Language as a lightning rod: Power contests, emotion regulation, and subgroup dynamics in global teams

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Abstract
Based on an ethnographic study comprising interviews with and observations of 96 globally distributed members of six software development teams, we propose a model that captures how asymmetries in language fluency contribute to an *us* vs *them* dynamic common in global teams. Faultlines, formed along the dimensions of asymmetries in lingua franca fluency, location, and nationality of team members, were associated with subgrouping in some but not all of the teams. Our findings suggest that divisive subgroup dynamics occurred only in teams that also suffered from power contests, suggesting that power contests activate otherwise dormant faultlines. Our findings extend theory on subgroup dynamics in global teams by adding language as a potential faultline dimension, showing how power struggles activated faultlines and were, in turn, reinforced by them and documenting the emotion-regulation processes triggered by subgrouping and enacted through language-related choices and behaviors.
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INTRODUCTION

Multinationals are increasingly mandating English as the lingua franca, or common language, to facilitate collaboration across national and linguistic boundaries (e.g., Bono & Vey, 2005; Feely & Harzing, 2003). Despite the central role of a lingua franca in global work, a gap remains in our understanding of how language affects work and workers in international organizations (Harzing & Feely, 2008). The burgeoning empirical studies examining the mandate of English in the global workplace shed light on the politics of language choice (e.g., Marschan-Piekkari, Welch, & Welch, 2005; Vaara, Tienari, Piekkari, & Säntti, 2005), language fluency as a source of power and status (e.g., Kingston, 1996; Neeley, 2013), the interplay between language and cultural diversity (Henderson, 2005), and the role of language in social identity and categorization (e.g., Harzing & Feely, 2008). This body of research has identified disparities in co-worker lingua franca fluency and has highlighted their importance (Fixman, 1989; Knapp, 2003). At the same time,

the last decade has produced a significant body of research on the dynamics of teams with members located in multiple countries who must collaborate across cultural and language divides. A near-universal claim in this research is that globally distributed teams tend to fracture into subgroups that are characterized by an *us* vs *them* mentality (e.g., Cramton & Hinds, 2005; Metiu, 2006; Polzer, Crisp, Jarvenpaa, & Kim, 2006). Research suggests that team dynamics are brittle in global teams, in part because of geographic distance, missing information, power imbalances, and the local identifications that strengthen allegiances at a given site. Despite the applicability of these two parallel streams to global teams, they have yet to be integrated, and little is known about how or whether asymmetries in language fluency contribute to subgrouping or, more generally, how subgroup dynamics play out in global teams.

Over a decade ago, Lau and Murnighan (1998) introduced the idea of faultlines that reflect alignment across demographic characteristics, thus creating a chasm between subgroups with the potential to erupt into conflict. Scholars quickly recognized the applicability of the faultline model to global teams, suggesting that subgroups, aligned along demographic faultlines and by location, are a natural consequence of global work, and interfere with a strong team identity (Cramton & Hinds, 2005; Polzer et al., 2006). O'Leary and Mortensen (2010), for example, report that geographically based subgroups (e.g., subgroups aligned with location in a geographically dispersed team) experience weaker team identification and more conflict. Subgroups can also experience destructive power dynamics, such as when status differentials deepen the divide between team members across different locations (e.g., Metiu, 2006). Theory suggests that social categorization explains this phenomenon because global team members identify more strongly with those who are collocated and, by default, are more similar to themselves (O'Leary & Mortensen, 2010; Polzer et al., 2006). Research on global teams documents the challenges of working across cultures and geographic barriers, and highlights the role of potential fissures between distant locations that can lead to unhealthy subgroup dynamics. Work to date, however, remains largely silent on how these dynamics unfold, on how the particular attributes of globally distributed teams contribute to these potential fissures and their activation, and on the role that language plays in these dynamics.

We examine the role of language asymmetries in subgroup dynamics in globally distributed teams through a qualitative study including interviews with and observations of six software development teams in one company in the high-technology industry (GlobalTech, a pseudonym). Language asymmetries, for the purposes of our study, refer to differing levels of language competence in the lingua franca (English) across team members. We present a theoretical model that captures the role of language asymmetries and documents the pivotal role of power in subgroup dynamics. In doing so, we provide insight into why and when global teams tend to fracture. Our theoretical contribution extends faultline theory to articulate how subgroups become salient and are reinforced in global teams and, particularly, how language can act as a lightning rod for these dynamics by attracting and conducting the tensions and then, in turn, reinforcing the emotions that further fortify the dynamic. We observed strong location-based subgroups in some but not all teams. We extend theory by identifying power dynamics as an activator of faultlines, and by describing how power dynamics triggered and reinforced language-based subgrouping behavior.

LANGUAGE AND SUBGROUP DYNAMICS IN GLOBAL TEAMS

Recent research has begun to explore language dynamics among members of multinational teams. Henderson (2005), for example, in a review of research on language diversity in international management teams, reported that language diversity interferes with trust and team building. Harzing and Feely (2008) similarly concluded in their study of German and Japanese MNCs that the failure to communicate effectively promoted faulty attributions, conflict, and distortion in management teams that did not share the same mother tongue. Neeley (2013) further documented status loss experienced by native French speakers in the presence of a newly mandated English lingua franca. In sum, early studies suggest that uneven language fluency interferes with information sharing and the building of rapport on global teams. Evidence also suggests that language is intricately tied with self-identity (e.g., Harzing & Feely, 2008; also Giles & Johnson, 1981) and that social identities are forged and reinforced through interaction (see Bucholtz & Hall, 2004, 2005). Thus evidence suggests that language asymmetries, exacerbated through day-to-day interactions, could promote the subgrouping so commonly observed in global teams.

In a related line of inquiry, Lau and Murnighan (1998) introduced the idea of group faultlines to reconcile inconsistent findings in research on group diversity and provide insight into subgroup dynamics. Faultlines are dividing lines formed by the alignment of demographic characteristics across group members (Lau & Murnighan, 1998) and represent a potential fracture that can lie dormant until activated. The faultline model has since been applied to advance our understanding of subgroup dynamics in global teams. One of the earliest studies examining faultlines in global teams confirmed the hypothesis that highly heterogeneous teams were more successful at creating a shared identity than were the teams that had multiple members from each country and could splinter along country lines (Earley & Mosakowski, 2000). Li and Hambrick (2005) later examined faultlines in Sino-Western joint venture management teams and reported that demographic faultlines (alignment of age, tenure, gender, and ethnicity) engendered emotional conflict, which resulted in behavioral disintegration across subgroups. More recently, Polzer et al. (2006) studied teams of graduate business students who were globally distributed. Subgrouping was most pronounced when there were two location-based subgroups, as compared with teams dispersed across more locations and when location-based subgroups were more homogeneous in nationality. This nascent research affirms that, when aligned with other defining features, geographic location can generate a faultline between physically separated subgroups in a team and can lead, as suggested by Lau and Murnighan, to subgrouping and, in turn, behavioral disintegration and conflict in global teams.

One gap in the extant research on subgroup dynamics in global teams is a more precise specification of the characteristics likely to align by location. So far, scholars have argued that team members at a given location will be more similar demographically: thus geographic dispersion will, by default, be associated with characteristics that align with location, such as nationality (e.g., Cramton & Hinds, 2005; Polzer et al., 2006). Unfortunately, most empirical research to date has measured only location, and has not examined directly alignment between location and other meaningful characteristics. As a result, we have little understanding of what, if any, demographic or other characteristics are influential when aligned with geographic location to create faultlines in global teams. One exception to this is Polzer et al.'s (2006) examination of homogeneity of nationality by location, which found that alignment between

location and nationality exacerbated subgrouping. Language, we speculate, is also likely to align with global dispersion and contribute to faultlines, especially in identity-based subgroups (Carton & Cummings, 2012), although the role of language has so far been overlooked in examinations of subgroup dynamics on global teams. As organizations mandate English as the lingua franca, however, there are compelling reasons to anticipate that language asymmetries will contribute to, and perhaps be a powerful source of, geographic subgrouping.

Although we set out in this study to shed light on subgroup dynamics in global teams, especially the role of language, our inductive approach yielded several unanticipated discoveries. We were first struck by how emotional team members were when talking about language asymmetries, the strategies used for dealing with these asymmetries, and the discomfort the strategies frequently engendered. Language asymmetries seemed to channel powerful subgroup dynamics, acting as a lightning rod or a conduit for intense emotion that was then reflected in behaviors and further exacerbated tensions. Our analysis enables us to clarify and extend theory related to language and subgroup dynamics in several ways. First, by virtue of having rich ethnographic data, we are able to identify the potent role of language asymmetries as a faultline dimension, one that was persistently available and concentrated team members' emotional energy, leaving other more taboo issues (such as power contests) obscured. Second, we capture the process by which subgroups are likely to emerge from faultlines, and how they are then held in place, in particular, by power dynamics and the emotions that are ignited around language asymmetries.

METHOD
A five-person research team conducted ethnographic interviews and observations at a large high-tech multinational company, GlobalTech (a pseudonym), headquartered in Germany. GlobalTech officially adopted English as its lingua franca 2 years prior to this study. Operationally, the rule required that official verbal and written communication occur in English, so that employees from various language backgrounds could interact and collaborate. Our team traveled to two cities in Germany, one in India, and three cities in the United States to conduct interviews with 96 informants involved in six projects within GlobalTech. Most informants were engineers, with the exception of 18 who served as liaisons between engineers and the sales division.

Informants in India were 22–27 years of age and had 1–5 years of tenure at GlobalTech. Informants in Germany and the United States were 30–40 years of age and had 5–15 years of tenure at GlobalTech. Interviews were followed by observations of four of the six project teams.

To facilitate understanding of cultural nuances, our research team was composed of multilingual members who represented the three primary countries involved in the study: Germany, India, and the United States. It is important to note, however, that the informants represented many more countries. The informants in the German office of GlobalTech, for instance, included people from several regions of Germany, as well as from places as distant as the United States, Tunisia, and India. The Indian location included informants from many different parts of India. Finally, the US office of GlobalTech included informants from China, India, Germany, Pakistan, and Australia.

