British Journal of Social Psychology (2007), 46, 423–435
© 2007 The British Psychological Society

The British Psychological Society

www.bpsjournals.co.uk

Cultural differences in the correction of social inferences: Does the dispositional rebound occur in an interdependent culture?

Nicolas Geeraert[1]* and Vincent Y. Yzerbyt[2]
[1]University of Essex, UK
[2]Catholic University of Louvain, Louvain-la-Neuve, Belgium

Although social observers have been found to rely heavily on dispositions in their causal analysis, it has been proposed that culture strongly affects this tendency. Recent research has shown that suppressing dispositional inferences during social judgment can lead to a dispositional rebound, that is relying more on dispositional information in subsequent judgments. In the present research, we investigated whether culture also affects this rebound tendency. First, Thai and Belgian participants took part in a typical attitude attribution paradigm. Next, dispositional rebound was assessed by having participants describe a series of pictures. The dispositional rebound occurred for both Belgian and Thai participants when confronted with a forced target, but disappeared for Thai participants when the situational constraints of the target were made salient. The findings are discussed in light of the current cultural models of attribution theory.

Were a computer program asked to analyse human behaviour, the software would probably see behaviour as a product of the actor's characteristics, or dispositions, and the situation. Quite a different answer is found when humans are asked to make a social inference as they typically seem to overestimate the weight of the dispositional factors at the expense of the situational antecedents. This judgmental tendency goes by the name of the *correspondence bias* (CB) and has been considered one of the most robust findings in social psychology (Gilbert & Malone, 1995; Jones, 1979; Ross & Nisbett, 1991). Typically, observers are believed to entertain a dispositional theory of behaviour. In other words, they seem to rely strongly on lay dispositionalism (Chiu, Hong, & Dweck, 1997). Building on the anchoring-adjustment heuristic (Tversky & Kahneman, 1974), Quattrone (1982) proposed a model that is able to account for the obstinate CB. Social observers are believed to start their judgment with a dispositional biased estimate and only later use situational information to correct their initial judgment. However, insufficient correction eventually leads to the CB (Quattrone, 1982). Importantly, while

* *Correspondence should be addressed to Nicolas Geeraert, Department of Psychology, University of Essex, Wivenhoe Park, Colchester, CO4 3SQ, UK (e-mail: geeraert@essex.ac.uk).*

DOI:10.1348/014466606X162062

the anchoring phase is believed to be an automatic process, correction is thought to be controlled (Gilbert, Pelham, & Krull, 1988).

Recently, it was suggested that avoiding the CB does not come without a cost. Building on research of mental control (Wegner, 1992, 1994), Yzerbyt, Geeraert, and their colleagues (Geeraert & Yzerbyt, 2007; Geeraert, Yzerbyt, Corneille, & Wigboldus, 2004; Yzerbyt, Corneille, Dumont, & Hahn, 2001) argued that engaging in situational correction may have ironic consequences for subsequent judgments. These authors suggested that during correction, observers must both process the situational information and suppress the initial dispositional judgment. The proposed re-conceptualization of the correction phase is significant in that mental suppression is known to cause post-suppressional rebound (Wegner, 1992, 1994). The rebound effect is defined as the increased accessibility of the suppressed construct, and is found to be a robust phenomenon (Wenzlaff & Wegner, 2000). Therefore, when observers correct their social inference, they may need to suppress their dispositional judgment. This means that dispositional rebound should be observed at a later stage. In line with this rationale, participants first confronted with a forced, but not an unconstrained, speaker put more emphasis on dispositional factors when judging a second target (Yzerbyt *et al.*, 2001) and selected more disposition-laden language in describing pictorially presented behaviours (Geeraert *et al.*, 2004). Hence, the dispositional rebound can be regarded as yet another demonstration of dispositional resilience.

Interestingly, the universality of dispositionalism has recently been questioned (Choi, Nisbett, & Norenzayan, 1999). Cross-cultural research suggests that people from interdependent cultures (Markus & Kitayama, 1991), such as East Asian countries, use more situational information in their causal analysis than people from independent cultures, such as Euro-American countries (Cousins, 1989; Miller, 1984; Morris & Peng, 1994). For example, Miller reported that when compared with North Americans, Indians used fewer personality traits and more situational and relational factors to explain the behaviour of a relative.

Several studies have focused directly on cultural differences in the CB. Both Americans and East Asians were asked to judge a constrained target in the context of the attitude attribution paradigm, the perceiver-induced constraint paradigm or the quiz paradigm, which are three well-known scenarios used to evidence the CB (Choi & Nisbett, 1998; Kashima, Siegal, Tanaka, & Kashima, 1992; Krull *et al.*, 1999; Van Boven, Kamada, & Gilovich, 1999). Interestingly, all participants were found to display the CB regardless of culture. These findings suggest that East Asians may rely on dispositions as easily as Euro-Americans.

