SOCIAL DIMENSIONS OF TELECOLLABORATIVE FOREIGN LANGUAGE STUDY

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ABSTRACT

Previous research on network-based foreign language study has primarily focused on: a) the pedagogy of technology in the language curriculum, or b) the linguistic characterization of networked discourse. In this paper, I explore socio-institutional dimensions of German-American telecollaboration and the ways in which they may shape foreign language learning and use. Telecollaborative partnerships represent particularly productive sites for the examination of social aspects of foreign language study since, by definition, they entail tight sociocultural and institutional interface. Within the theoretical framework of social realism (e.g., Carter & Sealey, 2000; Layder, 1993), any human activity is thought to be shaped by both macro- and micro-level sociological features. These include social context and institutional setting, situated activity and individual agency, respectively. In this analysis, I intertwine the socially and institutionally contingent features of language valuation, computer know-how, Internet access, and learning accreditation and the micro features of situated classroom interaction and individual psycho-biography in order to provide a rich and multi-faceted characterization of foreign language learning and use on both ends of a German-American telecollaborative partnership.

INTRODUCTION

In its relatively short history, much of the research on computer-assisted language learning (CALL) has focused on pedagogical and structural issues (Appel, 1999, p. 3; Warschauer, 1997, p. 470; Warschauer & Kern, 2000, p. 14). These have appeared as narrative accounts of the integration of technology into language and culture curricula generally regarded as successful (e.g., Warschauer, 1995) and descriptive characterizations of computer-mediated communication (CMC) at the interactional level (e.g., Chun, 1994; Kern, 1995, 1996; Sotillo, 2000). Researchers in this area have not yet robustly examined cultural, historical, and social dimensions of CALL and of learners engaged in CALL activities (Chapelle, 2000, p. 217).

Although mainstream second language acquisition (SLA) research is still characterized by primarily psycholinguistic approaches to language learning (e.g., Kramsch, 2000, p. 315; VanPatten, 1999), the social turn pervasive in educational research in general (e.g., Erickson, 1986; Salomon & Perkins, 1998) has begun to make inroads into the non-CALL variety of this field as well (e.g., Lantolf, 2000; McGroarty, 1998; Norton, 2000; Rampton, 1995; see Freeman & Johnson, 1998, for Foreign Language Teaching [FLT]). Broadly conceived, the social turn recognizes the culturally and historically shaped nature of learners as well as that of the learning and teaching processes in which they are situated. SLA and FLT researchers have subsequently begun to investigate language learners as agents in sociocultural context(s) as well as input "processing devices" (Lantolf & Pavlenko, 2001, p. 145).

Some CALL researchers have also recently recognized the need to place sociocultural dimensions of language learning and use toward the center of their developing research agendas. Warschauer (1998a, p. 760), for example, notes that in order "to fully understand the interrelationship between technology and
language learning, researchers have to investigate the broader ecological context that affects language learning and use in today's society, both inside and outside the classroom" (see also Chapelle, 2000; Salaberry, 1999, p. 104). Telecollaboration, defined here as the application of global communication networks in foreign language education (e.g., Kinginger, Gourves-Hayward, & Simpson, 1999; Warschauer, 1996), is of particular interest with respect to social dimensions of language learning and use, since this type of learning environment consists of pairs or groups of distally-located students embedded in different sociocultural contexts and institutional settings. Nevertheless, the social and institutional factors impinging on language learning and use in this configuration have been under-explored (see, Belz, 2001; Belz & Müller-Hartmann, 2001; Kramsch & Thorne, in press; Warschauer, 1998b; Wegerif, 1998). In this paper, on the basis of a wide variety of quantitative and qualitative data, I examine the ways in which social dimensions of telecollaboration, in tight conjunction with learner agency, may shape language learning and use on each end of a German-American partnership.