Our strategy was to collect data from teams that were split between only two countries and between only two locations. This focus served to minimize the variations and complexities that arise from configurational differences involving more than two countries or locations, which have been shown to significantly affect team dynamics (O'Leary & Mortensen, 2010). Table 1 presents a breakdown of the data collected on

each team and the team characteristics. Of the six teams included in this study, three were split between Germany and the United States, and three were split between Germany and India.

Semi-Structured Interviews
Following procedures for conducting ethnographic interviews (Spradley, 1979), we structured interviews around a common set of open-ended questions aimed at learning about informants' experiences with collaboration across sites and the nature of their interpersonal relationships with co-workers. We asked informants to provide in-depth project explanations as we posed descriptive questions to learn about their daily tasks, related communication demands, and team dynamics (Spradley, 1979). Sample prompts included "Could you tell us about your project?" and "How do you interact with your colleagues at other sites?" We also posed grand tour questions (Spradley, 1979) such as "Describe what you did yesterday from the time you walked into your office." Grand tour questions allowed us to hone in with mini-tour questions (Spradley, 1979) to get details about specific events and participants' experience of them. This line of inquiry was particularly useful in probing delicate subjects such as the emotions and behaviors associated with a mandated lingua franca and the subsequent impact of those behaviors on distant team

Table 1 Summary of task descriptions and data collected by team

Name	Locations	Interviews[a]	Observation days	Description
HH1	US	6	0	Product management team supporting strategic deals and special project implementation.
	Germany	12	0	
HH2	US	7	5	US-based team members tasked with creating the UI, while German-based members provide the back-end functionality software and the database application.
	Germany	9	5	
MM1	India	14	0	Provided support for retail software solution. Ownership over software support transferred almost completely from Germany to India.
	Germany	4	0	
ML1	India	6	5	Quality management in India with development support across sites and product management primarily in Germany.
	Germany	5	5	
LL1	India	16	5	Responsible for ensuring that data formats are compatible between the company's technology and the client's systems. India-based team worked mostly on client side while German team members worked on server side.
	Germany	8	5	
LL2	US	2	5	In charge of software development for personnel-related functionality. US team members worked on two aspects of personnel management, while German-based members worked on one.
	Germany	7	5	
Totals[b]		96	40	—

[a]Interview numbers include interviews with the managers on these teams.
[b]Follow-up team meetings a year later are not included in the total.

members. While our questions were aimed at covering topics connected to work experiences, the inquiries were open-ended, so that the most pressing issues for individual informants guided the conversations.

We conducted interviews primarily in English, but when it was evident that a German informant was anxious about being interviewed in English, we offered to interview him or her in German. With the exception of two informants, all agreed to be interviewed in English. Each interview averaged about 1 h, and most were conducted in conference rooms, private offices, and – on some rare occasions – cafeterias where informants and interviewers were seated in isolated areas. Interviews were tape-recorded, translated, and transcribed. Occasionally we collected diagrams, email correspondences, and other artifacts that informants offered to supplement interviews.

Concurrent Observations

Because we were interested in exploring subgroup dynamics in teams spread across two locations, we carried out concurrent observations of four of the project teams (two split between Germany and the United States and two split between Germany and India). We use the term *concurrent observations* to refer to the process of simultaneously observing team members located at multiple locations. For example, for a team split between Germany and India, one researcher conducted observations at the German site, while another researcher observed in India during the same week. This format allowed us to record social interaction and team dynamics as they occurred and provided rich data on how individuals at each location experienced team interactions, how people experienced cross-site and local meetings, and how events were interpreted similarly or differently across sites.

Observations of each team lasted from 8 to 12 h per day for 1 week. Extensive field notes documenting our observations were typed and distributed to everyone on the research team at the end of each day. During observations, we regularly exchanged emails to notify each other about important activities. For instance, one researcher observing in India sent her counterpart in Germany an email about a teleconference scheduled by someone in India that involved individuals on the team in Germany. These regular communications enabled us to observe the same events from our respective locations. During observations, we occasionally asked informants questions to clarify issues and get explanations and interpretations of activities. We paid close attention to the interactions,

attitudes, and responses of individuals as they communicated with both collocated and distributed colleagues. In addition to sitting with informants to observe them while working, we attended meetings, observed conference calls, had lunch with informants, and went to after-work social gatherings whenever possible.

Although there were only a few cross-site meetings during a given week, we captured some examples of language dynamics (e.g., code switching) in the meetings that occurred. Observations were also useful in detecting team dynamics and, in particular, cross-location subgroup dynamics and power contests. Further, because the concurrent observations were conducted between 3 and 7 months after our initial interviews, we were able to capture how the dynamics between team members and perceptions of coordination challenges across sites evolved over this period.

Approximately 1 year after the initial set of interviews and observations, two of the authors returned to the GlobalTech offices in Germany, India, and the United States to discuss, validate, and better understand some of the observations from our data analysis. These meetings were important in helping us to hone our understanding of the language, subgroup, and power dynamics at play.

Data Analysis: Individual Level

For our data analysis, we submitted all of our interview transcripts and field notes to a software program that we used to assign codes to passages of our data, as is common practice when working with ethnographic data. Our analysis followed empirical grounded-theory procedures (Strauss & Corbin, 1998). We began with a process of *open coding*, in which two of the authors read all of the data and assigned codes based on what emerged from it. One recurring theme from open coding revolved around communication anxieties and frustrations that arose from the use of English as the lingua franca. Within the first week of interviews, in fact, we discovered that English language communication was a deeply felt concern for many of the people with whom we spoke. This was further supported during open coding, when we found that nearly 70% of informants talked about their experiences with language asymmetries at GlobalTech. At the same time, we began to cycle back and forth between data analysis and reviewing the literature in international management, organizational behavior, sociolinguistics, communications, and social psychology to make sense of our findings, as well as to

refine our coding. In this process, the link between language asymmetries, emotions, and emotion regulation emerged.

In subsequent rounds of coding, we classified individuals into three broad levels based on their level of fluency in English and German. Informants were either native English speakers (e.g., those who were born or raised within an English-speaking country, or who reported having learned English as a first language), or bilingual speakers (those who learned English as a second language, but demonstrated speaking proficiency at the level of an educated native speaker), or professional-level speakers (e.g., those demonstrating the ability to use English accurately and participate in conversations, but who sometimes made errors, interspersed non-English words, and/or frequently asked for questions or comments to be repeated). We made use of the Interagency Language Roundtable (ILR, 2012) skill-level descriptors for competence in intercultural communication, designed for use in government settings such as the US Foreign Service. The ILR treats native and bilingual fluency as the same, but we differentiated these as described above, because the dynamics between native and non-native English speakers has been shown to be important in global teams (Neeley, 2013). We also combined the ILR Levels 3 and 4 (professional competence and advanced professional competence) to create a single category of professional competence, because we were unable to distinguish these two levels adequately in our data. We had no need for Levels 1 and 2 (elementary and limited working competence) because our informants were all at least professionally competent. For coding German language competence, we used only two levels of competence: those who spoke German fluently and those who did not. There were several informants who had attempted to learn some German and had mastered a few words or phrases, but they were not able to interact in German or participate in German-language meetings. All other informants were either native or bilingual German speakers, or spoke no German.

In analyzing the data, we were struck by the strategies that team members used to avoid experiencing anticipated negative emotions or to alleviate their experience of them. We then moved to the intermediary step of *axial coding* (Strauss & Corbin, 1998), in which we captured the host of strategies used by our informants to deal with uneven language fluency, the emotions or anticipated emotions that were associated with these strategies, and the

effects of these behaviors on team members. In the last stage of analysis, *selective coding* (Strauss & Corbin, 1998), we integrated and developed our overall model by iterating with theory and literature on emotion regulation and language asymmetries in international organizations, subgroup dynamics, and power dynamics in global teams. We noticed, for example, that informants were describing emotion-regulation strategies to deal with the negative emotions associated with language asymmetries. The emotion-regulation process includes stimulus regulation, reappraisal, experience regulation, and display regulation (see Table 2, also Elfenbein, 2007). We therefore applied these codes to our data to understand how emotion-regulation processes were used, and to uncover their effect on global collaboration. Finally, as noted, we scrutinized the validity of our findings by sharing them with a subset of GlobalTech study participants. Doing so yielded additional details that sharpened our interpretations.

Data Analysis: Team Level
After completing our individual-level analysis of the relationship between language asymmetries and emotion regulation, we turned to team-level analyses of the six teams in our study. We first read the data by team and, in doing so, noticed that strong subgroup dynamics coincided with emotionally charged language issues, and that power dynamics were intertwined with subgrouping and language challenges. In the next round of coding, we therefore calculated faultlines and focused on informants' response to language asymmetries (as described above), subgroup identities and subgrouping, and power dynamics.

