Working Together Apart: Challenges of Cross-Cultural Collaboration

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Abstract
We are studying long distance collaborations that span cultural boundaries, with a particular focus on collaborations on the Pacific Rim. Our initial phase involves field studies, focusing on patterns of success and failure in such cross-cultural collaborations, with an eye toward understanding what kinds of procedures and technologies can make such collaborations work more smoothly. Later we will follow up our observations with experimental studies that evaluate our specific hypotheses.

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Collaboration, culture, collaboration technologies.

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More and more organizations are forming virtual teams whose members reside in different countries. It is well known that working remotely presents many difficulties, summarized in "Distance Matters" and our recent book, *"Scientific Collaboration on the Internet"* (Olson & Olson, 2000; Olson, Zimmerman, & Bos, 2009). But one of the greatest challenges is not the distance per se, but the different cultural backgrounds. Contemporary theory suggests that people from different cultures even perceive and think differently (Nisbett, 2004). We are studying cross-cultural collaboration with the goal of suggesting ways in which collaboration tools can help people communicate in ways they intend, so that misunderstandings are minimized. We are studying existing cross-cultural team members to discover the kinds of difficulties they have encountered and ways they have overcome them.

We are focusing on cross-cultural teams who have members in Asia, because significant contemporary theory has explored the differences in thought and practices between Asians and Americans. Modern theory about culture (Nisbett, 2004) highlights US-Asia differences based on 25 years of research. And, Asia is

a rapidly developing part of the world in the 21st century. In many Asian countries, the kinds of technologies and infrastructure that we are studying are rapidly penetrating their societies.

Even though it is widely understood that working together when geographically distributed is difficult (Olson & Olson, 2000), all the evidence points toward such work becoming increasingly prominent. For instance, a survey conducted in 2008 by the Institute for Corporate Productivity found that 2/3 of companies anticipated increased reliance on virtual teams (this figure rose to 80% for companies with more than 10,000 employees), even though these same companies recognized the difficulties in managing such teams. These teams are increasingly spanning cultural and national boundaries. And, because collaboration technologies are becoming affordable for even small enterprises, there is a trend to more and more "micro-multinationals" (Varian, 2005).

We all hold to the notion that people from different cultures behave differently, but more recent evidence shows that cultural differences can influence how people *see* the world and *think*. Taken together, these two trends present a research challenge of how to develop both social practices and collaborative technologies that can mitigate the challenges of such cross-cultural collaborations.

Equally important is that participants in cross-cultural teams think that things are going well, when indeed they are not. Those in the dominant location (e.g. headquarters, say, in the US) often impose their cultural expectations and habits on the other, less dominant participants, and wrongly judge that collaborations are smooth, when indeed the less dominant participants have had to do all the adapting. It is very important to uncover the aspects that are going well and those that are not (from all participants' points of view) to find a comfortable "middle ground" that is inclusive of many ways of thinking.

We are studying successful and less-successful communication in cross-cultural distributed teams. We are less interested in collocated cross-cultural teams because the *place* the conversation takes place often dictates whose cultural rules will be followed: "when in Rome, do as the Romans." But in distributed teams, each team member is in their own "Rome," and they are less likely to bend their style to fit the remote location. Our goal is to understand what factors determine successful cross-cultural collaboration, and to specify requirements for tools that could facilitate such work.

One important aspect of intercultural collaborations is that they often cross time zones, with US-Asia time zone differences such that the workdays do not overlap. While some teams will conduct real-time conversations by video or audio conferencing, important work has to get done asynchronously. While e-mail and shared documents provide important asynchronous tools, there is a strong need for better awareness of what one's collaborators have been up to. It is very intrusive to have to summarize the day's important activities for the remote members. Tools that are time stamped and which include functionality that allows specific search-for-yesterday's-activity, for example, can be used in creative ways to provide needed awareness. If one could indicate in Chat that a particular conversation was important for those not on-

line to see, it could be indicated in a color or emailed to appropriate parties. One could imagine a view of the remote partners' activity the previous day (your night) by displaying important Chat episodes and summarizing which documents were checked in or out.

The literature on cross-cultural collaboration highlights that people from the US and Asia differ on many important dimensions having to do with collaboration and communication. In the table on the next page, we highlight some of the differences we expect and how technology might be changed to make the communication smoother.

Our hypotheses, based on our theory of remote collaboration (Olson, Zimmerman, & Bos, 2009) are simply stated as the differences above manifesting themselves in cross-cultural collaboration and that various new designs of reminders, calendars, and displays of the previous day's work will mitigate some of these difficulties.

We are pursuing these issues by studying in situ cross-cultural collaborations in several organizations. We are focusing on organizations that have regular collaborations with Asian counterparts. Our initial focus is on field studies. Later, informed by these observations, we will design and conduct controlled laboratory studies that focus on requirements for collaboration tools to facilitate such interactions. We expect to highlight and investigate, in a more controlled setting, issues of trust, awareness, decision-making, and the "manners" in which people initiate conversations or ask for help.

We would also test in the lab some of the changes in tools, visualizations, and reminders, outlined above, to both assess their potential effectiveness and refine their design before deploying them in the field.

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Table 1. Some hypotheses about cross-cultural collaboration.

Difference	**Description**	**Potential technical solutions**
Context	People in the US and Asia are in different parts of their daily cycle. Their calendars are different.	Visual display of others' Calendars that show what day and time it is for them locally. When working with Asia, we cross a date line as well as have different clock times.
Content of communication	US: Task-based Asia: Relationship based	In any application, reminders of others' expectations are sent. For example, to the US partner, "Be sure to ask how he is. Build and maintain a personal relationship." In Asia, "Be sure to be concrete in talking about the task."
Negotiation style	US: Win-lose Asia: Find a middle ground	In any application reminding people of this difference.
Face saving	US: Ask for clarification or help without regard to the impression made Asia: Do not ask. Save face.	In any application reminding Asians that in the US, it is expected that one asks for help as a sign of willingness to learn.
Power distance	US: Anyone can talk to anyone Asia: Communications go through the hierarchy	In any application reminding US partners to address an issue through "proper channels."