SOCIO-COGNITIVE INVESTIGATION

Unlike the field of FLT, where pedagogical revolutions have frequently demanded "a fervent commitment … to a single theory of teaching and [a rejection of] all other methods or approaches as ineffectual and outmoded" (Omaggio Hadley, 1993, p. 78), some proponents of the social turn in SLA research have been more tempered in their uprising, espousing the inter-illumination of culture and cognition as explanatory factors in SLA. For example, Warschauer and Kern (2000) advocate the application of socio-cognitive frames of interpretation to SLA phenomena (see also Kramsch, 2000, p. 316; Lantolf, 1996; Lantolf & Pavlenko, 2000, p. 159). Socio-cognitive interpretation necessarily entails the complementarity of sociocultural, ethnographic, and qualitative data sources on the one hand, and psycholinguistic, linguistic, and quantitative data sources on the other. These recent developments in SLA theory building and investigative methodology find precedence in the field of sociology, where researchers such as Margaret Archer (1988, 1995) and Derek Layder (1993) have advanced social realism as an approach to the exploration and interpretation of social action such as telecollaborative language learning (see Cameron, Frazer, Harvey, Rampton, & Richardson, 1992; Candlin, 2000, pp. xv-xix; Carter & Sealey, 2000, for applications of social realism to applied linguistics research).

Theoretically, the realist position construes the empirical world as highly complex and multifaceted. Within this variegated and layered world, social action is shaped by an intimate interplay of both macro-level phenomena such as social context and setting (i.e., structure) and micro-level phenomena such as linguistic interaction and psycho-biography (i.e., agency). Furthermore, social action is embedded within history and inequitable relations of power and both of these influence the ultimate meaning and shape of human activity in important ways.

Methodologically, social realism reflects the complex and layered nature of the empirical world. It relies on an exploratory, theory-generating, multi-strategy approach which attempts to make as many "analytic cuts" (Layder, 1993, p. 108) into the research site as possible in order to elucidate the meanings of particular social actions for the people involved. As a field guide to social realist investigation, Layder (1993, p. 55) suggests a research map (see Table 1) which clearly emphasizes the multi-directional inter-relationship of structure (i.e., context and setting) and agency (i.e., situated activity and self) in the investigation of human activity. Although realist accounts are predicated on a "bedrock of interpretive work" such as interviews and participant observation, Layder (p. 113) insists that quantitative data must be brought into the analysis in complementary fashion. However, quantitative data are not limited to counting observable instances of behavior (e.g., grammatical features of CMC), but also include such information as demographic statistics. "Put very simply," Layder (p. 16) remarks, "a central feature of realism is its attempt to preserve a 'scientific' attitude towards social analysis at the same time as recognizing the importance of actors' meanings..."
Table 1. Multi-strategy research in German-American telecollaboration
(Adapted from Layder, 1993, p. 114)

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<th>Additional Factors</th>
<th>Research Elements</th>
<th>Types of Data</th>
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<td>HISTORY, e.g., patterns of socialization into classroom FLL</td>
<td>CONTEXT</td>
<td>Qualitative</td>
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<td></td>
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<td>• Theoretical/interpretive characterizations, e.g., institutional histories; policy documents; informational interviews with administrators; scholarly publications</td>
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<td></td>
<td>SETTING</td>
<td>Quantitative</td>
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<td>• Aggregates of individuals in specific social circumstances, e.g., computer ownership by race/ethnicity from governmental statistical databases</td>
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<td>• Traditional quantitative data, e.g., statistical correlations between experimentally controlled variables</td>
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<td>POWER, e.g., student-teacher or NS-NNS differentials; learning accreditation pressures</td>
<td>SITUATED ACTIVITY</td>
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<td>SELF</td>
<td>• Participant observation</td>
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<td>• Interviews with learners</td>
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<td>• Learner portfolios</td>
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<td>• Simple forms of counting, e.g., occurrence of linguistic features in electronic discourse; number of e-mail messages composed per group</td>
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In this paper, I apply the multi-strategy methodology of social realist investigation to the situated activity of German-American telecollaboration in order to provide as rich a picture as possible of language learning and use in this configuration. In particular, I highlight the relationships between certain aspects of structure (e.g., institutional affordances and constraints) and agency (e.g., language learning and use) in the situated activity of transatlantic e-mail correspondence. The focus here is on the inter-relationship of the broader ecological context of telecollaboration and language learning and language use in telecollaboration, since it is this area which has been under-explored in the literature on computer-mediated language study to date. However, I also attempt to divert the tendency for sociocultural accounts to be interpreted as a form of social determinism by briefly discussing the multi-directional relationships between structure and agency in these data (see Multidirectional Interaction of Context, Setting, Situated Activity, and Self).