However, a different picture emerges when the constraints of the target were made salient, East Asian, but not Western, participants were able to avoid the CB (Choi & Nisbett, 1998; Masuda & Kitayama, 2004; Miyamoto & Kitayama, 2002). For example, Choi and Nisbett (1998, Study 2) had Korean and American participants write an essay with a designated position themselves before judging a forced writer. In line with earlier findings (Snyder & Jones, 1974), this prior episode did not affect the judgment of American participants. In contrast, Korean students no longer displayed the CB after the situational forces had been made salient to them. In a similar vein, Miyamoto and Kitayama manipulated the diagnosticity of the essays. Some essays were diagnostic with respect to the writer's true opinion: these essays were well-written and persuasive. Other texts were non-diagnostic for the writer's opinion: they were short and the arguments were poor. As predicted by the authors, Japanese but not American participants avoided the CB when judging a constrained writer of a non-diagnostic essay.

Clearly, cultural differences in attribution research have received a great deal of attention (for reviews, see Choi *et al.*, 1999; Fiske, Kitayama, Markus, & Nisbett, 1998). However, despite this large body of research, little is known about the exact process underlying these cultural differences even though the literature distinguishes a number of 'Western' attribution models (e.g. Gilbert, 1989; Trope, 1986). A remarkable exception can be found in a paper by Knowles, Morris, Chiu, and Hong (2001). These authors tested the viability of two different cultural attribution models both based on the anchoring-adjustment heuristic. The *spontaneous default inference model* suggests the existence of an automatic anchor which is either dispositional or situational. This anchor is followed respectively by a controlled situational or dispositional correction (Krull, 1993; Lee, Hallahan, & Herzog, 1996). This model suggests that East Asians, in contrast to Westerners, may sometimes, but not always, start with a situational anchor. The *automatized situational correction model* posits an automatic dispositional anchor followed by a controlled situational correction for Westerners, and an automatic situational correction for East Asians (Knowles *et al.*, 2001).

To test these models, Knowles and colleagues (2001) had Chinese and American participants judge a constrained target in a typical attitude attribution paradigm. Additionally, one-half of the participants had to do a second task simultaneously making them cognitively busy (Gilbert *et al.*, 1988). In contrast to non-busy American participants, busy American participants judged the target as strongly endorsing a corresponding attitude. That is, due to a shortage of their cognitive recourses, these students failed to correct their initial judgment. No such difference emerged between busy and non-busy Chinese participants. Such a pattern is in line with the *automatized situational correction model* that suggests a difference in the automaticity of correction.

In the present study, we had Thai and Belgian participants judge a *forced* or *free* writer in the attitude attribution paradigm (Jones & Harris, 1967). Additionally, we manipulated the diagnosticity of the text for the constrained target (cf. Miyamoto & Kitayama, 2002). Thus, we had three conditions in total: free writer, forced writer with a diagnostic essay and forced writer with a non-diagnostic essay. We predicted that the Thai participants in the forced non-diagnostic essay would show no strong sign of CB. The attitude attribution paradigm was followed by a measure of dispositional rebound. The participants were asked to describe a series of pictorially presented behaviours. We analysed these descriptions with the aid of the linguistic category model (Semin & Fiedler, 1991).

The linguistic category model distinguishes four levels of language abstraction. Descriptive Action Verbs (DAV) are context-dependent descriptions of an action with reference to a specific object and situation (e.g. 'John kisses Angela'). Interpretative Action Verbs (IAV) are interpretations of an action. IAV refers to a specific object and situation but goes beyond a mere description (e.g. 'John is comforting Angela'). State Verbs (SV) refer to a mental or an emotional state, with reference to a specific object but not to a specific situation. They are independent of context (e.g. 'John loves Angela'). Adjectives (ADJ) are highly abstract person dispositions. ADJ makes no reference to specific objects, situations or context (e.g. 'John is romantic'). This model proved an excellent instrument to measure dispositional inferences and has been used earlier to measure the dispositional rebound. Although Geeraert and colleagues (2004) relied on a fixed format version of the linguistic category model (Maass, 1999), we decided to encode open text in the present study (see also Wigboldus, Semin, & Spears 2000).