Our coding for subgroup identities and subgrouping was derived from previous theory related to language and identity (Bucholtz & Hall, 2004, 2005; Miller, 2000), focusing particularly on informants' social positioning of self vs other (see Bucholtz & Hall, 2005). We coded mentions of differences between other social groups (including cross-site, cross-discipline, etc.), overt categories or labels such as themselves being "other," evaluative comments regarding the other location, and mentions of ingroup/outgroup dynamics (us vs them). We also captured mentions of similarity across sites and associations with a team-level identity. To code for power dynamics, we examined the sources of power as described by team members (including access to information, decision makers, customers, key markets, and growth opportunities), and the comments or behaviors that demonstrated power struggles. In characterizing the power dynamics in each team,

Table 2 Emotion-regulation process definitions and examples of strategies enacted by German and non-German speakers

Process	Definition	Strategies enacted by German speakers	Strategies enacted by non-German speakers
Situation selection	Prior to experiencing an event that stimulates an emotional response, people use their anticipated emotions to make choices about exposing themselves to an experience that is likely to give rise to a particular emotion, whether it be desirable or undesirable (Gross & Thompson, 2007).	"If we are going to extend the meeting to a larger forum, if we have to talk in English, then I say no! No, I don't want to do this." A German informant said that he almost always refrained from calling his co-worker in India to avoid the stress of conversing in English. He said that he would either find another way to address his concern or search for collocated colleagues who would be able to help. "If I needed perhaps to write documentation, it would have to be in English. It's too hard to write in English, so I don't do it and there's no documentation at all because it is too difficult to write it in English."	"I don't actually stay because I feel it's a waste of my time and perhaps of theirs because I will not understand it. So, it's really no use. If you miss two words, you miss the whole idea of what they were talking about."
Situation modification	People change a situation to alter its emotional impact (Elfenbein, 2007; Gross & Thompson, 2007). In cases of situation modification, the individual still exposes himself or herself to the situation, but attempts to modify the conditions that evoke the desirable or undesirable emotion.	One of our informants said, "Some people just don't speak up at all [in meetings] because they are too shy to show their [poor] language skills." "Sometimes people (engineers) do not speak up in design reviews because they don't feel comfortable expressing themselves in English." She told us that she knew this because these engineers would sometimes speak with her in German after meetings about issues that they were otherwise reluctant to raise. A German informant said that they attempted to speak in English most of the time "but sometimes someone asks a question in German, and then everybody starts talking in German."	A US informant of Indian origin told us how she dealt with a constant flood of emails in German. She first tried to alter the situation by asking them to send an English version of the email and then, after getting no response, reminded them of GlobalTech's lingua franca policy. She said with annoyance: "We had a colleague last year who constantly kept sending emails in German, right? And I kept sending back emails. I mean it was through a distribution list, and they very conveniently assumed that everybody on the DL is German. So I replied back to them saying … you know, I'm really sorry that I don't know German. I am trying to learn, but until then, could you please send me an English version? Right? And ignore … I think we actually had an email from our CMR head, like the guy who leads the whole division saying that every communication, if it is Germany, should follow in an English version. I actually had to send him a copy of that." A developer in the United States explained how she dealt with code switching. She said, "I just tell them, like … guys, I'm sorry, you can't speak German … or something like that."

Reappraisal	A process by which workers cognitively reframe the event to change the way that they are directing their attention (e.g., ignoring it) or change their assessment of the event itself (Gross, 1998; Elfenbein, 2007).	An informant told us what he thought it might be like for non-German speakers, and how important it was to speak English: "[If] you sit in a group of Germans and they talk German to each other and you don't know if they're talking about you or not, and … I would feel uncomfortable being in China and them just talking Chinese and me not being able to understand anything. So, being sensitive, I guess we try to talk English as much as we can and try to involve people."	In speaking about his German team members, a US informant sympathized: "Sometimes they feel they cannot communicate some technical issue using English, they've got to go back to their mother tongue. And that one I can understand." Another native English-speaking informant expressed appreciation for the efforts of their German colleagues, saying: "I think even though it is really tough for them, they create all the documents in English. That way they are doing a really good job."
Experience and display regulation	Deliberate changes in one's emotional state, essentially suppressing or denying an emotion that exists rather than altering the situation or transforming the emotion by reappraising the stimulus (Gross & Thompson, 2007).	No examples in our data.	An Indian team lead explained how they would have meetings that would slip into German, "but we should smile, yeah, we are smiling," he said, despite the fact that they could not understand what was being said.

we noticed that two groups had power contests (e.g., expressions of competition, disagreements about who should get more work), two groups were experiencing a shift of power between locations (e.g., mentions by either location that one group was losing and another gaining resources and decision-making authority), and two groups had an imbalance of power that was not contested by either location (e.g., mentions that the other location had significantly more resources, but no objections to this state or evidence of competition over resources).

In our team-level analysis, we coded each team, one location at a time. With our first Germany–US team, for example, we coded the US informants first and then the German informants. In doing so, we got a strong sense of the team by location and the cross-location dynamics. After coding the data for each team, we created team summaries that captured within-team and across-location dynamics for that team. Our summaries enabled cross-team comparison to better identify the patterns and understand the similarities and differences between the dynamics within the six teams in our study. Using the team summaries and the coded data, we classified each team based on the strength of subgroup dynamics, the extent to which language issues were dealt with empathically or were negatively charged, and the nature of the power dynamics. Our classification process is described in the relevant sections of the findings. Finally, to classify the strength of faultlines, we captured each informant's location, nationality, English language fluency (native, bilingual, and professional), and German fluency (yes, no).[1] Based on this, we assessed alignment between location and nationality, location and English language fluency, and location and Germany fluency. For example, if location, nationality, and language fluency were aligned, *strong* location-based faultlines were indicated. If some but not all were aligned and/ or nationality and language fluency were cross-cut (e.g., German speakers at both locations) faultlines were classified as *moderate*.[2]

FINDINGS
Our research was grounded in the study of language challenges in global teams to help explicate how asymmetries in the lingua franca contributed to fracturing and subgroup dynamics in these groups, but our inductive investigation also revealed that, when subgrouping occurred, language asymmetries stimulated emotion-regulation strategies that reinforced subgroup dynamics. Further, we found

that power contests played a pivotal role, both activating otherwise dormant faultlines and being reinforced through the language strategies invoked by workers.

We start by describing the interactive situation that set the context for communication among globally distributed workers at GlobalTech, and then describe how team members responded to and dealt with language dynamics, focusing particularly on the emotion-regulation strategies employed and on co-workers' responses to these strategies. We start with responses to language asymmetries because this was most salient for our informants and provides a foundation for the team-level dynamics. We then present the team-level analysis, in which we describe the subgroup dynamics that characterized the teams in our study. Finally, we describe the power struggles we observed and how the balance (or not) of power across locations played a crucial role in determining the extent of subgrouping, and was likewise reinforced by the emotion-regulation strategies used by team members.

The Interactive Situation at GlobalTech
As mentioned earlier, GlobalTech established English as its business language 2 years prior to our study. Reaction to the language policy among its workers was mixed. US-based and India-based personnel perceived the introduction of English as the formal business language positively. US-based informants were mostly native English speakers, despite their wide range of ethnic origins, although some learned English as their second language. Most of the informants we interviewed in India were bilingual in English, although a few of them displayed professional fluency, demonstrating some struggles with understanding and articulating themselves without errors in English. For the most part, however, our Indian informants learned English at a young age, received their technical education in English, spoke English extensively every day at work, and expressed confidence in their English fluency. In contrast, although many of our German informants were bilingual, speaking and writing in English was often difficult. Many told us that, although professionally fluent, they received their technical education in German, and were formally trained to think and articulate ideas in their native language. In particular, most received their technical education in German. Their confidence in English was mixed and nearly all of them expressed feeling some anxiety about having access to appropriate words, particularly in situations that

were emotional or highly technical, or when they were fatigued. The German team members, unless collaborating with non-German speakers, spoke primarily German at and outside work. With few exceptions, team members in the United States and India spoke negligible German. It should be noted that asymmetries in fluency existed for both verbal and written communication.

All of the teams that we studied were interdependent across location and depended on team members at the distant location for project success. As a result, they interacted regularly in the English lingua franca through a combination of face-to-face meetings (site visits), videoconferences, teleconferences, phone calls, and emails. These were the primary occasions for anxieties associated with language asymmetries. German informants, for example, referred to the need to speak and write emails and documents in English as a "bottleneck" or "handicap," or as what "holds them back" from effective communication. In describing his experience, one German informant said that "the English expression is not really making the point that you are trying to make, and you are maybe an inch away from it." German informants explained that the experience of speaking English was more time consuming and, consistent with research on second language acquisition (see Mettler, 1984), more stressful. Attempting to communicate technical or business topics precisely in English was especially frustrating. One manager told us that, even if people pursue English language instruction, "they don't really teach engineering jargon there." In addition to feeling hindered by the official lingua franca at GlobalTech, many German informants said they felt awkward speaking in English in front of other Germans, particularly when they lacked confidence in the language. Likewise, many Germans preferred to write emails and documents in German if they expected the only readers to be their countrymen. One informant told us that "it always feels stupid to have two German colleagues talking to each other in English."

Non-German speakers felt similarly anxious about the dynamics associated with the lingua franca. They reported frustration, anger, guilt, and feelings of exclusion as a result of strategies invoked by their German-speaking collaborators to deal with language asymmetries. Greg, a developer based in the United States, explained how he felt when his German colleagues would speak German in his presence. In his words, "It didn't feel good at all. It felt that the other person didn't really respect you." In

sum, the lingua franca dynamics at GlobalTech triggered emotional responses from the native, bilingual, and professionally fluent English speakers.

Emotion-Regulation Strategies of German Speakers

Emotion regulation refers to a set of processes by which emotions, negative or positive, are regulated with or without conscious awareness (Gross & Thompson, 2007). Regulation can occur throughout the process of an emotional experience, from stimulus to expression, including situation selection, situation modification, reappraisal, experience regulation, and display regulation (see Elfenbein, 2007; Gross & Thompson, 2007). We provide definitions for each of these processes with additional illustrations from our data in Table 2 (see also Neeley, Hinds, & Cramton, 2012).

German speakers at GlobalTech who had professional fluency in English used most of these strategies. Informants told us, for example, about how they avoided language situations that provoked anxiety and shame by not attending meetings in which they anticipated having to speak in English and, when they had control over the invitation list, inviting only German-speaking members of the team (*situation selection*). In addition, informants said that decisions about who to include in communications were sometimes made on the basis of whether the involvement of that person would require that English be spoken, resulting in a more difficult exchange. Avoidance of the lingua franca was not isolated to spoken English. Workers also resisted pressures to create documentation, including emails, in English. Excluding native English speakers or avoiding lingua franca situations seemed to be particularly prevalent when informants who did not feel proficient in English felt heightened apprehension due to time pressure.

