

DIALOGUE

Cross-Understanding in Groups: How to “Cross Over” Without “Dying”

Despite recent advances in group cognition research, the link between this research and group decision making in real-life organizations has been lacking. In their article Huber and Lewis (2010) address this gap between research and practice by introducing the construct “cross-understanding.” According to Huber and Lewis, cross-understanding explains seemingly inconsistent research findings, since group decisions may be affected by group members’ (mis)understanding the “mental models” of other group members, including their knowledge, beliefs, sensitivities, and preferences.

Here we build on Huber and Lewis’s (2010) concept of cross-understanding in three ways. First, we address the difficulty of applying the concept, as presented by Huber and Lewis, to real-life organizations. Second, we discuss cross-understanding in terms of basic social psychological processes. Third, we present a model of group cognition that shows when and how cross-understanding could be used to benefit group decision making in real-life organizations.

CROSS-UNDERSTANDING IN REAL ORGANIZATIONS

As Huber and Lewis suggest, the concept of cross-understanding has particular relevance for groups that engage “in tasks that require the use of diverse knowledge, beliefs, or perspectives” (2010: 7), including top management teams, task forces, project teams, and product development teams. These groups are being used more frequently by firms because of recent changes many businesses are experiencing (Neilson, Martin, & Powers, 2009).

Creating and maintaining appropriate levels of cross-understanding may be difficult. Within the cross-understanding framework, more effective group decision making in real-life organizations depends on group members’ ability to maintain high cross-understanding of their fel-

low group members’ mental models without changing their own mental models too much in the process. This may not always be possible. For example, based on the recent Goldman Sachs Senate hearings, the top management team appeared to have a high degree of cross-understanding. However, this same team made a series of questionable decisions. Goldman Sachs executives may well have understood their fellow executives’ mental models, but in developing this understanding, their own mental models may have changed in a way that led to less effective decision making. It was clear, for instance, that Senate members did not share a high level of cross-understanding with the executives.

SOCIAL PSYCHOLOGICAL PROCESSES AND CROSS-UNDERSTANDING

People generally lack correct insight into their own and others’ preferences (Wilson, Lindsey, & Schooler, 2000). For example, understanding others’ beliefs and intentions is often a spontaneous inference that is made effortlessly and unconsciously and may or may not be accurate (Uleman, Saribay, & Gonzalez, 2008). Two biases that lead to inaccurate understanding of others are false consensus (Ross, Greene, & House, 1977), whereby one automatically assumes that others hold the same beliefs, preferences, and sensitivities, and pluralistic ignorance (e.g., Miller & Prentice, 1994), whereby one incorrectly assumes that privately held beliefs are not shared by others. At the group level, false consensus and pluralistic ignorance work together to create what we term *pluralistic arrogance*, where group members create an inaccurate implicit theory about the group’s beliefs, sensitivities, and preferences that can, in turn, influence the type of high cross-understanding that may develop. For instance, if group members assume under false consensus that others share their beliefs and preferences, they may fail to share unshared information, not realizing the information is unshared. Conversely, under pluralistic ignorance, group members might fail to share shared information, not realizing the information is shared.

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Huber and Lewis state that group decision outcomes that depend on cross-understanding are unlikely to be affected by empathy or perspective taking, because “the effects of cross-understanding depend fundamentally on members’ accurate understanding of one another’s factual knowledge, cause-effect beliefs, sensitivities, and preferences” (2010: 10). Based in part on pluralistic arrogance, however, we propose a distinction between the psychological processes that guide cross-understanding of these attributes. Whereas understanding of members’ knowledge might be based on shared cognitions, understanding of members’ beliefs, preferences, and sensitivities might depend on *shared social theories* (Randolph-Seng, Casa De Calvo, Zacchilli, & Cottle, 2010). More specifically, shared social theories are conceptualized here as conscious heuristic-based information processes at the group level (e.g., shared beliefs, values, norms, identities, or assumptions).

One example of a shared social theory is the creation of conscious social identities at the group level. According to social identity theory (Hogg & Terry, 2000), group membership becomes self-defining such that members assimilate perceived group attributes and rely on group norms to guide behavior. As a result, strong social identity can result in poorer group decisions—for instance, by promoting pluralistic arrogance (e.g., Hogg, Turner, & Davidson, 1999).

CROSSING OVER WITHOUT DYING

We suggest that cross-understanding can improve group decision making to the extent that group decisions are based on shared cognitions and not simply shared social theories. Specifically, we propose a dual process model of group cognition in relation to cross-understanding. Cross-understanding based on shared beliefs, preferences, and sensitivities creates shared social theories, which can lead to pluralistic arrogance and can implicitly reinforce cross-misunderstanding (direct route). This may have negative consequences for decision making. Accurate cross-understanding based on knowledge may result when beliefs, preferences, and sensitivities are made explicit (indirect route). This may lead to greater information sharing, which reinforces cross-understanding and improves decision quality.