We had two aims for this research. First, we wished to investigate whether the dispositional rebound also occurs in an East Asian culture. Second, we wanted to use dispositional rebound as a tool to study the process underlying attribution. In particular, we argue that different patterns of dispositional rebound are predicted by the *spontaneous default inference model* and the *automatized situational correction model*. To the extent that judging a forced writer elicits situational correction and dispositional suppression, the *automatized situational correction model* would predict no difference between judging a forced writer on the basis of a diagnostic essay or on the basis of a non-diagnostic essay. We would thus expect subsequent dispositional rebound whenever participants have been confronted with a forced writer or the absence of such rebound when they have been exposed to a free writer.

A different prediction would be made if the *spontaneous default inference model* applies. This model posits that with increased situational salience, East Asians would start with a situational anchor followed by a dispositional correction. In this case, there would not be any suppression of dispositional inferences but rather a suppression of situational factors. We would thus expect all participants judging a forced writer on the basis of a diagnostic essay to display dispositional rebound and to rely more on dispositions than participants judging a free writer in their subsequent behavioural descriptions. For Belgians, the provision of a non-diagnostic rather than a diagnostic essay should make no difference and rebound should emerge in both cases. For East Asians, however, a non-diagnostic essay should make the situational factors more salient, and consequently no dispositional rebound should be found.

Method

Participants

Participants were 105 higher education students from the Hogeschool Gent, Belgium and 128 students from Kasetsart University, Bangkok, Thailand. All participants volunteered to complete the study in exchange for a small gift.

Materials

Text

We pre-tested a number of possible issues and selected the one that proved counter attitudinal in both cultures, namely free possession of arms. We also pre-tested the arguments for the essays. We constructed two different texts. The diagnostic essay was rather long, well-written and persuasive. The text included three valid arguments acceptable for both cultures. The non-diagnostic essay was much shorter, unpersuasive, and consisted of one single fuzzy argument. We translated the Thai texts from the Dutch versions by relying on the back-translation procedure (Brislin, 1970). Finally, the essays were hand-written on a blank sheet of paper by a female native speaker.

Pictures

We selected four pictures from different Manga-style comics. Each picture showed at least two human figures engaged in an action, but the pictures left enough room for interpretation. We decided to use Manga-style comics because this kind of drawings has become very popular both in Asia and Europe. This ensured that familiarity with the

style of drawings was not culturally bound. Occasionally, participants indicated that they seemed to recognize some comics but this was the case both in Belgium and Thailand, confirming that the style of images was indeed equally familiar for both cultures. The images were presented on separate pages in a small booklet.

Procedure

The participants were tested in small groups. They were greeted by a native experimenter and invited to take a place at separate tables. They learned that they would have to read another person's essay and that they later would have to answer a series of questions regarding the writer's personality. The experimenter explained that participants in another study had been instructed to think about the topic 'free possession of arms' and that they had been asked to write an essay about this topic. Participants would have to read one selected essay from a female student enrolled at the same university. Depending on the condition, they were led to believe that the essay writer had either been free or forced to choose a particular stance regarding this issue. Also, depending on conditions, the forced writer was associated with a diagnostic or a non-diagnostic essay. Immediately before the essay was distributed, the experimenter checked that all participants had correctly understood the instructions.

Once they had finished reading the essays, participants received the Attitude Attribution Questionnaire. First, participants answered a series of filler items on the writer's personality. Next, they estimated the writer's true attitude towards the topic, on a scale ranging from 1 (totally against) to 9 (totally in favour). Further, participants were asked to recall the arguments of the essay and the characteristics of the writer. Finally, they indicated to what extent the writer was free to choose a particular stance on the topic on a scale ranging from 1 (not at all free) to 9 (totally free).

Next, the participants received the booklet with the Manga pictures along with a response page. The written instructions explained that they would see four different pictures. They were asked to imagine that they had to tell another person what was happening on the images. They were instructed to write down whatever they would like to tell this person. After they completed their text, they were thanked, debriefed and dismissed.

The study thus involved a 2 (culture: Belgian versus Thai) by 3 (freedom of writer: free essay versus forced diagnostic essay versus forced non-diagnostic essay) quasi-experimental design.

Results

One Belgian and one Thai participant wrote nonsense on the description of the Manga pictures. In fact, none of their responses could be coded. We removed these participants from the data set prior to the analyses.

Studies elsewhere have reported cultural differences in response biases especially when using Likert scales (for a recent discussion see Smith, 2004). To correct for this, ratings in the Attitude Attribution Questionnaire were standardized by culture as recommended by van de Vijver and Leung (1996). This is justified as this transformation merely removes the variance in scale response bias between cultures. As a consequence, there will be a total absence of cultural main effects; on the other hand, the interactions

with culture will reveal genuine differences in manipulation, unaffected by potential scale response biases.