Even more prevalent in our data were *situation modification* strategies designed to alter the anxiety-producing language situation. German speakers who lacked confidence in the lingua franca attended meetings, but remained silent, switched to German for some of the meeting, and, when faced with having to produce emails and documents, generated those in German as well. Our informants repeatedly told us that when they were mentally or physically fatigued, for example, at the end of the workday or under time pressure, they simply remained silent at English-language meetings because the additional effort required for them to speak English became overwhelming, and heightened anxiety. Another prevalent regulation

strategy of the German speakers was to switch to German during English-language meetings. Code switching is a phenomenon in which a bilingual speaker shifts from one language to another in the course of a conversation (Auer, 2000; see also Harzing, Köster, & Magner, 2011). In our data, code switching was employed as a means of altering a situation that instilled anxiety, shame, and frustration in speakers. When apprehensive about their language skills, workers at GlobalTech simply returned – at least temporarily – to their native language. During our observations, we documented occasions in which German colleagues code-switched during the course of teleconferences that involved their distant co-workers. Many Indian and US informants also discussed code switching during our interviews with them. In extreme cases, we were told, meetings turned entirely into German-language sessions. German informants were aware that they at times reverted to their native language in the course of communications involving non-German speakers. They perceived this as a minor incident that occurred only for short periods of time. They said they attempted to speak in English most of the time "but sometimes someone asks a question in German and then everybody starts talking in German."

The final strategy we observed among the German speakers was *reappraisal*, which refers to emotion-regulation strategies in which people reframe the stimulus, thus changing their emotional response to it. A German informant, for example, explained the importance of getting accustomed to speaking English so that Indian colleagues would have access to the information. He said: "Perhaps if I do it in English, there's a chance an Indian colleague can follow what I did." In reappraising the situation, reframing it by being empathic about their distant colleagues' experience, non-native English speakers found a way to avoid the unpleasant emotions associated with articulating their ideas in English by changing their interpretation of the meaning the event.

Non-German Speakers' Response

When German team members regulated their own emotional responses through situation selection and situation modification, this often triggered negative emotional responses in their non-German-speaking collaborators. Native, bilingual, and professionally fluent English speakers who spoke no German told us of their anger, frustration, and discouragement when excluded from meetings, unable to read documents and emails, and confronted with code

switching during visits and video or teleconferences. While the company's lingua franca policy stipulated that work-related communication be conducted in English, the policy was not always followed. Informants who did not speak any German told tales of being forwarded email threads that had begun in German and then crossed country and linguistic lines. Sometimes a brief English summary was attached, which was intended to capture the gist of the trail of communication exchanges, and which contained a request for a response. Informants, however, said that the summaries typically did not convey to their satisfaction the previous communication, the request put to them, or an indication of how to respond. The central source of discontent seemed to be the inability to derive meaning from a communiqué where tacit, contextual, and jointly constituted knowledge was obscured. An Indian informant, Geet,[3] recounted what he said was a frequent occurrence:

> Emails get written in German where two, three emails between people go back and forth on some topic, and then it's forwarded to me with some comments in English ... Most of the time, somebody who is handling some problem would have analyzed the problem in German before it is sent to me. If that piece is in German, it's difficult for me to understand what's going on. That is the main problem. They need to stick to the company language.

Geet's plea that people "stick to the company language" captured the ongoing frustration that he felt at being excluded from communications that were important to his work. Code switching created particularly strong emotional responses. A number of non-German-speaking informants described feeling "lonely" when they were excluded from meetings or when their German team members conversed in German in their presence. English speakers, at times, concluded that the switch was intended to exclude them. Said one US informant:

> The classic fear of all Americans, unilingual inhabitants of this continent, is that when somebody's talking in German and they know you don't speak German, the natural thought is – they're talking about you.

In India and the United States, engineers wondered about how, in the face of important documents and emails being only in German, a language they could not speak or read, they could really be considered valuable members of the team.

To avoid these real or anticipated negative emotions, non-German speakers also relied on emotion-regulation strategies. We saw evidence that non-German speakers, albeit infrequently, used *situation selection* strategies to avoid or change situations that they anticipated would yield anxiety, discomfort, or frustration. In some cases where their German-speaking colleagues would switch to German, non-German-speaking team members would leave the meeting to avoid "wasting their time" and feeling excluded. More common, however, were attempts at *situation modification*. Non-German speakers attempted to alter the situation when they confronted emails or documents that they could not understand, or code switching on the part of their German colleagues. They asked for explanations or translations, declared that their colleagues' behavior was rude, asked that meetings, documents, and emails be in English, invoked the company rule stipulating that English be spoken in the presence of non-German speakers, and even tried to learn German. A common response to code switching was to draw attention to the fact that non-German speakers were present and to ask that English be spoken. A developer in the United States, for example, explained how she dealt with code switching. She said, "I just tell them, like ... guys, I'm sorry, you can't speak German ... or something like that."

Non-German speakers also frequently described a *reappraisal* strategy in which they recognized the lingua franca dilemma as "just part of the job," or thought about the language issue as one that plagued everyone, thus not taking the coping strategies personally, and even empathizing with their German colleagues. Empathy is an emotional process in which people feel compassion and concern for others (Barsade, 2002; Davis, 1983). When co-workers took the perspective of others, empathized with their struggles, and altered their action accordingly, a break in the negative emotional cycle occurred. Empathic responses led to sensitivity and behavioral adaptations that seemed to ameliorate some of the tensions associated with language asymmetries. When co-workers empathized with the plight of their distant colleagues, they often took action that was less likely to be interpreted as threatening or devaluing. Informants told us, for example, about listening more carefully, working hard to involve others, and being painstakingly careful in their communication to avoid causing offense. Although empathy was not the primary response to asymmetries in lingua franca fluency, this alternative path eased the emotional burden of the lingua franca mandate.

We also saw ample evidence of experience and display regulation among non-German speakers,

particularly when confronted with emails and documents in German and code switching in meetings. An American informant, for example, said that initially she would be "infuriated" when her colleagues switched languages in her presence. Later, she said that her anger turned into resignation and she just sat silently and "let them continue to speak on their own." They would also regulate their display of emotions by pretending they understood and smiling at jokes, regardless of how they were feeling.

Overall, language asymmetries triggered intense emotional responses, which were then regulated to reduce discomfort. German speakers relied heavily on situation selection and modification, and some of these strategies, particularly code switching, evoked powerful emotional responses in their non-German-speaking team members. Non-German speakers in India and the United States then responded, primarily with strategies grounded in frustration and anger, but occasionally with empathy.

Language Asymmetries, Subgroup Dynamics, and Emotion Regulation
Our data show that the team dynamics, especially subgrouping, were intertwined with the emotion-regulation strategies described above. In particular, the teams that experienced less subgrouping across locations also relied on reappraisal that was more empathic and reduced the emotional charge associated with language asymmetries, whereas the teams that experienced more severe subgrouping used more situation selection and modification (e.g., excluding team members from or leaving a meeting, code switching) that ignited emotional reactions in distant colleagues.

For our analysis, we categorized each of the teams with regard to the strength of subgrouping across locations based on the codes described in the method section. So, for example, teams whose members at one or both locations consistently referred to the differences between locations, a sense of being "other," and a strong us vs them dynamic were rated as *high*, and teams that talked primarily about similarities between locations and referred to their teams as integrated across the two locations, were rated as *low*. The teams we rated as *medium* had some us vs them dynamics, but they were not felt by the entire team, and/or the discussion of differences was counterbalanced with discussion of similarities by multiple members of the team. We also categorized each team as high, medium, or low based on their affective responses to language asymmetries, where *high* indicates that the team, on the whole, experienced a

highly charged emotional environment around language asymmetries. On these teams, there was high negative affectivity and/or low positive affectivity across most team members (or most team members at one location), reflecting unpleasant emotions around language asymmetries in these teams. *Low* ratings indicate a weak emotional charge, with generally empathic or neutral comments around language asymmetries in the team, and *medium* was used to capture teams that had some frustration, but also some empathic responses to language asymmetries. To illustrate our findings, we describe the context, structure, and dynamics of four of these teams, two with strong subgrouping across locations and highly charged emotional responses to language asymmetries (high/high (HH)), one with moderate subgrouping and some negative affect around language (medium/medium (MM)), and one with weak subgrouping and virtually no emotional charge around language asymmetries (low/low (LL)). Table 3 captures the faultline strength and distance, the location-based subgroup dynamics, and the language dynamics and emotion regulation associated with language asymmetries in the six teams in our study.

High/high 1
The HH1 team was split between the United States and Germany. Of the 18 members, 12 were in Germany and 5, plus the German VP, were located in the United States. This was a technical product management group that sat between marketing and development. They gathered customer requirements and created demos for potential customers to generate interest in product offerings. The faultline on HH1 was moderate. Team members in Germany were homogeneous with regard to nationality, but both locations had mixed language proficiency, including three German speakers on the US-based team.

This team experienced strong divisive subgroup dynamics between locations, using the language "our team and their team" frequently to describe the two locations, despite their stated dependence on one another. The team members in Germany perceived the US team members as being quite different from themselves. In interviews, the German team members pointed out their different work styles, "mentalities," communication styles, and capabilities, suggesting that these differences were a source of "tension." One German team member, for example, described how "we're trying here to sometimes fix the most tiny little screw and might not be working … whereas in the US, they would rather

Table 3 Faultline, subgroup dynamics, emotion regulation around language asymmetries, and coordination challenges by team

Team	Locations	Team composition by location	Faultline strength and distance	Emotion regulation around language asymmetries	Subgroup identification and subgroup dynamics	Power dynamics
HH1	US (6) Germany (12)	US-based team members described as Caucasian American (one with German heritage), Indian, and Chinese American. There were two German team members in the United States, including the team lead. Three female/three male. Mixed English fluency, ranging from native to bilingual. Three German speakers. German-based team members all appeared to be from Germany. Four female/eight male. Mixed English fluency from bilingual professional fluency. All fluent German speakers.	Moderate faultline with nationality homogeneity in Germany, but cross-cutting language.	The division between the United States and Germany was strongly felt on this team, with numerous attributions to locational and cultural differences. Competition was mentioned on this team. In particular, team members in Germany worried about getting the attention of their boss, who had relocated to the United States.	This team had acute language issues and strong negative emotions associated with the regulation strategies (e.g., code switching, exclusion). Team members felt disrespected, infuriated, and resigned to the situation. There was little evidence of reappraisal as a strategy.	Power contested.
HH2	US (7) Germany (9)	US-based team members described as Caucasian American, Asian-American, or Indian. Some team members were born and raised in Asia. One female/six male. Mixed English fluency, ranging from native to professional fluency. One fluent German speaker. German-based team members all appeared to be from Germany. Nine male. Mixed English fluency, from bilingual to professional fluency.	Moderate faultline with nationality and gender homogeneity in Germany, but cross-cutting language across locations.	There were strong tensions between subgroups by location, but this was mostly expressed by the US-based team members. Competition and fear were mentioned frequently on this team, and team members in Germany questioned whether the US location was needed.	This team had a highly emotionally charged situation around language asymmetries. Team members, particularly in the United States, felt ostracized, angry, left out, and resigned. They rarely used reappraisal as a strategy.	Power contested.
MM1	India (14) Germany (4)	India-based team members from India. Two female/twelve male. Mixed English fluency, from bilingual to professional fluency. No German speakers. German-based team members all appear to be from Germany. Four male. Mixed English fluency, from bilingual to professional fluency. All fluent German speakers.	Strong faultline, with nationality homogeneity in Germany and India and no cross-cutting German language fluency. However, there are also no fluent English speakers.	Although the German team members had negative impressions of Indian team members, and there was a clear faultline because the work was being moved, the group still talked about being a single team, and there was not much evidence of subgroup tensions.	This team had some language issues and mentioned exclusion and code switching as troublesome, but they also reported constructive responses, and emotions around language were not highly charged.	Power shifting.

