Gender roles and implicit causality

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Numerous studies investigated the phenomenon of implicit verb causality (cf. Rudolph & Försterling, 1997). This research revealed the robust finding that different types of interpersonal verbs lead to systematic causal attributions to one of the interacting persons. However, few studies addressed the interaction between verb causality and context variables. The present cross-cultural study investigates implicit gender roles in action and state verbs comparing two samples from Germany and China. Results show that the German sample perceived actions to be caused by men whereas states were causally attributed to women. However, our Chinese sample perceived men and women rather equally accountable.

1. Introduction

Interpersonal verbs describe either an action (e.g., to arrest) or a state (e.g., to love) taking place between people. Previous research has shown that these verbs lead to specific attributions regarding either the sentence subject or object even if no further information is provided. Hence, a 2 x 2 = 4 verb type scheme reflecting these two independent features can be derived (Rudolph & Försterling, 1997; see Table 1).

Table 1: **Four verb types of interpersonal verbs according to the Revised Action-State Distinction (Rudolph & Försterling, 1997)**

Verb class	State verb		Action verb	
Lexical definition	to experience, to feel		to act, to do	
Verb type	SE Stimulus-Experiencer	ES Experiencer-Stimulus	AP Agent-Patient	AE Agent-Evocator
Attribution	subject	object	subject	object
Example	surprise	like	dominate	praise

Existing research has shown that these verbs also give rise to specific attributions regarding the sex of the sentence subject and object. For example, LaFrance, Brownell, and Hahn (1997) found for an American sample that actors are perceived to be more causally accountable when acting towards a female recipient. Moreover, they showed that females are seen more causally accountable in bringing others to act towards them.
In line with these findings Rudolph, Spörrle, and Krokenberger (2003) found for a German sample that *actions* are perceived as being executed by men, whereas *states* are perceived as being induced by men and experienced by women. However, these results have been obtained in individualist cultures and to our knowledge there is no study examining these effects cross-culturally. The scope of the present study was to compare gender role attributions between a German (i.e., individualist culture) and a Chinese (i.e., collectivist culture) sample.

3. Results

Comparing the subject gender attribution between the two countries for action and state verbs, a two-way ANOVA showed a significant main effect for country, $F(1, 384) = 17.27$, $p < .001$, $\eta^2 = .03$. Thus, the sentence subject is perceived as being more male in China ($M = 4.40$, $SD = 1.03$) than in Germany ($M = 4.76$, $SD = .67$). Moreover, there was also a significant main effect for action ($M = 4.32$, $SD = 1.01$) vs. state verbs ($M = 4.84$, $SD = 1.03$), $F(1, 384) = 102.26$, $p < .001$, $\eta^2 = .06$. Hence, in both countries the sentence subject is perceived rather male for action verbs than for state verbs. Moreover, a significant interaction indicates that this differentiation between action and state verbs is stronger in Germany than in China, $F(1, 384) = 4.99$, $p < .05$, $\eta^2 = .01$ (see Figure 1).
Using a difference score (subject gender attribution *minus* object gender attribution) an analogous two-way ANOVA showed a significant main effect for country (China: $M = -0.84$, $SD = 1.75$, Germany: $M = -0.17$, $SD = 0.88$), $F(1, 384) = 23.05$, $p < .001$, $\eta^2 = .04$, as well as a significant interaction between country and verb class, $F(1, 384) = 7.76$, $p < .01$, $\eta^2 = .01$. Thus, people in China seem to differentiate more between subject's and object's sex than people in Germany and this differentiation was even more pronounced for state verbs compared to action verbs (see Figure 2).

2. Method

Participants
Our convenience sample consisted of 386 university students which were recruited at two universities in Germany and China: 195 students (117 female, age: 18-31, $M = 22.17$, $SD = 2.09$) were recruited on the campus of the University of Munich (Germany) and 191 students (111 female, age: 18-30, $M = 22.05$, $SD = 2.13$) were recruited at the University of Nanjing (China).
Material
Working together with three Chinese native speakers in Germany, the German version of the questionnaire was translated into Chinese and back-translated into German. The validity of the Chinese version was ensured by pretesting Chinese native speakers in Germany ($N = 40$).
The questionnaire consisted of 24 scenarios each represented by a minimal sentence of the pattern "A [*interpersonal verb*] B". Six scenarios for each verb type were selected based on the Revised Action-State Distinction (Rudolph & Försterling, 1997). After each scenario respondents were asked to rate the extent to which they perceived the subject and the object as male or female on two separate rating scales for A and B, respectively. We used 11-point rating scales ranging from 0 ("more likely male") to 10 ("more likely female").

Figure 1:
ANOVA action vs. state verbs and Germany vs. China
Subject attribution (0 = male; 10 = female)
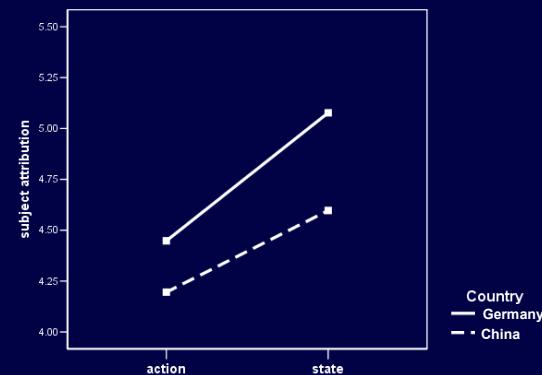
Figure 2:
ANOVA action vs. state verbs and Germany vs. China
Difference Score (sentence subject minus object)
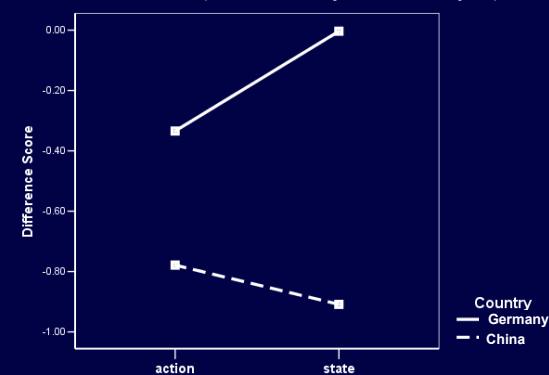
4. Discussion

Both countries: The ones who experience *feelings* are perceived as female whereas those who *act* are perceived as male.
Germany vs. China: In Germany people seem to perceive especially state verbs as being both equally male and female. The Chinese sample on the other hand differentiates more between the sex of the subject and object than the German sample. This effect occurred even stronger for state than for action verbs indicating that the two countries differ in particular in their attribution of state verbs in so far as Chinese people hold a more traditional view and regard states, primarily, as something more feminine.

References:
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