The methodology of social realism brings a disciplined flexibility (Layder, 1993, p. 109) to exploratory investigations of new SLA environments afforded by technological advances. The research map provides clear guidelines for sites as well as forms of data collection. Its insistence on the inter-penetration of structure and agency (indicated by dashed lines in Table 1) nicely reflects the sociocultural gist of the social turn, while simultaneously legitimizing the explanatory contribution of previous and prevalent quantitative approaches. Finally, social realism clearly acknowledges the crucial roles of the self, history, and power in the explanation of social action. Some of these constructs do not appear to be highlighted to the same extent in other sociocultural approaches to human activity.

According to Layder (1993, p. 80), situated activity "shifts focus away from the individual's response to various kinds of social situations towards a concern with the dynamics of interaction itself…" Embedded within this particular situated activity were 16 American and 20 German selves, each with his own psycho-biography. As Layder (1993, p. 74) writes, the self "points to an individual's sense of identity, personality and perception of the social world as these things are influenced by her or his social experience." As indicated in Table 1 above, data sources for these two micro layers include biographical
and technological surveys, interviews, participant observation on the part of the author, e-mail and chat transcripts, and student-produced course portfolios.

Layder (1993, p. 90) defines settings as "already established forms of organization" in which situated activities take place, while class, gender, and ethnic relations comprise the typical macro elements of contexts. In this case, the institutions of the German and American universities, foreign language classes at universities in general, and the particular foreign language class in this study are all levels of setting. As Tella (1996, p. 10) points out, the computer-mediated foreign language classroom, in comparison to the conventional foreign language classroom, facilitates significant shifts in aspects of the culturally-dependent classroom script (Belz, 2001, pp. 143-145; Hatch, 1992, p. 92). German and American society in general and post-secondary educational systems in particular frame the situated activity of telecollaboration on the structural level. Data sources include institutional and societal statistics, informational interviews, policy documents, and academic publications.

DESCRIPTING THE SITUATED ACTIVITY OF GERMAN-AMERICAN TELECOLLABORATION

The networked German-American learning community reported here consisted of a teacher education Proseminar at Justus-Liebig-Universität (JLU) in Gießen, Germany, and a fourth-semester German class, German Conversation and Composition, at Penn State University (PSU). The JLU Proseminar, entitled Encounters between the US and Germany: Intercultural Readings of Texts and Films, was one of several options for fulfilling a variety of Teacher Education program requirements in foreign language pedagogy. The students in this Proseminar were enrolled in degree programs which lead to certification as an English teacher at the elementary and secondary levels in the German education system. The U.S. German class represented the first foreign language elective beyond PSU's three-semester undergraduate requirement. The JLU English Proseminar met once a week in a computer laboratory, while the U.S. German class met four times per week, twice in a computer laboratory.