ML1	India (6) Germany (5)	India-based team members from a variety of Indian states. Two female/four male. Mixed English fluency, from bilingual to professional fluency. No German speakers. German-based team members were mixed, with one from Yugoslavia and one from India at the time of the interviews. Two female/three male. Mixed English fluency, from fluent to professional fluency. Two fluent German speakers (three non-German speakers).	Moderate faultline with nationality homogeneity in India and no cross-cutting German language fluency, but with cross-cutting Indian nationality (e.g., Indians in Germany).	Overall, good team integration. Team members had a lot of autonomy, but spoke of themselves as a team. Team members at both locations spoke positively about the other location, although there was some mention of cultural differences (such as the Indian team members not saying "no") as culturally different.	This team had some language issues, and discussed feeling neglected and excluded, but often had adaptive and empathic responses. Indian team members reported using easier words and speaking more slowly to compensate for their team members' lack of English proficiency.	Power shifting.
LL1	India (16) Germany (8)	Indian-based team members from various locations in north and south India. Two female/thirteen male. Mixed English fluency, from bilingual to professional fluency. No German speakers. German-based team members predominantly from Germany, with one from Tunisia with recent German citizenship. Three female/five male. Mixed English fluency, from bilingual to professional fluency. All fluent German speakers.	Strong faultline with nationality homogeneity in Germany and India, and no cross-cutting German language fluency. Also, no fluent English speakers.	Generally positive and integrated. Team members feel comfortable calling one another, and respect one another's work and work ethic. Communication is described as open and positive.	Despite language asymmetries, this team rarely mentioned language as a problem. They described adaptive and empathic responses to what they saw as a challenge for all involved.	Acceptance of power imbalance.
LL2	US (2) Germany (7)	US-based team members included one Chinese American and one who described himself as Turkish Australian. One female/one male. Mixed English fluency, from fluent to bilingual. No German speakers. German-based team members were mixed, with one from Austria, one from China, and one from Spain. One female/six male. Mixed English fluency, from bilingual to professional fluency. Mixed German fluency, from fluent to bilingual.	Moderate faultline with mixed-nationality teams at both locations, but no cross-cutting German language fluency by location.	Team members were generally well integrated, and respected one another.	Despite language asymmetries, this team rarely mentioned language as a problem. They described adaptive and empathic responses to what they saw as a challenge for all involved.	Acceptance of power imbalance.

concentrate on … the general impression that somebody is getting." Some of the German team members reported that the US team members were not as competent and had to be monitored closely which, they said, was difficult at a distance. The US team members repeatedly described themselves as being "outsiders" on the team and pointed out that they "put a US perspective on things." Subgrouping was severe in this team. As mentioned by one US-based team member: "There hasn't been like a guiding principle … that like you're … you guys should work together and leverage your work and collaborate."

Language issues also were highly charged in this team, with many German team members expressing a lack of confidence in their language skills, and as a result relying on code switching to alleviate their discomfort. Code switching was common, and those who did not speak German (all located in the United States) felt excluded, became infuriated, and charged their German-speaking team members with being disrespectful and rude. In the interviews with these team members, they became tearful as they talked about being excluded from discussions, or spoke angrily as they described the situation in which they found themselves. As recounted by one of the US team members talking about code switching: "It's not the most pleasant experience, and I think that's a very big problem. It's an HR issue at GlobalTech." Another US informant said: "They are certainly entitled to speak their language. It's just sometimes infuriating because they'll just like break into it in mid-meeting and you're like … okay." To some extent, these US team members railed against code switching by trying to change the situation. For example, they went to management asking that the rest of the team members be required to speak the lingua franca. In the end, though, these informants said that they had "given up" and either resigned themselves to their situation or considered leaving the team as a result of their powerlessness to change the situation. As stated by one team member: "There are so many times when I'm like … oh, why am I working on this team?"

Overall, this team was fraught with tension. Team members were anxious about being able to get their work done, and attributed breakdowns to their distant counterparts. Language asymmetries were frequently pointed to as a source of frustration on the team and US-based team members identified it as important evidence reflecting how they were outsiders and devalued by their German colleagues.

High/high 2

The 16 members of HH2 were split more or less equally between Germany (9) and the United States (7). The team had spent nearly 2 years developing a prototype software application in a new application space. The US team members were primarily responsible for defining the technology for the user interface (UI), while the German team members worked on the back-end technology. The faultline in this team was also moderate, again with homogeneity of nationality in Germany, but not the United States, and a mix of English fluency at both locations. In addition, there was a German speaker at the US location.

As with HH1, there were strong location-based subgroups in HH2, although the experience of subgrouping was felt most by the US team members. The Germany-based team members, in contrast, generally described an integrated team with a strong shared identity, although during our observations they suggested multiple times that perhaps the team should be separated. Despite the fact that all team members were part of the same team in the same company under the same leader, team members in the United States felt like "outsiders" and described their location as an "outpost" and "isolated." As one US team member explained: "I usually just consider my team to be the team here." One team member even described the US location as "a subsidiary in [US city], we're not in [German city]." Several US-based team members felt that their work on the UI was being misrepresented by their German counterparts, which further exacerbated the us vs them divide. A US team member confided, "They are talking with one another and reporting that the technology for this new UI is unstable and unusable."

The frustration around code switching was also acute on this team, primarily from the perspective of the US members. They perceived frequent code switching during meetings, which was corroborated by our observations, and were angry that emails and documentation were often in German. As relayed by one of the US team members: "If there is documentation we need, it's in German. We asked them, 'Hey, can you translate to English?' They say, 'Oh, we think in German first and then we translate to English,' but sometimes they'll take forever to translate to English." The interpretation of code switching was experienced as exclusionary and the response of many US team members was anger, frustration, and defensiveness. One US team member described a situation where she faced an email that was entirely in German. She said, "They ticked me off when it happened." In contrast to the US-based team

members, the German team members either did not believe language-related difficulties existed, or spoke empathically about the challenge faced by their distant team members. In some cases there was ambiguity about which documents and artifacts were in German and which were in English. One German informant, for example, said that language was not a problem, because "The PowerPoints are in English, the specifications, the documentations, the documentations with the coding, everything is in English." Some also perceived that they "always switch to English" to accommodate the US team members. Not all German team members, however, held this perception. Many of the German team members claimed that most documents and "all development" were in German. They recognized that language was a problem and that "there can be more misunderstandings because of the language." They attempted to adjust to the situation by repeating themselves and explaining "it again with an example" to make communication more clear, but these adjustments were not perceived, nor did they assuage the frustration of the US-based team members.

In sum, the US team members on HH2 felt that code switching and lack of access to important documents in English were prevalent, which contributed to their feelings of being isolated and devalued. During our study, the team splintered further and performance suffered. At the time of our observations, the two sites were fighting for their own technology solutions and mistrust was rampant.

Medium/medium

The MM1 team was split between Germany and India. Of the 18 team members, 4 were located in Germany and the remaining 14 were in India. There was a manager in each location, but the project leader was located in Germany. Many of the Indian team members were new to the organization, having been hired within the previous year. This was a team responsible for a large software application for customers in the United States and Europe. The application was fairly mature, so it was primarily in the maintenance phase, with limited new development. During our initial interviews, the team was in the process of moving all of the maintenance work to India. This was the third attempt to move the maintenance of this system to India, although the team members in India were new. Our data suggest that the faultline in this group was relatively strong. Only German nationals were in Germany and only Indians were in the India-based team. None of the

India-based team members spoke German, but English fluency was fairly comparable across locations.

Despite strong faultlines on this team, subgrouping was moderate. In general, the Indians were positive about the collaboration and about their German colleagues, although they had a sense that they had to be prepared for meetings, because the Germans would not provide additional information if not asked about it explicitly. The Germans expressed some frustration that the Indian team members were not as capable as they had hoped and were anxious to have the Indians learn German work practices. As described by one German team member: "Sometimes they are just … faced with a problem, they only see this small part of the problem and … sometimes they don't take care of problem with side effects … their view is a bit narrow sometimes." There was a clear sense from both sides of the Germans having more expertise, although some of the Indian team members felt that their German colleagues underestimated their talents. In addition to recognizing differences in skill and expertise, members from both locations recognized that there were cultural differences in how people collaborated and framed the problem. One of the German team members, for example, observed that the Indian team members "do not initially cooperate with women like we do." An Indian team member also described differences in communication approaches, saying, "They're very frank … about things. I wouldn't say all the negative things as they would say so openly … ."

