Pennebaker, J. W. (2006). Do bilinguals have two personalities? A special case of cultural frame switching. *Journal of Research in Personality*, 40, 99–120.

Rhee, E., Uleman, J. S., Lee, H. K., & Roman, R. J. (1995). Spontaneous self-descriptions and ethnic identities in individualistic and collectivistic cultures. *Journal of Personality and Social Psychology*, 69, 142–152.

(p. 61) Ross, L. D. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. *Advances in Experimental Social Psychology*, 10, 173–220.

Ross, M., Xun, W. Q. E., & Wilson, A. (2002). Language and the bicultural self. *Personality and Social Psychology Bulletin*, 28, 1040–1050.

Saussure, F. D. (1966). Course in general linguistics. New York: McGraw-Hill.

Schwartz, S. H. (1994). Beyond individualism/collectivism: New cultural dimensions of values. In U. Kim, H. Triandis, Ç. Kağitçibaşi, S. C. Choi, & G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and applications* (pp. 85–122). London: Sage.

Searle, J. R. (1969). Speech acts. Cambridge, UK: Cambridge University Press.

Semin, G. R., & Fiedler, K. (1988). The cognitive functions of linguistic categories in describing persons: Social cognition and language. *Journal of Personality and Social Psychology*, 54, 558–567.

Semin, G. R., & Fiedler, K. (1991). The linguistic category model, its bases, applications and range. *European Review of Social Psychology*, 2, 1–30.

Semin, G. R., Gőrts, C. A., Nandram, S., & Semin-Goossens, A. (2002). Cultural perspectives on the linguistic representation of emotion and emotion events. *Cognition and Emotion*, 16, 11–28.

Shweder, R. A., & Bourne, E. J. (1984). Does the concept of the person vary cross-culturally? In R. A. Shweder & R. A. LeVine (Eds.), *Culture theory* (pp. 158–199). Cambridge, UK: Cambridge University Press.

Sussman, N. M., & Rosenfeld, H. M. (1982). Influence of culture, language, and sex on conversational distance. *Journal of Personality and Social Psychology*, 42, 66–74.

Tabellini, G. (2008). Institutions and culture: Presidential address. *Journal of the European Economic Association*, *6*, 255–294.

Tardif, T. (1996). Nouns are not always learned before verbs: Evidence from Mandarin speakers' early vocabularies. *Developmental Psychology*, 32, 492–504.

Tardif, T., Fletcher, P., Liang, W., Zhang, Z. Kaciroti, N., & Marchman, V. A. (2008). Baby's first 10 words. *Developmental Psychology*, 44, 929–938.

Tardif, T, Gelman, S. A., & Xu, F. (1999). Putting the "noun bias" in context. *Child Development*, 70, 620-635.

Trafimow, D., Triandis, H., & Goto, S. G. (1991). Some tests of the distinction between the private self and the collective self. *Journal of Personality and Social Psychology*, 60, 649-655.

Trafimow, D., Silverman, E. S., Fan, R. M. -T., & Fun Law, J. S. (1997). The effects of language and priming on the relative accessibility of the private self and the collective self. *Journal of Cross-Cultural Psychology*, 28, 107–123.

Uleman, J. S., Winborne, W. C., Winter, L., & Schecter, D. (1986). Personality differences in spontaneous personality inferences at encoding. *Journal of Personality and Social Psychology*, *51*, 396–403.

Watkins, D., & Gerong, A. (1999). Language of response and the spontaneous self-concept: A test of the cultural accommodation hypothesis. *Journal of Cross-Cultural Psychology*, 30, 115–121.

Whiten, A., & van Schaik, C. P. (2007). The evolution of animal 'cultures' and social intelligence. *Philosophical Transaction of Royal Society B*, 362, 603–620. doi:10.1098/rstb.2006.1998

Winter, L., & Uleman, J. S. (1984). When are social judgments made? Evidence for the spontaneousness of trait inferences. *Journal of Personality and Social Psychology*, 47, 237–252.

Witkin, H. A., & Goodenough, D. R. (1977). Field dependence and interpersonal behavior. *Psychological Bulletin*, 84, 661–689.

Yang, K.-S., & Bond, M. H. (1980). Ethnic affirmation by Chinese bilinguals. *Journal of Cross-Cultural Psychology*, 11, 411–425.

Zwaan, R. A. (2004). The immersed experiencer: Toward an embodied theory of language comprehension. *The Psychology of Learning and Motivation*, 44, 35–62.

Zwaan, R. A., & Radvansky, G. A. (1998). Situation models in language comprehension and memory. *Psychological Bulletin*, 123, 162–185.

#### **Notes:**

(1) . To say that a pronoun is "dropped" implies that the "normal form" is to include a pronoun, and, for this reason, some have argued that it is an English-centric nomenclature (e.g., Dryer, 2011). We tend to agree with this judgment; however, we decided to use this terminology for its ease of exposition.

#### Yoshihisa Kashima

Yoshihisa Kashima, School of Psychological Sciences, The University of Melbourne

#### **Emiko Kashima**

Emiko Kashima, School of Psychological Science, La Trobe University

#### **Evan Kidd**

Evan Kidd, Research School of Psychology, Australian National University