Using e-mail, synchronous chat, and Web-based information exchange (e.g., the construction of Web sites), the German Proseminar and the U.S. German class collaboratively engaged in a series of tasks for the express purpose of developing foreign language competence and intercultural awareness. These interactions were based, in part, on students' common reading and viewing of parallel literature and film (e.g., Furstenberg, Levet, English, and Maillet, 2001, pp. 65-66; Kinginger et al., 1999). Parallel texts are linguistically different renditions of a particular story or topic; crucially, they are not literal translations of the same text, since it is the culturally-conditioned varying representations (Widdowson, 1992, pp. 16-25) of a single story or topic that are at issue as a prompt for intercultural learning. Grimm's original German-language fairy tale, Aschenputtel, and Disney's English-language animated adaptation, "Cinderella," illustrate the concept for a German-American partnership. The JLU-PSU interaction was loosely organized around the topic family issues and consisted of four phases.

In Phase I, prior to the commencement of the German academic semester, the U.S. German students prepared Web Project I, a compilation of biographical sketches and university information, in order to introduce both themselves and their community to the JLU English students (click here to sample pages from Web Project I). They also read the first set of parallel texts, the juvenile novels Ben liebt Anna (Härtling, 1997) and If You Come Softly (Woodson, 1998), which deal with intercultural/interracial first love (see Müller-Hartmann, 2000, for a rationale of the use of juvenile literature in networked FLT; see also Kramsch, 1985). The Cinderella versions comprised the second set of parallel texts, while the contemporary feature films, Nach fünf im Urwald (Schmid, 1995) and American Beauty (Mendes, 1999), which deal with middle-class family life, formed the final set.

In Phase II, the students formed transatlantic pairs or groups based on mutual interests. The primary task in this Phase was discussion and analysis of the parallel texts with native-speaking partners via e-mail. In order for both the German and U.S. students to profit linguistically, discussion occurred bilingually in
both German and English (Appel, 1999, pp. 62-63). The e-mail discussion took place and was archived for analysis in FirstClass (2001), a teleconferencing software program that enables the simultaneous maintenance of e-mail correspondence between multiple pairs/triads as well as multi-room synchronous chat (Gillespie, 2000; click here for a screen shot of the FirstClass working environment).

In Phase III of the partnership, the transatlantic pairs/triads merged to form seven larger transatlantic groups. The task during this phase was for each group to develop a Web site (click here for sample pages from Web Project II) which contained a bilingual essay pertaining to the parallel texts and a bilingual discussion of a cultural construct (e.g., "racism," "beauty," "family") from multiple perspectives. In addition to discrete-point grammar, discourse grammar (e.g., McCarthy & Carter, 1994), and content, students were evaluated on their demonstration of electronic literacy (e.g., Warschauer, 1999) as evidenced by the appropriate integration of images, video, sound, and topic-related informational hyperlinks into their Web sites. The U.S. semester ended at the conclusion of Phase III. During Phase IV, the JLU students discussed their experiences in the telecollaborative partnership from practical and theoretical perspectives.

DATA PRESENTATION AND ANALYSIS

The current focus on social dimensions of telecollaboration is reflected in the data presentation by proceeding from the level of structure. Language valuation and technological access and know-how are discussed as representative of the level of context. Methods of learning accreditation are addressed at the level of setting. Indicative of the inter-penetration of structure and agency in the social realist paradigm, data pertaining to the micro-levels of linguistic interaction and psycho-biography are woven through these sections in narrative fashion. They are further discussed in Multidirectional Interaction of Context, Setting, Situated Activity, and Self.

Level of Context

Language Valuation. In the German-speaking world, knowledge of English is often considered to be a prerequisite for success in certain areas of professional and personal life (Hilgendorf, 1996). German, in contrast, does not share the same status in American society. This difference can be seen vividly with the example of foreign language instruction in secondary education in each country. For the 1998/1999 German school year, Das Statistische Bundesamt (Federal Statistics Office) reported that 97.3% of all children in the fifth grade and 99.8% of all children in the seventh grade receive instruction in English. In contrast, the U.S. National Center for Education Statistics reported in 1994 that 2.7% of all pupils in Grades 9 through 12 receive instruction in German. Furthermore, the English language is pervasive in present-day German media and popular culture (Hilgendorf), while the reverse trend is not in evidence. Based on this macro-level demographic information, one could surmise that Germans generally have more exposure to English than Americans do to German. This additional exposure may facilitate higher English language proficiency levels for Germans when compared to German-language proficiency levels for their U.S. age peers. Jennifer, a 19-year-old U.S. student, hinted at the relationship between the macro-level shaping of this discrepancy in proficiency and her position as a U.S. student in a German-American telecollaborative partnership: "I figured they [the Germans] expected to have a much higher level of English I mean they've had English forever."