With regard to language, the German team members in MM1 expressed concerns about their own English proficiency, and worries about not being able to express fully what they meant, but did not report any major difficulties with using the lingua franca. The Indian team members similarly did not have much to say about language asymmetries, although they reported that the Germans sometimes communicated among themselves in German, and these messages would make their way to India, but not be accessible to the Indian team members, which they found frustrating. They also complained that, during visits to Germany, their German team members would speak in German despite their inability to understand and felt "left out" as a result. Also, initially, major parts of the code and documentation were written in English, but had been translated by the time we began our study. A close inspection of the interviews shows that the regulation strategies by team members were more constructive than in teams HH1 and HH2, and that the issue of language asymmetries was less

emotionally charged. Indian team members tried to learn technical terms in German, used online translation services, and asked clarifying questions. German team members worked to improve their English, patiently repeated themselves in their accented English, and tried to find ways to communicate more effectively, given the language barrier. One German team member, for example, declined a meeting, asking whether they could "just send me emails, and if we can discuss this problem through emails because I'm not comfortable with speaking English." An informant in India explained: "And that was fine with us and that's how we resolved the issue, just through emails." In general, members of this team recognized that there was a language barrier that was sometimes annoying, but treated it as a problem to resolve together.

Overall, despite the strong faultline, this group demonstrated moderate subgrouping, with some tensions between the locations around how the work was being done. There were also some frustrations around language issues, especially associated with code switching on the part of the Germans, but generally the regulation strategies used in this team were more constructive than those used in the HH teams, and the affective tone was more neutral.

Low/low
Team LL1 was composed of 24 members, split between Germany (8) and India (16). This team was responsible for technical solutions to ensure that data in different systems was compatible. The system was primarily in maintenance mode, with little new development, so much of the work entailed fixing bugs in the system. The team had been together for 6–7 years, although it had undergone a massive reorganization 6 months prior to the start of our study. LL1 had a relatively strong faultline, similar to MM1, with homogeneity in nationality at both the German and Indian locations. No German speakers were located in India. Both locations included a mix of bilingual team members and those with professional fluency in English. Despite the strong faultline, subgrouping in this team was minimal. The Indian team members described the German members as friendly and helpful. The German team members said that they were generally comfortable with their Indian colleagues, reporting that the Indian team members were working long hours and weekends to make deadlines and meet requirements. In the past there had been some tension as a result of shoddy work by the Indians, described by a German informant as "a quick and dirty job," but

these issues had been resolved with time. The Indian team members said that their German team members were responsive, and they appreciated the structure that they brought to the task and the fact that the Germans did not over-commit.

Neither the German nor the Indian team members thought that language asymmetries were a problem. The Indian team members acknowledged the asymmetries, but empathized with their German team members' struggle to express themselves fully. They said that, as long as it did not interfere with the work, they were comfortable with the Germans switching to their native language. In fact, during our observations, we noted that some of the communication among Indian team members was in Tamil, since they were mostly from that region, and at other times they switched between English, Hindi, and Tamil. Although asymmetries in fluency were not generally an issue in this team, the Indians referred to a past time when there were problems because major parts of the code and documentation were in German, but said that all documentation was now in English, and the problems were resolved.

Overall, this team mentioned language asymmetries, but members were sympathetic to their distant team members' experience and did not see language as a problem for the team. Team members typically talked about themselves as an entire team across locations and rarely highlighted location-based differences. Tensions were described as low on this team.

In addition to the four teams described above, there was one additional LL team (LL2) and one team rated as ML (ML1) (see Table 2 for details). LL2 had patterns similar to LL1. ML1 had some language issues, with the India-based team members sometimes feeling neglected and excluded, but this team also reported being empathic, and had adapted their responses.

POWER CONTESTS AS AN ACTIVATOR
As described in the examples above, strong faultlines sometimes resulted in subgrouping, but not always. Further analysis reveals that power dynamics may have operated as an activator, triggering subgroup dynamics in teams along their geographic-, nationality-, and language-based faultlines. We follow Magee and Galinsky (2008: 361) in defining "social power as asymmetric control over valued resources in social relations." The value of resources is subjectively determined, but if one person controls it and the other values it, more power accrues to the individual who controls the resource. Power is differentiated from status in that "power is based in

resources, which belong to an actor, whereas status exists entirely in the eyes of others" (Magee & Galinsky, 2008: 363–364). In the teams that we studied, we noticed that some had intense struggles for resources and power across locations, some were in transition because power was shifting from one location to the other, and yet others recognized and accepted a power imbalance across locations that they anticipated continuing into the near future. Our analysis revealed a pattern in which teams that had severe power contests also experienced the most divisive cross-location subgrouping, teams with shifting power reported less subgrouping, and teams that accepted the power imbalance reported virtually no subgrouping across locations, suggesting that power dynamics moderate the relationship between faultlines and the presence of divisive subgroups. We again provide descriptions of four of the six teams, this time organized by type of power dynamic.

Power Contests

Both teams HH1 and HH2 experienced power contests. The German and US team members recognized that those located at the German headquarters were in the location where the bulk of the resources existed, where most decisions were made, and where most people and therefore most development activity resided. As stated by a German in HH1, this located them with the "heart" and "brain" of the company, where most of the ideas were generated. He went on to say: "If you're just kind of a finger somewhere else, then it always takes time to understand what the brain is thinking and also what the heart is doing." Members of HH1, both in Germany and in the United States, acknowledged that the US location had its own source of power, including being closer to the key market for software, to the core marketing team, and to the industry analysts who were knowledgeable about the local high-technology industry. In addition, and in part because of the resources near the US site, the vice president for this group, a German, had relocated to the United States, thus giving the US team members more access to him on a day-to-day basis. Members at both locations in HH1 described the teams as "equal," but also reported power contests. At both locations, team members mentioned a sense of competition between locations. A team member in Germany, for example, described insecurities when a new topic was assigned to someone in the group. He said they would ask themselves, "Now a new topic and people feel like … is it more important than my topic?" A US-based team member echoed

this sentiment, saying that there is always the "push" to put the work in Germany. Much of the competition revolved around being appreciated and receiving recognition from the VP, and around questions about whether or not they had his attention. German team members, in particular, wondered whether he understood and valued what they were doing, given that he was spending more time with the US team members. They also worried about his ability to represent them in critical activities in Germany, thus heightening their fear of losing ground. US-based team members, however, also felt that their position was threatened. They said that "ownership" was predominantly in Germany and that Germany set the timeframe so that, for example, they would have to work holidays even though their German counterparts did not.

HH2, in contrast, did not report feeling equal. US team members considered themselves "outnumbered" by the German team members (despite the fact that the numbers were fairly equal). As one reported, "the development team here is outnumbered by the people, the colleagues in [German city]" and went on to say that their problems were rooted in the "number issue" and the "language issue," which led to their "opinions or feedback" not being "equally taken as the people in [German city]." The US-based team members described the dynamic as a "rivalry" with their Germany-based team members. During our observations, we saw high levels of frustration and a pervasive sense of threat and competition at the US "outpost." In meetings we observed, German team members spoke most and appeared to control the agenda. Although the German team members generally expressed a value for the diversity in thought that the US team members brought to the team, and saw their contribution as necessary and distinctive, they also felt a sense of competition. One German developer, for example, made the case that perhaps all of the work on this project should be moved to Germany, telling us: "One of the other guys from the other country is really good, there's no question about that. You can learn from him. But there's no question that similarly good guys are around here as well." The manager of the team who was based in Germany acknowledged the issues with power, telling us during our observations that every time the US team members developed something, it might get rejected, because it did not fit with what the German team members had in mind. In one case, the German sub-team completed a task assigned to some of the US team members because the United States was seen as "too slow," which further

contributed to worries of power loss experienced by the US team members. At the same time, the manager worried that the German developers' jobs would be moved offshore, because they spent so much time organizing the projects and communicating with the United States rather than coding.

In general, the teams that were characterized by power contests saw their situations as unstable, and were constantly on guard against the loss of valued resources to the other location.

Power Shifts

Two of the teams in our study were experiencing shifts in power from the German to the Indian site. The MM1 team, for example, had recently moved most of the work from Germany to India, although the transition was not yet complete. There was general acknowledgment of the transition of work and of ownership for that work, including the placement of a team manager in India, although new development and product management remained in Germany. As stated by a German team member, "It is completely changed. We give over the work and the responsibility." We still saw, however, some resistance in Germany and some impatience in India. The Germans were described as retaining seniority, experience, and product expertise on which the Indian team members were dependent. As a result, as relayed by an Indian team member, "mostly the agenda is set by colleagues in [German city]." One German team member spoke about how the Indian team members could be overconfident, but after spending time with the Germans, came to understand the gaps in their own knowledge. Another described the Indian team members as "competitive." He said that, at the beginning, they had "a good ego … actually they don't have a clue at that point." The Indian team members countered by arguing that "the Germans are learning something from us … the way we do analysis of a problem … the kind of creative people we have … and we are very adaptable." At the point when we conducted our interviews, the decision making resided in Germany, but it was also expected to shift to India in a few months. The Indian manager said, "June is the deadline, where the solution will shift and then another six months, completely, it will shift here … so by next year end, we can expect to make decisions rather than be a part of the decision-making."

Acceptance of Power Imbalance

Two of the teams in our study clearly had a power imbalance in which the primary base of power was in Germany. In LL1, for example, team members in both locations were clear that the standards, decision making, directions, strategy, and most of the opportunities flowed from Germany to India. As stated by one of the German team members: "So most of the teams working in that area … are in [German city] … the decision-makers are in [German city] … and a lot of good interesting projects are in [German city] … and when someone decides to have a manager for a small … project lead, then it's most of the time in [German city]." Indian team members agreed. They said, for example, that "the decisions [are] … more concentrated in [German city] and here [India] are the executors. That's always the normal functionality." Our observation was that although the power imbalance was acknowledged, it was not contested. In fact, the Indian team members seemed to rationalize the current situation as something *normal* in the short term, while taking the long view that there would eventually be more growth opportunities in India.