To the extent that all group members share similar social theories, the likelihood of processing information according to the direct route should increase. Group decisions based primarily on shared social theories will be influenced by implicitly shared beliefs, values, norms, identities, or assumptions. Furthermore, groups may automatically make decisions based on these shared social theories (direct route), unless individuals explicitly express the rationale or thought process for their group-level decisions (indirect route). Group decisions based primarily on shared cognitions will be influenced by a more authentic rationale and, thus, will represent a more cognitively controlled decision-making process (see Randolph-Seng et al., 2010).

During the Goldman Sachs Senate hearings, Joseph Birnbaum, managing director of the mortgage department, said, “No one from top management told me to make bets against the subprime market. Rather . . . the consistent theme from management was to get smaller, reduce risk, and get closer to home.” Supposing those under Birnbaum’s direction were operating under a similar mental model, they may have failed to share information that would have pointed to the mortgage market collapse, assuming under pluralistic arrogance that if such information were valid, others would have already called attention to it. By our account, a high level of cross-understanding may have reduced decision accountability by discouraging mortgage executives from questioning the decisions of their colleagues. Furthermore, a high level of cross-understanding may have changed executives’ own mental models and made it difficult for them to understand the implications of their decisions for those outside the Goldman Sachs circle.

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Cross-Understanding and Shared Social Theories

Cross-understanding refers to the extent to which group members have accurate understandings of other members' mental models (Huber & Lewis, 2010: 7). It is a group-level compositional construct—each member's understanding of each other member's mental model is a construct at the component level—whereas cross-understanding—which depends on these component-level values—is a construct at the group level. Members' understanding of others' mental models (and, thus, cross-understanding)

can evolve through intermember communications or interactive experiences; from observations of members' communications or behaviors; from access to members' biographical information; or from third-party descriptions of, for example, members' factual knowledge, cause-effect beliefs, sensitivity to the relevance of particular issues, or preferences (Huber & Lewis, 2010: 7).

In their Dialogue piece concerning the effect of cross-understanding on group decisions, Randolph-Seng and Norris theorize about the effects of shared social theories (SSTs) and cross-understanding on the quality of group decisions. We welcome this opportunity to contribute to a

dialogue on these and related matters and thereby advance theory about cross-understanding. We first consider relationships between aspects of the cross-understanding construct and SSTs. Following this, we examine the separate and joint effects of different levels of SSTs and cross-understanding on the quality of group decisions.

SSTs AND DEVELOPMENT OF CROSS-UNDERSTANDING

Randolph-Seng and Norris suggest that groups generally possess SSTs, conceptualized in previous work as "shared beliefs, values, norms, identities, or assumptions" (Randolph-Seng, Casa De Calvo, Zacchilli, & Cottle, 2010). In our article (Huber & Lewis, 2010) we imply that groups generally possess some level of cross-understanding (although the level may be low). Thus, in this Dialogue it seems appropriate to consider probable relationships between cross-understanding and SSTs.

To this end, we first note that cross-understanding and SSTs differ in at least two important ways. First, SSTs, as conceptualized by Randolph-Seng and Norris, do not include factual knowledge. In contrast, factual knowledge is an important aspect of cross-understanding (Huber, 2004: 69; Huber & Lewis, 2010). Second, SSTs are "shared," meaning that they are identical, or are at least very similar, across members. Indeed, they seem to be a form of *shared mental models* (Cannon-Bowers, Salas, & Converse, 1993; Hodgkinson & Healey, 2008; Mathieu, Heffner, Goodwin, Salas, & Cannon-Bowers, 2000; Mohammed & Dumville, 2001). In contrast, as we explain in our article, the components of cross-understanding—that is, the understandings that members have of other members' mental models—are rarely identical and are often dissimilar.

Moving on from differences, we turn now to relationships between aspects of the cross-understanding construct and SSTs. We propose three working hypotheses intended to sharpen and extend the proposed relationships between SSTs and cross-understanding set forth by Randolph-Seng and Norris. Specifically, we posit the following:

1. A group member's assumptions concerning the content of the group's SSTs act as a

default template in the development of the group member's understanding of other members' mental models.

2. If the content of an observed group member's mental model deviates from the content of the group's SST, the observing group member's ongoing experiences with that member and observations of that member's communications and behaviors serve to correct the observing member's erroneous assumptions about the validity of the group's SST as an indicator of the observed member's mental model.
3. Corrections to a member's erroneous assumptions serve to reduce the member's reliance on the default template, thereby increasing the validity of the member's understanding of other members' mental models and, thus, increasing cross-understanding.

