

Connecting through interdisciplinarity: A complex responsive process approach to communication

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This paper discusses the importance of conversations that include diverse perspectives for the generation of new knowledge and advocates interdisciplinary conversations as a means of connecting communication academics. It draws on complex responsive process theory (CRP), a communication theory that focuses on emergent processes of relating. According to CRP, although most communicative interactions follow comfortable patterns of relating, it can be the moments of deviation that resonate with participants and lead to new knowledge and new ways of being. CRP explains how communication produces both knowledge and self-identity, whilst simultaneously causing anxiety and tension. Applying this theory to an academic context, this paper considers the construction of disciplinary identity and the difficulties of communicating across disciplinary boundaries.

Key Words: communication, complex responsive process theory, interdisciplinarity

1. Introduction

A highly connected society has emerged from the development of information and communication technologies. Communication scholars, teachers and practitioners are amongst those who have benefited from increased networking, with a number of specialized newsgroups, listservs, websites, conferences and journals online, for example. However, a somewhat paradoxical consequence of this ability to connect with people who share similar interests is a potential reduction in opportunities for new knowledge generation. This paper aims to provoke reflection within the academic communication community by exploring this paradox. In doing so, it takes the theoretical perspective of complex responsive process theory (CRP), a communication theory that argues one of the key contributions to developing new knowledge is diversity of voices, and applies it to the communication discipline as a community of practice.

Lave and Wenger (1991) coined the term community of practice (CoP) while theorising how situated learning occurs through participation in a community. CoPs “are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly” (Wenger, 2008, ¶ 4). Three elements are essential to a CoP. First, the community needs a clear identity, defined by commitment to and competence in the shared interest. Second, members interact with one another in ways that build relationships and facilitate learning. Finally, they share a practice, developed over a sustained period of sharing resources and experiences (Wenger, 2008). A CoP provides its members with a sense of shared identity. Common understandings and interests unite them, facilitating communication with other members as they, at least in part, share worldview, routines, and vocabulary.

While CoPs like the academic discipline of communication are certainly beneficial to learning, there is increasing evidence in the literature that suggests groups consisting of individuals who do not belong to the same CoP are possibly more effective at generating new knowledge (Fong, 2003; Mitchell & Nicholas, 2006). This paper, using CRP as its theoretical base, invites consideration of how whom we connect with and how we connect affects knowledge generation. It proposes that interdisciplinary or cross-community communication provides opportunity for the generation of new knowledge. From a CRP perspective, interdisciplinary engagement may threaten our self-identity and lead to anxiety, yet, new knowledge arises out of conversations that challenge us. This paper explores how a CRP understanding of communication may help stimulate communication scholars to engage in conversations outside of comfortable disciplinary and community boundaries.

2. Generating knowledge through communication

CRP is predicated on the idea of communication as a series of gestures and responses continually emerging and self-organising through the process of relating (Stacey 2001; 2003). That is, CRP proposes we create meaning by reacting to one another's use of verbal and non-verbal symbols rather than by sharing cognitive content. CRP also sees meaning and knowledge as equivalent, with knowledge enacted in the process of communicating (Stacey, 2001).

According to Stacey (2001), we relate based on habitual patterns. When we communicate we bring expectations of our own and others' performance to the interaction. We have a set of habits, routines, beliefs and so on that are not things we "store" in our minds, but predictable couplings of gesture and response that we typically reproduce as we interact (Stacey, 2001). As we interact in ways patterned by past behaviours we continuously recreate our individual identities, simultaneously including or excluding ourselves from various social identities or groups (Stacey, 2003; 2001). Thus, communication between, for example, scholars from different disciplines can be made difficult by established discourses, routines and so on that identify them as belonging to differing CoPs. If, as CRP suggests, however, we accept that these differences are not intrinsic to the communities and their members, but merely established habitual ways of communicating, then they become not fixed but able to be transformed (Stacey, 2001). In fact, though CRP sees our identities as being continuously reproduced through interaction, it is always with the potential for transformation (Cooke-Davies, Cicmil, Crawford, & Richardson, 2007).