THEORETICAL MODEL

Our contribution resides, in particular, in articulating how language asymmetries contribute to the us vs them subgroup dynamics often documented in global teams (e.g., Cramton & Hinds, 2005; Polzer et al., 2006). By providing evidence that language asymmetries contribute to faultlines, that power dynamics activate faultlines, and that some dimensions of faultlines, specifically language, can channel and embody intense subgroup power struggles, we extend theory on language asymmetries and subgroup dynamics in global teams. Our conceptualization is more dynamic than previous theory on subgroup dynamics, suggesting a process that is self-reinforcing. Language asymmetries constituted an element of a faultline (combined with location and nationality), but ultimately were reflected in actual behaviors and clashes between locations. For these teams, language asymmetries were not simply invisible dividing lines. Subgroup identification and language asymmetries fueled one another in a reinforcing process in which language was a visible marker that kept subgroup identifications alive, while divisive subgroup dynamics exacerbated the emotionally charged experience of language asymmetries. Our data suggest that the teams in our study with more severe subgrouping also suffered from a more negative affective state that was intertwined with their response to language asymmetries. A team affective state arises from a combination of team composition (e.g., individual affective tendencies)

and team context that is transferred through affective transfer processes (e.g., Barsade & Gibson, 2012). The patterns we observed suggest that language asymmetries and subgrouping created a context that contributed to and reinforced negative team affective states. We posit that language asymmetries become a conduit for heightened emotions when subgroups are strong and divisive, because constant interaction aggravates an already negative affective state. Unlike more subtle cultural differences between locations, language is a day-to-day behavior that is constantly accessible and thus persistently salient.

The theoretical model that emerged from our analysis reflects the relationship between lingua franca asymmetries and subgroup dynamics and the process that unfolded (Figure 1). Specifically, language asymmetries aligned with distance and nationality to create faultlines that were dormant in some teams and activated in others. Power contests were associated with stronger and more divisive subgrouping and a negative team affective state, thus suggesting an "activating condition" that triggered otherwise dormant faultlines. Teams that fractured into divisive subgroups were also the ones whose dominant responses to language asymmetries were protective (e.g., situation selection and modification) or reactive (e.g., experience and delay regulation) rather than empathic (reappraisal). Finally, these emotional responses to language asymmetries were associated with behaviors, such as code switching or exclusion, that further inflamed anxieties about power in those teams already burdened with power contests. As depicted in Figure 1, this fueled a self-reinforcing cycle for the teams who had language-based faultlines and who were suffering from power contests.

DISCUSSION

Our goal in this study was to understand the effect of language asymmetries on subgroup dynamics in globally distributed teams. We succeeded in describing how language was an emotionally potent issue for both German- and non-German-speaking team members at GlobalTech, and how language asymmetries contributed to a faultline that lay dormant in some teams, but was activated in others. With the increasing prevalence of internationally distributed work, it is critical to introduce theoretical and empirical perspectives that explicate the impact of a lingua franca and bring it into the mainstream of international business and organizational behavior scholarship. Although intercultural sociolinguistics, intercultural pragmatics, and symbolic interactionists have long acknowledged language as a critical carrier of communication, little work has explored how differences in language backgrounds and language fluency affect team dynamics. Cossette (1998: 1364) argues that language in organizations "must necessarily be examined in the light of the tongue spoken or written by the individuals concerned – in other words, the system of linguistic signs used by them." Our work helps to fill this gap and extend our understanding of language in organizations, with particular attention to its role in the us vs them dynamic so commonly observed in global teams (e.g., Cramton & Hinds, 2005; Polzer et al., 2006). Our findings suggest that language asymmetries are a potent dimension of a faultline and play a role in fueling us vs them subgroup dynamics. In our case, language aligned with geographic location and nationality to create powerful faultlines. Although Earley and Mosakowski (2000) asserted that nationality is an umbrella trait to which managers must
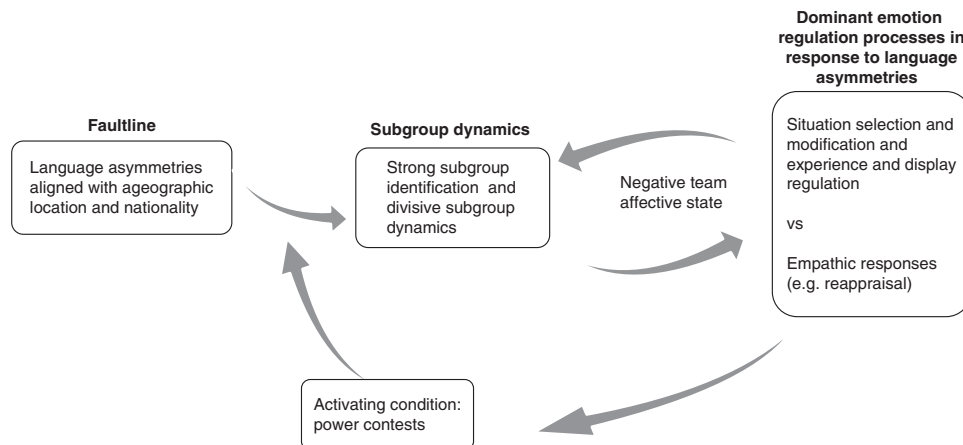

Figure 1 A process model of the relationship between language asymmetries and subgroup dynamics in global teams.

attend, we join others (e.g., Maloney & Zellmer-Bruhn, 2006) in challenging this assertion. Our data suggest that language may be more salient and explosive than nationality, which can go unnoticed when there is a strong occupational culture, or when distance renders some of these differences less visible (Maloney & Zellmer-Bruhn, 2006).

The link we propose between language asymmetries and subgroup dynamics extends previous research on language and identity. Bucholtz and Hall (2004: 382), for example, argue that language is "a fundamental resource for identity production." Identity is an emergent product of linguistic practices and is, as a result, a social and cultural phenomenon that emerges in interaction (Bucholtz & Hall, 2004, 2005). This approach to identity and language suggests that team identity, language, and context are intertwined. Language is one of the ways in which we categorize others and ourselves as belonging to particular groups or subgroups (Harzing & Feely, 2008; also Giles & Johnson, 1981). In global teams, we conjecture, language asymmetries can enact and help to fortify local identities, particularly location-based subgroups. Depending on the context in which the interaction takes place, identity work can be used to obscure differences to create a shared identity (as in LL1 and LL2), or can highlight differences, thus reinforcing an ingroup–outgroup dynamic between locations (e.g., Bucholtz & Hall, 2004; Harzing & Feely, 2008), as we saw in HH1 and HH2. In their meta-analysis of research on multicultural work groups, Stahl, Maznevski, Voigt, and Jonsen (2010) suggest that surface-level differences (e.g., overt demographic characteristics) vs deep-level differences (e.g., psychological characteristics) are more salient, and thus may trigger categorization. Language, as a surface-level difference, was a constantly accessible category, reinforced during nearly every interaction, and so was highly salient, and may therefore have exacerbated the categorization process and interfered with communication effectiveness, as suggested by Stahl and colleagues. We extend their work by providing more specificity to which conditions heighten the salience of (e.g., activate) these categories, since all of the teams in our study faced and spoke about language asymmetries, but some were more dispassionate in their response to it.

We also contribute to theory about faultline activation. Despite general agreement about the importance of an activation process to trigger subgroup dynamics, there exists a dearth of research on activators and the role they play. A prominent feature of the original formulation of faultline theory was the need for faultlines to be activated in order to result in subgrouping. As argued by Lau and Murnighan (1998: 333), when faultlines are not activated, they are not only impotent, but "their strength may naturally decrease over time" as teams in the meantime develop a shared identity. Scholars building on the faultline model for global teams have recognized the importance of activating events and have mustered anecdotal evidence for their role. Earley and Mosakowski (2000), for example, noticed in their study that one of the teams that included members from three separate national identities was well integrated, but that another similarly composed team perceived a cultural schism. They conjectured that the perception (or lack thereof) of heterogeneity was pivotal to the level of integration. That is, national identity had to be salient for subgrouping to occur. Li and Hambrick (2005) also noted that activation needs to occur for faultlines to generate subgrouping, but were not able to test it with the data they collected. They did, however, postulate that their participants "almost certainty attached some salience to their delegate status" (p. 808), and that this salience triggered the faultline. Polzer et al. (2006) similarly were unable to test the role of activating events, but reported exploratory analysis suggesting that location differences became salient when teams divided the work by location. Our study demonstrates that it is not necessarily the teams with the strongest faultlines that fracture, but that the activator – in our case power contests – is crucial in determining whether or not they do.

Specifically, our analysis shows that power dynamics may occupy a central role in faultline activation and subgroup dynamics. Sivanathan, Pillutla, and Murnighan (2008) conceded that research on power loss is rare. Loss of power, however, is a primary reason cited for wars among nations and is known to increase vigilance and attention to more powerful parties (Sivanathan et al., 2008). Threats to power (e.g., anticipated power loss) are also known to generate feelings of anxiety and shame (Keltner, Gruenfeld, & Anderson, 2003). Previous research on power suggests that those who hold power enact strategies to maintain the *status quo* (Magee & Galinsky, 2008). In our study, power contests and power shifts contributed to heightened tensions between subgroups. Power dynamics were associated with discontent regarding control or perceived control over valued resources such as access to information and decision makers. We found that the relationship between the activator (e.g., power contests) and subgrouping was also more complex than previously

proposed. Power contests activated faultlines, but were then also reinforced by the language-based subgrouping behavior that ensued. Articulating this reinforcing cycle makes a new contribution to theory on language-based subgroup dynamics by explicating one of the reasons why subgroups, once activated, may be difficult to dismantle.

It is interesting to note that the power contests and struggles in the teams we studied were somewhat reflected in issues and shifts in society at large, such as the push to outsource work to lower-cost labor markets. The external nature of these sources of power and power shifts made it especially hard for team members to talk about and resolve power-related issues internally. In a provocative article, Chrobot-Mason, Ruderman, Weber, and Ernst (2009) suggest that triggers from society at large can activate faultlines, such as when "a Palestinian boss gave overtime pay to a Palestinian and denied it to a Jordanian," thus heightening subgroup identification and tension. Brannen (2003) captures this idea of external factors in the negotiation of culture in global ventures by differentiating field-based power (from the external environment) and arena-based power (from the organization). In our case, two of our teams split between the United States and Germany (HH1 and HH2) were the ones with the most severe subgrouping and most intense emotional reaction to language asymmetries. It is likely that the power contests between the United States and Germany reflected field-based dynamics, such as the flat or diminishing growth in jobs and opportunities in Germany and the United States, as well as arena-based dynamics, such as the location of headquarters in Germany, potentially contributing to the sense of power loss felt by these teams. Levine and Moreland (1998) argued that more attention to the settings that groups occupy was necessary. Our reflections suggest that attending to the context in which teams are embedded is as important as ever for understanding subgroup dynamics and is highly relevant to global teams that span multiple contexts.