In sum, we hypothesize that a group member's assumptions concerning the content of the group's SSTs act as a default template in the development of the group member's understanding of other members' mental models. As members interact, communicate, and observe each other in the course of completing their tasks, this default template is likely to be replaced by more accurate understandings of others' mental models, increasing cross-understanding. We now examine the separate and joint effects of SSTs and cross-understanding on the quality of group decisions.

SEPARATE AND JOINT EFFECTS OF SSTs AND CROSS-UNDERSTANDING ON GROUP DECISIONS

In our article we do not explicitly theorize about the effects of cross-understanding on group decision making. We do theorize, however, that when cross-understanding is high, the information brought to bear on the group's task tends to be high in quantity and quality. It follows, therefore, that—if members employ their understandings of other members' mental models by seeking or sharing relevant information—the group's decisions will be of high quality. Thus, it seems reasonable to conclude that *cross-understanding increases the quality of group decisions*. In contrast, with regard to the effect of SSTs on the quality of group decisions, Randolph-Seng and Norris imply by their arguments that *SSTs curtail the quality of group decisions*.

These possibly conflicting effects of cross-understanding and SSTs on decision quality suggest the need to examine their joint effects. Here we develop and posit four working hypotheses concerning the joint effects of cross-understanding and SSTs on decision quality. We begin with the case of groups with weak SSTs and low cross-understanding. In this situation group members have minimal *common ground* (Clark, 1985, 1998) and are therefore handicapped in their communication. This situation slows, and perhaps even limits, development of member understandings of the mental models of other members and, thus, retards growth in the group's initially low cross-understanding. Further, it slows and perhaps limits the development of the group's decision process. These thoughts cause us to posit the following:

4. Groups with weak SSTs and low cross-understanding embody decision processes of low or moderate effectiveness and generate low-quality decisions.

We turn now to the case of groups with weak SSTs and high cross-understanding. When a group does not possess a strong and widely held SST, its members are individually and collectively influenced by varied assumptions, values, and norms. One consequence is that the group's decision process tends to be difficult and slow to develop. A second consequence of a weak SST is that the search for and sharing of diverse information is relatively unconstrained. In both cases the positive effects of high cross-understanding on communication effectiveness and on extended information search and sharing will offset, to some extent, the negative effects of the weak SST on decision quality. Thus:

5. Groups with weak SSTs and high cross-understanding embody moderate- or high-effectiveness decision processes and generate high-quality decisions.

Next we consider the case of groups with a strong SST and a low cross-understanding. The nature of such SSTs is such that they foster member compliance with the theory's values, norms, and assumptions. One consequence is that the group's decision process tends to be quickly created and smoothly operated. A second consequence is that the compliance tends to limit the range of information and the variety of processes that the group accepts as appropriate

and, thus, (1) limits the diversity of information available for decision making and (2) curtails the evolution of cross-understanding. We therefore conclude the following:

6. Groups with a strong SST and low cross-understanding embody smoothly functioning decision processes and generate low-quality decisions.

Last we examine the case where the SST is strong and cross-understanding is high. As stated immediately above, the nature of strong SSTs is such that they foster member compliance with the theory's assumptions, values, and norms and thereby foster smooth and speedy decision making. But they also limit the range of information and the variety of processes that the group accepts as appropriate. Randolph-Seng and Norris argue that cross-understanding exacerbates these two negative effects of strong SSTs. We differ with the authors on this point. In contrast to their argument, we reason that high cross-understanding will *mitigate*, rather than exacerbate, these negative effects of strong SSTs. Specifically, we argue that high cross-understanding will help members identify the new or dissenting information that is needed to avoid making a decision with unduly limited information and options. In addition, the interpersonal insights associated with high cross-understanding can help members with such information convince other members of the value of this information for increasing decision quality. With these thoughts about the conflicting relationships between SSTs and cross-understanding in mind, we posit the following:

7. Groups with a strong SST and high cross-understanding embody highly effective decision processes and generate decisions of moderately high quality.

SUMMARY

Randolph-Seng and Norris theorized about the effects of SSTs on the quality of group decisions and about certain interactive effects of SSTs and cross-understanding on the quality of group decisions. Here we have attempted to sharpen and extend their work by advancing two clusters of working hypotheses, one concerning the relationships between SSTs and aspects of the cross-understanding construct and one examining the joint effects of different levels of SSTs

and cross-understanding on the quality of group decisions.

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Blind Spots in Dutton, Roberts, and Bednar's "Pathways for Positive Identity Construction at Work": "You've Got to Accentuate the Positive, Eliminate the Negative"

We agree that work, as Dutton, Roberts, and Bednar assert, "is a pervasive life domain and a salient source of meaning and self-definition for most individuals" (2010: 265). However, in their insistence on the value of researchers "focus[ing] on positive work-related identities" (2010: 267; emphasis added), we argue that Dutton et al. are implicitly suggesting, in the