Perceived freedom of the writer

The perceived freedom of the writer was analysed by means of a 2 (culture) by 3 (freedom of writer) ANOVA (see Figure 1). As a consequence of the z score transformation, the main effect of culture was not significant. The analysis did reveal a significant main effect of freedom of writer, $F(2, 225) = 52.24$, $p < .001$. The main effect of freedom was qualified by an interaction with culture, $F(2, 225) = 6.76$, $p < .005$. To clarify the nature of this interaction, we looked at the simple main effects per culture. Looking at the Belgian culture first, the analysis showed a significant effect of freedom of writer, $F(2, 225) = 41.74$, $p < .001$. Pairwise comparisons indicated that the free writer was perceived as more free than the diagnostic ($p < .001$) or non-diagnostic writer ($p < .001$). No difference was found between the diagnostic and the non-diagnostic writers ($p = .71$).

We next looked at the effect of freedom of writer for the Thai culture, which proved to be significant, $F(2, 225) = 14.08$, $p < .001$. Pairwise comparisons revealed that the free writer was perceived as more free than the diagnostic ($p < .001$) or non-diagnostic writer ($p < .01$). Interestingly, however, the Thai participants judged the non-diagnostic writer as being slightly more constrained than the diagnostic writer ($p < .06$). As a set, these results indicate a successful manipulation of freedom of writer.

Perceived attitude of the writer

We next looked at the perceived attitude of the writer by means of a 2 (culture) by 3 (freedom of writer) ANOVA (see Figure 1). Again, there was no effect of culture due to standardization. The analysis revealed the presence of a significant main effect of

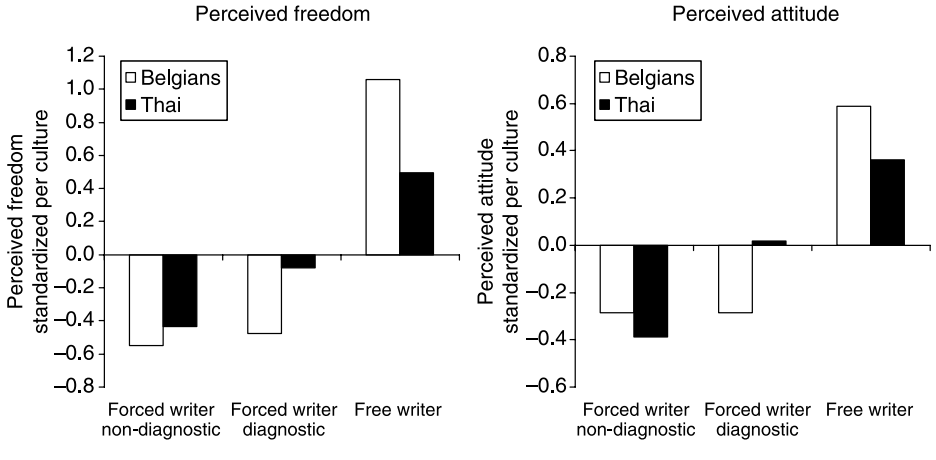

Figure 1. Normalized scores (standardized per culture) for the perceived freedom of writer, and the perceived attitude of writer, as a function of experimental condition and culture. Higher scores indicate that the writer was perceived as being more free (left panel) or perceived as displaying a higher correspondent attitude (right panel). Due to normalized scores no comparison should be made between cultures per condition.

freedom of writer, $F(2, 225) = 15.53$, $p < .001$. Tukey *post hoc* tests showed that participants judged the free writer's attitude more in favour of the topic than the attitude of the diagnostic ($p < .001$) or non-diagnostic writer ($p < .001$). There was no difference between the diagnostic and non-diagnostic conditions ($p = .32$). The omnibus interaction of culture by freedom of writer was not significant, $F(2, 225) = 1.63$, $p = .20$. Yet, in accordance with findings elsewhere (e.g. Choi & Nisbett, 1998; Miyamoto & Kitayama, 2002), we would have expected an interaction such that for the Thai culture the attitude for the diagnostic writer was more correspondent than that of the non-diagnostic writer. Visual inspection of the means indeed reveals such a pattern (see also Figure 1). Therefore, we still decided to conduct separate analyses per culture.

For the Belgian culture, we found a main effect of freedom of writer, $F(2, 225) = 9.88$, $p < .001$, revealing a more correspondent attitude for the free writer than for the diagnostic ($p < .001$) or non-diagnostic writer ($p < .001$). As expected, there was no difference between the forced conditions ($p = .99$). Looking at the Thai culture next, we found a main effect of freedom, $F(2, 225) = 6.89$, $p < .001$, showing a more correspondent attitude for the free writer when compared with the non-diagnostic writer ($p < .001$), and a trend between the free and the diagnostic writers ($p < .10$). As we would have expected, the forced diagnostic writer was perceived to have a slightly stronger attitude in favour of the topic than the forced non-diagnostic writer ($p < .06$).