According to CRP, the emergence of new patterns in communicating through transformation depends on two factors (Suchman, 2006). First, participants must be responsive. That is, they must be aware of others' ideas and feelings and be able to be affected by others. They need to understand that meaning is not the property of the gesture itself but depends upon the response to the gesture; that is, it arises in interaction (Stacey, 2001). Gestures and responses ideally need to be interpreted with an open mind and a willingness to deviate from comfortable previous patterns. Unsurprisingly, those who gravitate towards academic work tend to have a willingness to explore new ideas, which after all underpins the very nature of academic enquiry. However, academic responsiveness can be constrained, for example by the lengthy delays between a gesture (such as an article being published) and a response.

The second factor that influences the emergence of new patterns of communication is diversity. Academic communication is typically highly patterned and structured. The disciplinary structure of educational institutions pushes scholars into constructing a disciplinary identity. However, those same structures that help provide CoPs with which to engage, also can negatively affect diversity. The potential for transformation (and the subsequent emergence of new knowledge) as

we interact is always present, but increases when groups are diverse (Stacey, 2001; Fong, 2003). For example, research on knowledge generation and sharing within organisations has identified that in order to optimize knowledge employees need to be integrated, but not so integrated that difference between them is eliminated (Hasgall & Shoham, 2008). Simply put, the wider the variety of perspectives that can be introduced into a conversation, the greater the opportunity for new associations to form and reproduce into new patterns of meaning (Suchman, 2006).

As Suchman (2006) notes, however, there is a basic conflict between the diversity and responsiveness that CRP proposes are essential to the generation of new knowledge. The more we have in common with the people we communicate with the greater the shared understanding and empathy, but when widely divergent participants converse the chances of talking past one another increase:

...in groups that have well-established ideas and have known one another a long time, there is a tendency for there to be too little diversity...in groups where participants share little in common, there may be too much diversity and communication may disintegrate. (Simpson, 2006, p. 479)

This is partly because conversations that threaten our comfortable communication patterns with the inclusion of opposing or diverse voices can both undermine our identity and lead to anxiety and tension.

3. Identity

From a CRP-informed perspective, all conversations are shaped by issues of identity and power (Stacey, 2001). We establish ourselves as members of the communities we belong to in part through our communicative practice. The language adopted, the theories adhered to, and the issues wrestled with all contribute to the construction of a disciplinary identity, for example (Leggon, 2006). The identifying features of a CoP (vocabulary, routines, codes of conduct and so on) work to establish the identity of the community by differentiating it from other communities, even to the extent that outsiders cannot participate in what its members do (Koskinen, 2005). As members of a discipline, for example, we are expected to conform to an accepted understanding of academic credibility, intellectual rigor, and appropriate subject matter (Leggon, 2006).

Issues of power are unavoidably linked with issues of identity as to establish identity we are necessarily interdependent, defining our difference against an “other”. We must also continually negotiate the process of interacting, accounting for the actions of ourselves and others, and negotiating the next action (Stacey, 2001). One way that we seek to include or exclude ourselves from groups is in the way we communicate. Any social institutions, then, whether academic discipline or organisation, “...are patterns of power relations sustained by ideological themes of communicative interaction and patterns of inclusion and exclusion in which human identities emerge” (Stacey, 2003, p. 329).

