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Communication and Culture:
Collaborating in Technology-Mediated Work Spaces across Four Continents

Due to recent innovations in technology, work settings for many people now include conversations with others a world away, at work in cultural systems they have little familiarity with. A journey through multiple time zones and interpretive zones, which is made in seconds, presents professionals with strikingly different habits of thought and styles of collaborating. Although people are surprisingly agile in adapting to new technological environments, adapting to new sites of cultural contact has proven more challenging than resolving the technological how-to of initiating and sustaining technologically enhanced multi-cultural meeting places. This talk addresses some challenges of successful communication in cross-cultural virtual work settings. I report on findings from a three year study of engineers working together from four continents to design complex industrial processing plants. The engineers found that their different communication habits and values were more significant than they supposed, and conflicts emerged from different ideas of how to get the job done. Though all the engineers had all mastered complex skills in engineering modeling, for example, predicting interactions between fluids and shapes of pipes that carried them, or concrete foundations and certain soils, they struggled to develop similar common understandings about processes such as beliefs about the nature of a person, or locally relevant ways to promote one's idea or check others' understandings, or ways to disagree. They had problems with identity, with different expectations of acknowledgment and approval, and with indirect forms of communication. They suffered from a frequent lack of visual communication cues. Some of the key aspects of their successful cross cultural collaborative work included negotiating validation procedures, teaching others in non-threatening ways, and mastering different systems of identity recognition.

I analyze interviews with the engineers as well as their spontaneous language use in technologically-mediated cross-cultural and cross-continent team meetings. I use this data to show examples of unfolding sequences of miscommunications which led to costly errors, and the role of culture, communication and technology in virtual team work. The weekly meetings were designed to coordinate knowledge states, to critique procedures, and to plan.

It is becoming increasingly common to work and play in technologically-mediated spaces, spaces which transgress cultural and geographical boundaries in ways that used to be difficult to even imagine. New possibilities for participation and innovation continue to be invented and made widely available. Using data from the engineers engaged in virtual design collaborations in cross cultural telecommunication settings, I show how participants in technologically-mediated work settings must negotiate communication principles, roles and relationships, repair misunderstandings, and transfer knowledge. The talk particularly focuses on the role of language and culturally appropriate uses of language in relationship maintenance, hierarchical vs. egalitarian organization, and personhood, as well as mechanical attributes of technologically-

mediated communication and interpretation. Knowledge and value conflicts, goal conflicts, miscommunication, and assumptions about others' points of view are common and persistent. As people design their actions to be interpreted by others, new audiences and technologies play a key role in shaping behavior.