Dispositional rebound

For each culture, two independent naïve judges scored participants' writings by use of the linguistic category model (Semin & Fiedler, 1991). Cronbach's α for the reliability between raters reached a respectable .77 for the Thai judges and .84 for the Belgian judges. A bilingual rater encoded a random sample in both data sets, and overall the inter-judge agreement was quite satisfactory. The ratings for each participant were summed and a mean total abstraction score was computed by assigning a value from 1 (DAV) to 4 (ADJ), where higher scores identify more disposition-laden language. We also calculated proportions for each of the four linguistic categories.

The linguistic category data can be analysed by either looking at the total abstraction scores or by analysing the proportions for the linguistic categories. We will look at the total abstraction scores first.

Analyses on abstraction scores

We analysed the abstraction scores by means of a 2 (culture) by 3 (freedom of writer) ANOVA (see Figure 2). This analysis showed no effect for culture ($F < 1$), but showed a trend for freedom of writer, $F(2, 225) = 2.99$, $p < .06$. Tukey *post hoc* comparisons revealed that participants in the forced diagnostic writer condition subsequently described the pictures more abstractly ($M = 1.88$, $SD = 0.39$) than participants in the free writer condition did ($M = 1.74$, $SD = 0.30$, $p < .05$). This is a clear indication that we were able to replicate the dispositional rebound. The forced non-diagnostic condition ($M = 1.76$, $SD = 0.35$) was not reliably different from the free ($p = .87$) or the diagnostic condition ($p = .12$).

Importantly, the main effect of freedom of writer was qualified by an interaction with culture, $F(2, 225) = 3.19$, $p < .05$. Consequently, we analysed the abstraction scores

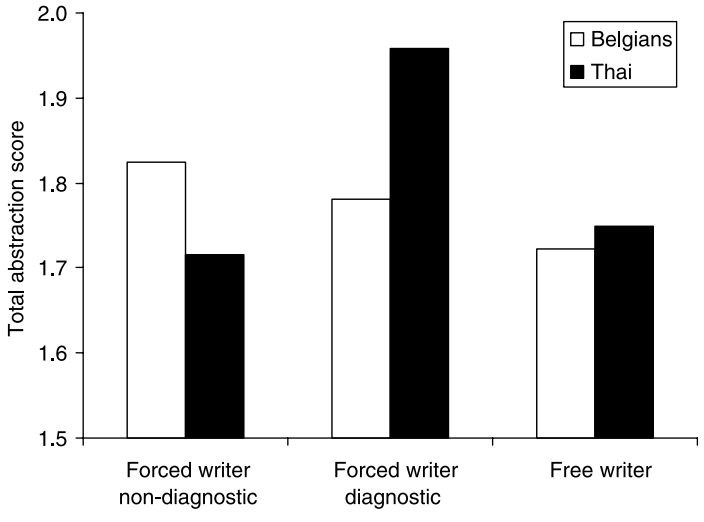

Figure 2. Total abstraction scores for the linguistic category measure, as a function of experimental condition and culture.

separately per culture. Looking at the Belgian culture first, the simple main effect of freedom did not reach significance ($F < 1$), suggesting that we did not find any sign of dispositional rebound.

Turning to the Thai culture, the effect of freedom was shown to be significant, $F(2, 225) = 5.86$, $p < .01$. Pairwise comparison revealed that the participants in the forced diagnostic condition used more abstract scores ($M = 1.96$, $SD = 0.47$) than participants in the free ($M = 1.75$, $SD = 0.35$, $p < .01$) or the forced non-diagnostic condition ($M = 1.72$, $SD = 0.41$, $p < .01$). We found no difference between the free writer and the forced non-diagnostic conditions ($p = .66$). These results suggest that, in contrast to the Belgian participants, Thai participants manifested the dispositional rebound effect but only after confrontation with a forced diagnostic writer.

Analyses on linguistic descriptors

We next analysed the proportions of the linguistic descriptors (see Figure 3). We conducted a 2 (culture) by 3 (freedom of writer) by 4 (type of linguistic descriptor) mixed design ANOVA, with the type of linguistic descriptor varying within participants. This analysis revealed a significant main effect of the type of descriptor, $F(3, 675) = 269.64$, $p < .001$, indicating that some descriptors were encountered more often than others. This main effect was qualified by an interaction of culture by type of descriptor, $F(3, 675) = 8.44$, $p < .001$. Importantly however, we also found a three-way interaction between culture, freedom of writer and the type of descriptor, $F(6, 675) = 4.19$, $p < .001$.