We use two kinds of logic in the process of constructing community identity. First, we follow a symmetric logic, stressing what we have in common and minimizing difference to establish the group identity. Simultaneously, we employ asymmetric logic in that we focus on the differences of those outside the group, while obscuring any similarities we might have with them (Stacey, 2001). Thus, when members of two or more communities come together issues of identity and power are intrinsic to their communication processes. In the case of members of academic disciplines, for example, scholars can be fiercely territorial both in the sense of claiming an area of knowledge for their own and in the sense of contending that new knowledge can only be generated by legitimised insiders (Leggon, 2006). In addition, the control of outlets for publication and the competition for funds and status within the university system contribute to the

power struggle involved in developing a scholarly identity (Leggon, 2006). Even within a discipline, factions may develop as scholars construct their identity based on, say, theoretical perspectives (such as functionalist versus critical scholars). Nevertheless, because identity is perpetually constructed, according to CRP, it is fluid. So, when a communication department and an engineering department confront one another in a meeting they are defining themselves against each other, yet when the institution to which they both belong confronts a competitor, they may draw together under a different, common identity.

The consequences of identity and power issues for interdisciplinary conversations are significant. First, the perceived need to firmly establish oneself in a community can result in little incentive to participate in conversations across disciplines, leading to a “silo effect” (Jones, 2008). In order to adopt the vocabulary and routines of a particular community scholars are susceptible to engaging only with those who think and communicate like themselves. Thus, information systems academics might research information and communication technologies yet never engage with research on the same topic by communication scholars, and vice versa.

A subsequent problem that arises from this approach is the entrenchment of perspectives. The communicative, epistemological and ontological practices by which disciplines define themselves means that scholars working in particular disciplines embrace certain perspectives (Jones, 2008). These are crucial to maintaining membership and authority in their community. It is not surprising then, that IS scholars tend to maintain a working concept of knowledge which sees it as reified and objective while communication scholars see it as abstract and subjective. As Leggon (2006) notes:

...academic territoriality can be an obstacle to the conduct of inquiry when strict adherence to the language and perspectives of one’s discipline precludes establishing some common ground with researchers from different disciplines from which creative research might develop. (p. 3)

In other words, communication’s contribution to the establishment of identity affects participants’ ability to be responsive when engaged with others.

In the academic world, interdisciplinary interaction provides an opportunity to balance the paradoxical needs that CRP suggests are inherent in new knowledge generation. Interdisciplinarity can be defined as “bringing together and interweaving content, methods, and research strategies of various existing fields of study” (Payne, 1999, p. 176). Because participants are part of the system of academia, a degree of shared practice or experience can be assumed. By implication, members of academia are interested in learning and exploring cognitive landscapes, so, in CRP terms they are likely to be responsive. Self-awareness is crucial to successful interdisciplinary conversation so that participants can adopt a mode of inquiry that draws from the knowledge bases of many disciplines, enabling them to see through different eyes (Leggon, 2006). However, they are also likely to be tied to disciplinary practice and regard themselves as members of particular academic CoPs. Ideally, participants will understand their own communicative practices (vocabulary, organization and so on) as habitual rather than intrinsic. Still, getting researchers from different disciplines to talk to one another, rather than talk past one another, is a challenging goal, at least in part because of the anxiety and tension inherent in interdisciplinary interaction.

4. Anxiety and tension in communication

The chance for the necessary transformation in interaction that generates new knowledge is reduced when the desire to maintain identity within our community entrenches our patterns of communicating so that we are not open to unexpected deviation. For example, Stowell (2007)

notes that web communities often increase isolation rather than encourage interaction in that they make it much easier to ignore disparate ideas. By connecting people who hold the same beliefs, vocabularies, and expectations of information, such communities have no need to justify their perspectives or face criticism; instead they reinforce one another's perspective. "Individuals need to be part of a community that is able to exchange ideas, ask questions and debate issues" to gain new knowledge (Stowell, 2007, p. 421). While academics clearly carry out these practices within their own fields of study to positive effect, just how much more transformation could occur if such practices were employed more often across disciplinary and conceptual boundaries is worth considering.