As early as Lau and Murnighan's (1998) introduction of the faultlines model, there was speculation that power may play a role. Lau and Murnighan (1998: 335), for example, suggested that power moderates the relationship between subgrouping and conflict, proposing that "Groups that split into subgroups of comparable power are likely to experience intense, overt conflict." Surprisingly, they talked only about power being associated with the size of the subgroups (e.g., equally sized subgroups), and ignored other sources of power. Jehn and Bezrukova

(2010), in one of the few studies of faultline activators, allude to the role of power by examining entitlement personality. Finally, Carton and Cummings (2012) argue that asymmetries in power create "disparity-based" faultlines that result in resource-based subgrouping, although it was outside the scope of their work to test this proposition. Evident from this summary is agreement that power plays a role in subgroup dynamics, but the point at which this happens (e.g., as a moderator between subgroups and conflict, as a faultline, or as an activator) remains ambiguous. Our study is, as far as we know, one of the first direct examinations of the role of power in subgroup dynamics, and therefore helps to resolve these conflicting propositions. We found that power asymmetries are not, in fact, faultlines. In our teams that faced power struggles, resources were not (perceived as) distributed asymmetrically. Instead, it was the symmetry or move toward symmetry that seemed to ignite power contests. We found that equally powerful subgroups and subgroups experiencing power shifts competed for resources (Jehn & Bezrukova, 2010; Magee & Galinsky, 2008), thus making salient an otherwise dormant faultline with language as a dimension, and affirming power as an activator in subgroup dynamics.

Although mostly unacknowledged, on rare occasions informants linked power issues directly to language, recognizing that the power differences across locations were intertwined with language asymmetries. On HH2, for example, there was a feeling that resources and opportunities went to German speakers. One informant told us: "I've always felt that Germans do get maybe a little better treatment here … if you can speak German, then you'll always have an advantage over someone who can't speak German." When asked about these benefits, this team member said, "Well, if it came to layoffs, I've always thought that they would keep the German person over the non-German-speaking person. And then I think a German has more opportunities to move up in this company." As documented in previous research, more power accrues to those working in their native language (Harzing & Feely, 2008), while those required to work in a second language can experience status loss, especially if working with native speakers of the lingua franca (Neeley, 2013). In our case, awareness of these imbalances fueled frustrations, which were enacted in self-protective language-related behaviors.

Although harder to support with evidence, we also speculate that informants used language to reclaim power. The strategy of talking to the boss about

violations to the English lingua franca policy, for example, was a way that US team members reasserted their power in the situation. Similarly, code switching may have been used by German team members not only to alleviate unwanted emotions, but also as a way of regaining diminishing power. This is consistent with work in linguistics demonstrating that code switching can be used to exert power and create desired social situations (e.g., Auer, 1984; Jan, 2003). Heller (1992) further argues that language choice reflects the relative value and symbolic distribution of resources across communities. Team members' responses to language asymmetries in polarized teams were therefore complex, in that they reinforced negative affect and subgrouping, but also invoked strategies, consciously or unconsciously, that kept power dynamics alive.

Our research also contributes to a better understanding of the emotional labor demanded of workers in globally distributed teams. Emotional labor has been extensively studied in organizations (Elfenbein, 2007; Hochschild, 1979; Wharton, 2009). The term "emotional labor" is commonly used to refer to situations in which workers are expected to regulate their emotions in service to an organization as part of their jobs. To date, most research on emotional labor has been conducted in service contexts in which workers must regulate their emotional expression during service encounters (e.g., Hochschild, 1979). Only a small number of studies consider the requirements for emotional labor in professional jobs, and even fewer attend to the emotional demands of interacting with collaborators. Orzechowicz (2008: 143) describes these as "privileged emotion managers," because they have more autonomy, resources, and support than do service workers. In her recent review, Wharton (2009: 161) calls for more research on emotion, emotional expression, and emotional labor in interactive work, suggesting that "an investigation of these issues can shed light on a range of workplace processes and dynamics." She further challenges researchers to use globalization as a stimulus to examine "the intersections between local and global influences on the construction and regulation of emotion at work" (Wharton, 2009: 162). Answering this call, our study at GlobalTech suggests that language asymmetries and reliance on a lingua franca can demand emotional labor from globally distributed workers. The informants we observed and talked with grappled daily with emotional issues around language. In several of our interviews, informants became tearful or cried when talking about their

feelings about language asymmetries. Some spoke with anger about their experience with the lingua franca at GlobalTech. We argue that this demands emotional labor from these employees, and conclude that global work and language asymmetries exact an emotional toll on these professionals.

Our team-level analysis suggests that Germany–US teams were more likely to experience power contests, subgrouping, and frustration around language asymmetries. There are several possible factors that intensified these effects. First, the US informants inhabited a relatively mono-lingual society as compared with India. US informants generally spoke a single language, were more inclined to experience fear of being talked about, and were less accustomed to situations in which code switching occurred. On the Indian teams, in contrast, we saw more empathic responses. Evidence suggests that bilingual speakers are perceived as being less threatening than native English speakers in a mixed exchange (Neeley, 2013), and that multilingual speakers have more cognitive empathy (Dewaele & Wei, 2012). The fact that the Indian location had no native English speakers may have contributed to more empathic responses and/or the perception on the part of the Germans that they would be more understanding, thus reducing anxieties around asymmetries. It is also intriguing to note that both of the HH teams had a German speaker in the non-German location (e.g., the United States). We posit that the presence of a native German speaker may have made the language asymmetries more salient. In some of our observations, for example, we noticed that German speakers could be overheard talking on the phone in German with collaborators in Germany. This may have been a persistent reminder to the US-based team members that they did not speak the language of headquarters, thus reinforcing their concerns about power loss.

A final consideration is the role of task and the division of work between locations. Lau and Murnighan (1998) suggested that the task itself could behave as an activator of faultlines. In our study, however, we see little evidence of this. In HH1, the task was not split between locations. There were multiple functions on the team, and team members in Germany and the United States worked together on all of them. In HH2, in contrast, the task was split, with the UI in the United States and back-end development work in Germany. In neither of these teams was the work itself location dependent (e.g., localizing for a specific market). The remaining teams were mixed, with the work somewhat

modularized between locations or, as with MM1, in transition. With regard to the division of work, we heard complaints that the work was too hard to coordinate when it was not modularized, but also complaints that when it was modularized, it made it difficult to know what was going on, which interfered with later integration. Localization of the product did not seem to be salient for any of these teams. Another consideration is the status associated with different types of tasks. In this high-technology company, development work was most prized. Maintenance work and product management, in contrast, afforded less status. HH1 may have felt more insecure by virtue of being employed in a high-technology company but in a lower-status task, which could have exacerbated power contests. This was not, however, the case with HH2, a team that was involved in high-status development work. Task status is therefore not likely to be the primary explanation for the dynamics we observed.

As with any study, ours has limitations. First, ethnographies are well suited to build theory, but not to test it. We have identified patterns and associations, but cannot establish causality. Additional research is therefore needed to validate the relationships we have identified. This will likely require quantitative studies with significantly more teams. Second, although we conducted some observations, they were limited, and did not enable micro-level analysis of conversations, particularly around code switching and responses to code switching. An important future research approach would therefore be to implement sociolinguistic methods of discourse and conversation analysis to better understand the actual patterns of code switching that informants described in our study. Doing so would enable the analysis of micro-level patterns in the structure of the conversations that might contribute to interactants' identity construction and meaning-making (Auer, 2000; Bucholtz & Hall, 2005; Lo, 1999; Sebba & Wootton, 1998). Moreover, this type of analysis would be required to reveal differences in code-switching practices between subgroups within a team. Third, all of our teams were spread across only two locations and included Germany. The role of language and power might look different in global teams with more locations, more languages, and more cultures, so additional research will be required to explore these dynamics. Fourth, we examined only globally distributed, not collocated teams, and therefore geographic location was a key faultline dimension. We speculate that on collocated, multinational, multicultural teams, language may

align with other team characteristics, such as professional training or organizational boundaries, to create similar dynamics. For example, if a collocated team composed of Spanish-speaking Chilean and Spanish entrepreneurs from Company X and English-speaking American and British designers from Company Y is working together on a product, we might expect language and company boundaries to align to create dynamics similar to those seen in the study we report here, particularly in the presence of power contests between the two subgroups. Future research will be needed to assess how subgroup dynamics play out when aligned with other faultline dimensions on collocated teams with language asymmetries.

Despite the limitations of this study, our findings have important implications for managers charged with overseeing globally distributed projects. In particular, managers need to understand the communication challenges that people face when they have a mix of native, bilingual, and professional competence in the lingua franca. Managers also need to understand the probable coping strategies that workers may employ, which may involve withdrawal, exclusion, and code switching for less confident English speakers, and leaving, asking for translations, or requesting that English be used for more fluent and confident English speakers. Perhaps more importantly, identifying persistent activating forces, such as power contests, and helping to alleviate the sense of threat and fear that accompany these dynamics would go a long way to reduce subgroup dynamics and, in turn, create the conditions for more empathic responses to language asymmetries.

In sum, language asymmetries aligned with geographic distribution can contribute to a potent faultline in global teams and, when activated by power contests, draw emotions like a lightning rod, thus fueling a negative affective state that radiates tension across locations in these global teams, and triggers a self-reinforcing cycle of language-related behaviors that fuel an us vs them dynamic.

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NOTES

[1]Although functional area or discipline has also been shown to be an important faultline dimension, the teams in our study were fairly homogeneous in functional/disciplinary area, so functional area did not constitute a faultline dimension.

[2]Ideally, we would have employed a quantitative measure of faultlines, but were unable to, because most existing measures were not robust to groups as large as those in our study (e.g., Bezrukova et al., 2009), and those that were tended to generate too many subgroups to be meaningful.

[3]This is a pseudonym, as are all other informant names reported in this paper.

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