To clarify this three-way interaction, we analysed the proportions of linguistic descriptors separately per culture, by means of a 3 (freedom of writer) by 4 (type of linguistic descriptor) ANOVA. For the Belgian culture, this analysis revealed a significant freedom of writer by the type of descriptor interaction, $F(6, 303) = 3.86$, $p < .001$. Follow-up analyses revealed an effect of freedom of writer for DAV and IAV only. More specifically, free writer participants used more IAV than forced diagnostic participants

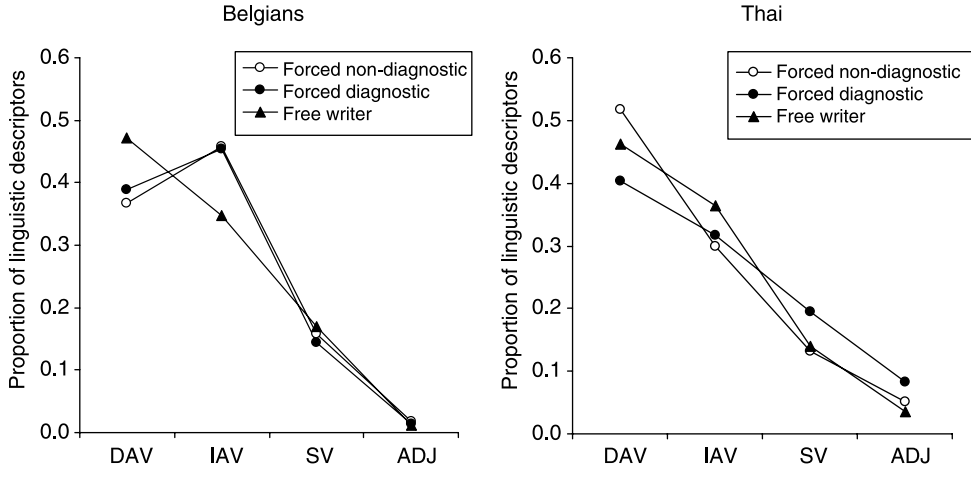

Figure 3. Proportion of linguistic descriptors, ranging from DAV (concrete), over IAV and SV, to ADJ (abstract).

($p < .01$) and non-diagnostic participants ($p < .001$). Similarly, free writer participants used less DAV than forced non-diagnostic participants ($p < .05$). Because freedom of writer had only an effect on DAV and IAV, we can now understand why we failed to find a difference in the abstraction scores. Still, to the extent that the linguistic category model provides a scale ranging from descriptive to dispositional (cf. Maass, 1999), this pattern of results is in its own right a sufficient indication for dispositional rebound in the forced diagnostic and the non-diagnostic conditions.

For the Thai culture, we also found a freedom of writer by type of descriptor interaction, $F(6, 372) = 2.37, p < .05$. Further analyses showed an effect of freedom of writer on DAV, SV and ADJ. Specifically, forced diagnostic participants used more ADJ than free writer participants ($p < .05$). When compared with forced non-diagnostic participants, the forced diagnostic participants also used more SV ($p < .07$) but less DAV ($p < .07$). Together with the findings on abstraction scores, we can safely conclude that forced diagnostic participants showed clear signs of dispositional rebound when compared with free and forced non-diagnostic participants.

Discussion

Thai and Belgian participants were asked to judge a free or a forced writer in an attitude attribution paradigm. Further, we manipulated diagnosticity such that participants had to judge a forced target on the basis of a diagnostic or a non-diagnostic essay. Subsequently, participants had to describe the behaviours on a series of pictures. In line with earlier research (Miyamoto & Kitayama, 2002), Thai students seemed more sensitive to the diagnosticity of the essay. Thai participants rated the constrained writer of a diagnostic essay as more free than the writer of a non-diagnostic essay. Similarly, the diagnostic forced writer was believed to have a higher corresponding attitude than the non-diagnostic forced writer. Belgian participants did not prove sensitive to the manipulation of diagnosticity.

Overall, Belgian and Thai participants used more abstract language, after judging a constrained diagnostic writer than a free writer. We thus found evidence for the

occurrence of the dispositional rebound in both cultures. Although we failed to demonstrate notable difference on the total abstraction score for Belgians, we did find signs of dispositional rebound in the analyses of the linguistic descriptors. Interestingly, for the forced writer of a non-diagnostic essay, a different pattern emerged. While Belgian participants still showed sign of dispositional rebound in describing the images, Thai participants showed no such pattern.