Communicating across disciplinary boundaries requires established patterns to be disrupted so that new patterns can emerge: "It is in their struggling to understand each other in fluid, spontaneous conversational exchanges that people create new knowledge" (Stacey, 2001, p. 182). To foster the emergence of possibility for transformation of patterns, parties must feel secure in their identity yet comfortable with change. However, conversations that disrupt patterns are not easy to manage (Stacey, 2001). First, misunderstanding is common, which may lead to frustration and stress, resulting in participants wanting to withdraw from the interaction. Second, when a conversation has the potential to disrupt everyday patterns of being, it also has the potential to threaten continuity of identity, giving rise to anxiety in the participants. Finally, conversations that offer the possibility of transformation often threaten established power relations. Those in power may seek to close such conversations down as the threat of a shift in power becomes manifest (Stacey, 2001). These communicative tensions need to be addressed to foster successful interdisciplinary conversations.

Practical tools and strategies for interdisciplinary conversations are needed to manage the complex communication process. The use of boundary objects is one future area for research. Boundary objects are typically organisational artefacts (such as prototypes or design drawings) that allow activity to occur, despite the basic incommensurability of groups involved in a task (Wilson & Herndl, 2007). Though usually tangible objects, abstract concepts can also function as boundary objects (Koskinen, 2005). When members of various communities come together with little understanding of their own and one another's assumptions and communicative expectations, the co-construction of a boundary object can provide a focal point for weakening the lines of demarcation. The boundary object provides a tangible focus for the parties, allowing them to see how their own ways of being, their own patterns of knowing, are contingent on their identification with a particular discipline and its interaction patterns and expectations (Wilson & Herndl, 2007).

For example, a new policy document could act as a boundary object between departments in an educational institution. Members from different departments are likely to arrive at a meeting to develop a common document with a set of expectations as to what the document will contain and how its format and content should be decided. These expectations, from a CRP perspective, are a result of the typical patterns of interaction each member has within their own communities and their personal experiences and ways of being. Alliances are likely to form between members who share similar vocabularies and beliefs, and the relative power of any factions will likely impact on any decisions made. Yet, CRP suggests that if members come into such a meeting welcoming diverse perspectives and open to understanding those perspectives, and adjust their own beliefs and behaviours accordingly, innovation is far more likely to occur. The policy document becomes a joint focus around which varied perspectives can interact, rather than a symbol of power and representation of departmental identity.

5. Conclusion

From a CRP standpoint, communication constructs knowledge and identity, while arousing feelings of tension and anxiety. When members of different communities of practice come together, they bring with them their own patterns of communicating and their anticipation of how others will communicate.

In the living present, individuals are interacting with each other in their own local situations. The basis of their action is their current expectations of the future, conditioned by their accounts of the past, where those accounts are influencing expectations for the future and expectations of the future are influencing the current accounts of the past. (Stacey, 2003, p. 330)

However, from a CRP perspective, new knowledge is created by the disruption of old patterns of communicating; interdisciplinary conversation is one way to achieve that disruption. To genuinely dislocate our patterns we need to embrace not only responsiveness but also diversity. We need to be willing to threaten our professional self-identity by disrupting our patterns of communication and being prepared to see through others' eyes. We need to be aware that in conversations transformations can occur at the local level but then be amplified throughout the community (Luoma, Hämäläinen, & Saarinen, 2007). We need to realise that change is an inevitable part of human interaction. If we come to expect the unexpected, then our level of anxiety and our defensiveness about our identity declines (Stacey, 2001).

While this paper has focused on interdisciplinary academic interactions, the ideas apply elsewhere. Anywhere there are cross-disciplinary teams we need to consider how effective communication and knowledge generation can be encouraged despite the issues of identity and power inherent in communicating across CoPs. Truly "interdisciplinary efforts can facilitate moving beyond individually established facts to meeting the complex challenges we face with more dynamic applications of emerging knowledge" (Aboelela et al., 2006, p. 342). CRP provides a useful lens through which we can consider interdisciplinary connections because it sees knowledge creation as an ongoing communicative process and focuses on what people are doing and how they are doing it.

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