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The others: Universals and cultural specificities in the perception of status and dominance from nonverbal behavior ☆

Gary Bente [a,*], Haug Leuschner [a], Ahmad Al Issa [b], James J. Blascovich [c]

[a] Department of Psychology, University of Cologne, Germany
[b] Department of English, American University of Sharjah, United Arab Emirates
[c] Department of Psychology, University of California, Santa Barbara, United States

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ABSTRACT

The current study analyzes trans-cultural universalities and specificities in the recognition of status roles, dominance perception and social evaluation based on nonverbal cues. Using a novel methodology, which allowed to mask clues to ethnicity and cultural background of the agents, we compared impression of Germans, Americans and Arabs observing computer-animated interactions from the three countries. Only in the German stimulus sample the status roles (employee vs. supervisor) could be recognized above chance level. However we found significant correlations in dominance perception across all countries. Significant correlations were only found for evaluation between German observers and observers from the other two countries. Perceived dominance uniformly predicted the assignment of status-roles in all cultures. Microanalysis of movement behavior further revealed predictive value of specific nonverbal cues for dominance ratings. Results support the hypothesis of universalities in the processing of dominance cues and point to cultural specificities in evaluative responses to nonverbal behavior.

1. Introduction

Man is a "social animal" (Aronson, 1972) equipped with a unique capacity to process and to adapt to complex affordances created by our social environment (Freeman, Rule, & Ambady, 2009). Culture has been identified as a core factor influencing this capacity. With regard to social information processing it has been conceptualized as a human universal as well as a cause of diversity (see Chiao & Ambady, 2007), either applying a general or a particular concept (Vogeley & Roepstorff, 2009). With respect to the biological foundations of social cognition humans can be considered as equal and as distinct from all other living beings. Given that evolution created the biological basis for symbolic interaction, mutual understanding, and social organization, culture describes a general human achievement emerging from, and at the same time driving the particular phylogeny of the human brain (Nettle, 2009; Tomasello, 1999; Tomasello, Carpenter, Call, Behne, & Moll, 2005). Culture in this perspective is conceptualized as a general or universal characteristic of humans' cognitive capacities enabling us to construe a system of social structures, rules and rituals to cope with environmental and social challenges and to buffer collective and individual needs and urges. Different cultures however seemingly have found their own way to adapt to these life affordances, and furthermore also created different environments and communication systems to which homo-sapiens had to adapt (Chiao & Ambady, 2007; Rohner, 1984). Viewed this way culture no longer comes as a universal but as a cause of diversity, instantiated in self construal, cognitive styles, perceptual schemata and communication patterns which serve to

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* Corresponding author.
E-mail address: bente@uni-koeln.de (G. Bente).

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assign meaning to the physical and social world (Markus & Kitayama, 1991; Kitayama, Duffy, Kawamura, & Larsen, 2003; Nisbett, Peng, Choi, & Norenzayan, 2001). Consequently the question has repeatedly been raised regarding to which degree and under which conditions universals in social information processing override cultural specificities or, conversely, whether different cultures imply distinct cognitive implementations, which influence the way we perceive ourselves and others (Markus & Kitayama, 1991; Matsumoto, 2003, 2006; Zebrowitz-McArthur, 1988) and which might even affect the way our brain works (Hedden, Ketay, Aron, Markus, & Gabrieli, 2008; Chiao et al., 2010; White, Lehman, & Cohen, 2006).