Dispositional rebound has been explained as an ironic consequence of correcting and suppression an initial dispositional judgment (Geeraert *et al.*, 2004; Yzerbyt *et al.*, 2001). Alternatively, these findings could be explained in terms of cognitive fatigue or ego-depletion (Baumeister, Muraven, & Tice, 2000). According to this, account confrontation with a constrained target imposes higher cognitive demands, leaving participants with impaired cognitive resources. In turn, these depleted resources could influence subsequent judgments, such that participants rely on less demanding, more abstract, language. Plausible as this hypothesis might be, Geeraert and Yzerbyt (2007) demonstrated that ego-depletion could not account for the effect of dispositional rebound.

Importantly, we were able to replicate the dispositional rebound in an interdependent culture. After judging a forced target, Thai participants used more disposition-laden language to describe a series of behaviours. Taken together, these findings imply that the proposed conceptualization of situational correction is valid and not culturally bound. It also suggests that people from an interdependent culture are indeed not totally immune to the dispositional way of thinking (Choi *et al.*, 1999). After all, in order to suppress a thought, the thought must be present first. It is thus probable that interdependent observers frequently start with a dispositional anchor followed by a situational correction. However, the current research also supports the notion that East Asians are more sensitive to salient situational information, as several studies have suggested (Choi & Nisbett, 1998; Miyamoto & Kitayama, 2002).

To some extent, the present findings are also relevant for the debate on cultural attribution models. The *spontaneous default inference model* (Krull, 1993; Lee *et al.*, 1996) predicts a situational anchoring--dispositional adjustment sequence for interdependent judges under conditions of increased situational salience. Provided there is this alternative anchoring-adjustment route, no dispositional rebound would be expected in the non-diagnostic condition for Thais, which is exactly the pattern that emerged. We argued that the *automatized situational correction model* (Knowles *et al.*, 2001) would predict no such difference between the diagnostic and the non-diagnostic conditions.

According to the *spontaneous default inference model*, Westerners are believed to start their inferential work with a default dispositional anchor followed by a situational inference. For Asians, the picture is more complex. Asians may start with either a dispositional anchor or a situational anchor mostly depending on the salience of the situation. It is interesting to speculate what would be the default anchor for East Asians. For instance, although Asian observers have been found to display the CB, this might be related to the experimental demands of judging a target's personality (Krull, 1993). Clearly, future research must help resolve this matter.

Although we would argue that the current study supports the *spontaneous default inference model*, it is difficult to provide solid evidence for this. After all, any attempt to peek inside the black box is difficult and purely based on theoretical grounds. One established method to investigate cognitive processes in the context of attribution theory is the manipulation of cognitive load (Gilbert *et al.*, 1988). However, we would

argue that the dispositional rebound can also be used as a tool to study the cognitive machinery underlying people's attributions. Clearly, however, more research is needed for more conclusive explanations of cultural differences in attribution.

In conclusion, we once again found evidence for the existence of lay dispositionalism and for the ironic consequences of suppressing dispositional inferences. At the first sight, culture did not seem to affect the occurrence of dispositional rebound. However, when the situational constraints were made salient, observers from an interdependent culture were able to override this rebound. This pattern of results is in line with predictions made by the *spontaneous default inference model*, and feeds into a fascinating debate regarding the way human beings account for the behaviours they observe, be they Westerners or Easterners.

Acknowledgements

This research was supported by a travel grant from the Belgian Ministry of the French Community to the first author and FRFC research grant 8.4507.00 from the Belgian FNRS to the second author. We wish to thank the social cognition laboratory at Louvain-la-Neuve, Tim Rakow, Brian Parkinson and three anonymous reviewers for their comments on this project. We would also like to express our gratitude to the Department of Psychology at Kasetsart University, Bangkok for their warm hospitality. Further, we would like to thank Arjan Sirinapa, Arjan Ratigorn, Arjan Tippowan, Bunruksa Prasert, Kithiya Suchpasert, Marleen Easton, Peter Cauwelier, Micha Geeraert and Wendy Lecluyse for their help in various stages of this project.

References

Baumeister, R. F., Muraven, M., & Tice, D. M. (2000). Ego depletion: A resource model of volition, self-regulation, and controlled processing. *Social Cognition*, *18*, 130–150.

Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, *1*, 185–216.

Chiu, C., Hong, Y., & Dweck, C. S. (1997). Lay dispositionism and implicit theories of personality. *Journal of Personality and Social Psychology*, *73*, 19–30.

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.

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

Fiske, A. P., Kitayama, S., Markus, H. R., & Nisbett, R. E. (1998). The cultural matrix of social psychology. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., Vol. 2, pp. 915–981). New York: McGraw-Hill.