We consider expressions and perceptions of power and dominance as a paradigmatic case to approach this question. Social hierarchies are ubiquitous in human societies and successful navigation of the social world implies particular skills to produce and process social cues which reflect, construct or consolidate the vertical dimension of social systems. There is ample evidence that dominance and power are rarely communicated explicitly but mainly expressed through subtle nonverbal cues (Aguinis, Simonsen, & Pierce, 1998; Argyle, Salter, Nicholson, Williams, & Burgess, 1970; Burgoon, 1994; Carli, Martin, Leatham, Lyons, & Tse, 1993; Dovidio & Ellyson, 1982; Dovidio, Ellyson, Keating, Heltman, & Brown, 1988; Edinger & Patterson, 1983; Lee, Matsumoto, Kobayashi, Krupp, & Maniatis, 1992; Mehrabian, 1969, 1970; Mignault & Chaudhuri, 2003; Remland, 1982). It could be shown that culture is influential in molding these nonverbal expressions as well as their perception and cognitive processing (Kowner & Wiseman, 2003; Matsumoto, 2006; Sussman & Rosenfeld, 1982). What poses a particular problem for our understanding of the subtle dynamics of nonverbal behavior is the fact that it is largely produced and processed automatically and without conscious awareness (see Burgoon, Berger, & Waldron, 2000; Choi, Gray, & Ambady, 2005; Newman & Uleman, 1989; Uleman & Bargh, 1989). Andersen (1999) commented on the potential implications for cross-cultural communication: "Because we are usually not aware of our own nonverbal behavior, it becomes extremely difficult to identify and master the nonverbal behavior of another culture" (p. 258). Against this background the current study aimed to identify universals and cultural specificities in the perception of nonverbal behavior and to answer the question whether people from different cultures are equally able to identify dominance and underlying status roles in nonverbal interactions shown in their own or in foreign cultures.

2. Background

Cultures have been shown to differ with regard to the value they assign to the vertical dimension of social relations (Hofstede, 1980; Triandis & Gelfand, 1998), either accepting that inequalities in power and status are natural or existential or seeing them as man-made and largely artificial (see Naylor, 2009). Against this background it doesn't come as a surprise that cultures are regarded as a major source of diversity in the manifestation of power and consequently as a potential cause of misunderstanding when it comes to the perception and interpretation of dominance cues in intercultural communication (Aguinis et al., 1998; Gudykunst & Ting-Toomey, 1988; Gudykunst, Ting-Toomey, & Nishida, 1996).

However, data on cultural diversity in this regard is elusive baring some evidence that nonverbal expressions of dominance, although based on culture-specific attitudes towards status and power, are recognized and processed as trans-cultural universals (Burgoon, Buller, & Woodall, 1996; Guerrero & Floyd, 2005; Keating, 1985; Kowner & Wiseman, 2003). A clarification of the conflating concepts involved in this realm might be helpful to approach the partly contradictory results (see Burgoon, Johnson, & Koch, 1998). According to Dunbar and Burgoon (2005) the terms status, power and dominance should be treated as interrelated but nevertheless "separate constructs" (p. 208). With regard to dyadic power theory (Dunbar, 2004; Rollins & Bahr, 1976) power can be conceptualized as a latent variable (Komter, 1989), i.e. having the potential to influence others, which can rely on different power bases (French & Raven, 1959), such as explicit rules (legitimate power), means control (coercive and reward power), quality of relation (referent power) or skills and knowledge (expert power). Status thus can be understood as a structural basis of (legitimate) power, derived from asymmetric role assignments in social systems (superior vs. subordinate). In contrast, dominance describes an overt phenomenon which is manifest in the interaction patterns, i.e., a set of "...expressive, relationally based communicative acts by which power is exerted and influence achieved" (Dunbar & Burgoon, 2005, p. 209; see also Burgoon & Dunbar, 2000; Burgoon et al., 1998).

According to Kowner and Wiseman (2003) cultural values influence different instantiations of status and dominance on different levels: "Culture, we argue, determines the values attached to status, but it also affects the magnitude at which a person's status is manifested through behavior in a given society" (p. 206). In a cross-cultural business negotiation, for example, cultural display rules might reveal different expressions of status in different groups; nevertheless observers could agree upon who is dominant and who is submissive. Moreover, inferences about underlying status relations could converge independently from what a particular culture would consider appropriate or successful in asymmetric interactions. Thus we can assume different layers of dominance perception: a descriptive layer, potentially relying on universal perceptual mechanisms, and an evaluative layer relying on culture-specific comparisons to the self and experiences with other members of the in-group. Kowner and Wiseman (2003) found that for the US and Japan although the descriptions of typical status-related behavior were "far from identical" (p. 207), the named behaviors were unanimously interpreted as either dominant or submissive across the cultures. These results support the hypothesis of culture-specific expressions of status and power (see also Triandis & Gelfand, 1998; Triandis & Suh, 2002), and also show that status-relevant cues can be identified by members of other cultures, even though not part of their own repertoire. In a recent brain imaging study Freeman, Rule, Adams, and Ambady (2009) provided additional evidence that members of different cultures (in this case Americans and Japanese) are equally able to differentiate dominant and submissive postures, displayed on digitally edited photographs (contour