Geeraert, N., & Yzerbyt, V. Y. (2007). How fatiguing is dispositional suppression? Disentangling the effects of procedural rebound and mental fatigue. *European Journal of Social Psychology*, *37*, 216–230.

Geeraert, N., Yzerbyt, V. Y., Corneille, O., & Wigboldus, D. (2004). The return of dispositionalism: On the linguistic consequences of dispositional suppression. *Journal of Experimental Social Psychology*, *40*, 264–272.

Gilbert, D. T. (1989). Thinking lightly about others: Automatic components of the social inference process. In J. S. Uleman & J. A. Bargh (Eds.), *Unintended thought* (pp. 189–211). New York: Guilford Press.

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

Gilbert, D. T., Pelham, B. W., & Krull, D. S. (1988). On cognitive busyness: When person perceivers meet persons perceived. *Journal of Personality and Social Psychology*, *54*, 733–740.

Jones, E. E. (1979). The rocky road from acts to dispositions. *American Psychologist*, *34*, 107–117.

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

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.

Knowles, E. D., Morris, M. W., Chiu, C., & Hong, Y. (2001). Culture and the process of person perception: Evidence for automaticity among East Asians in correcting for situational influences on behavior. *Personality and Social Psychology Bulletin*, *27*, 1344–1356.

Krull, D. S. (1993). Does the grist change the mill? The effect of the perceiver's inferential goal on the process of social inference. *Personality and Social Psychology Bulletin*, *19*, 340–348.

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

Lee, F., Hallahan, M., & Herzorg, T. (1996). Explaining real-life events: How culture and domain shape attributions. *Personality and Social Psychology Bulletin*, *22*, 732–741.

Maass, A. (1999). Linguistic intergroup bias: Stereotype perpetuation through language. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 31, pp. 79–121). New York: Academic Press.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*, 224–253.

Masuda, T., & Kitayama, S. (2004). Perceiver-induced constraint and attitude attribution in Japan and the US: A case for culture-dependence of correspondence bias. *Journal of Experimental Social Psychology*, *40*, 409–416.

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

Miyamoto, Y., & Kitayama, S. (2002). Cultural variation in correspondence bias: The critical role of attitude diagnosticity of socially constrained behavior. *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.

Quattrone, G. A. (1982). Overattribution and unit formation: When behavior engulfs the person. *Journal of Personality and Social Psychology*, *42*, 593–607.

Ross, L., & Nisbett, R. E. (1991). *The person and the situation: Perspectives of social psychology*. New York: Mcgraw-Hill.

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

Smith, P. B. (2004). Acquiescent response bias as an aspect of cultural communication style. *Journal of Cross-Cultural Psychology*, *35*, 50–61.

Snyder, M., & Jones, E. E. (1974). Attitude attribution when behavior is constrained. *Journal of Experimental Social Psychology*, *10*, 585–600.

Trope, Y. (1986). Identification and inferential processes in dispositional attribution. *Psychological Review*, *93*, 239–257.

Tversky, A., & Kahneman, D. (1974). Judgement under certainty: Heuristics and biases. *Science*, *185*, 1123–1131.

Van Boven, L., Kamada, A., & Gilovich, T. (1999). The perceiver as perceived: Everyday intuitions about the correspondence bias. *Journal of Personality and Social Psychology*, 77, 1188–1199.

van de Vijver, F., & Leung, K. (1996). Methods and data analysis of comparative research. In J. W. Berry, Y. H. Poortinga, & J. Pandey (Eds.), *Handbook of cross-cultural psychology: Theory and method* (Vol. 1, pp. 257–301). Needham Heights, MA: Allyn & Bacon.

Wegner, D. M. (1992). You can't always think what you want: Problems in the suppression of unwanted thoughts. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 193–225). New York: Academic Press.

Wegner, D. M. (1994). Ironic processes of mental control. *Psychological Review*, *101*, 34–52.

Wenzlaff, R. M., & Wegner, D. M. (2000). Thought suppression. *Annual Review of Psychology*, *51*, 59–91.

Wigboldus, D. H. J., Semin, G. R., & Spears, R. (2000). How do we communicate stereotypes? Linguistic bases and inferential consequences. *Journal of Personality and Social Psychology*, *78*, 5–18.

Yzerbyt, V. Y., Corneille, O., Dumont, M., & Hahn, K. (2001). The dispositional inference strikes back: Situational focus and dispositional suppression in causal attribution. *Journal of Personality and Social Psychology*, *81*, 365–376.

Received 11 March 2004; revised version received 29 June 2006