The expectation that the U.S. students may be less proficient in German than the German students are in English surfaced at the level of situated activity in e-mail correspondence during Phase II. For example, Verena, a 22-year-old German student, wrote the following to her U.S. partner, 18-year-old Nancy, in her second e-mail: "I think that it must be hard to learn our language. My pen friend from England is not as good as you are." Corinna, a 24-year-old German student, betrayed her pre-conception of her U.S. partner's (21-year-old Mitch) ability to understand German: "Okay, let me introduce myself in English, I guess, that will be easier for you to understand." These initial positionings of the U.S. students by the German students as the linguistically less competent members of the partnership may be perceived by the
U.S. students as threats to positive face (Brown & Levinson, 1987) which, in turn, may have meaning for their ability to "open up to each other on an emotional plane" (Müller-Hartmann, 2000, p. 130) and establish the positive personal rapport that is important to maintaining a viable electronic partnership and engaging in intercultural learning (Appel, 1999, p. 55; Wegerif, 1998, p. 34; see also Byram, 1997, p. 50).

The U.S. students in this partnership also tended to position themselves as the linguistically less competent members. For example, 19-year-old Alice explicitly cast herself and her U.S. classmates in this role in her first e-mail to her partner, 24-year-old Patricia: "It is a little intimidating for us, because you have studied English for much longer than we have studied German. From talking with my classmates, we all are a little nervous that our German isn't quite as good as you expect." Similarly, Mitch imagined what his German partner might think when she received e-mail from him: "Yeah, I'm sure that some of the stuff I wrote [Corinna] was like ohhhh great! What is he trying to say…" (see also Fischer, 1998, p. 114). In a post-semester interview, Nancy conjectured that the German partners may be less likely to participate if they perceived the U.S. partners to be less proficient: "Maybe [they wouldn't want to write because] they thought it was like funny when they'd get the emails from us and like not really understand the German."

Mismatches in foreign language proficiency affected both interpersonal and linguistic aspects of the telecollaborative partnership in the case of 21-year-old Joe and one of his German partners, 20-year-old Gabi. On a written project assessment, Joe explained,

The German students … have learned English since grade school. I felt childish when I spoke with my German partner … It was particularly problematic when we were in a chat room. I got upset because I write very slowly in German … I think that my partners also got a little bit upset.

Joe related the discrepancy in proficiency, at least in part, to differences in the respective educational systems. On the same assessment instrument, Joe's partner, Gabi, wrote that the proficiency difference influenced her to withhold particular linguistic actions from him: "It was difficult for me to correct mistakes because I didn't want to give my partner a feeling of inferiority. He tried really hard and I found that to be more important." Other German students acknowledged the role that their partners' proficiency level played in the development of the individual telecollaborative partnership. For example, Marike, a 22-year-old German student, commented on a post-semester questionnaire that she got lucky with her American partner, 19-year-old Jackie, because she spoke German well: "I had very good luck with my partner Jackie who was linguistically super fit which enabled deep discussions and analyses" (see Belz & Müller-Hartmann, 2001, for a case study of Jackie). The implication may be that Marike would have been less inclined or able to participate in the way that she would have liked to, if Jackie had had a lower proficiency level.

In an interview, Mitch gave a clear picture of how his proficiency level in German affected his linguistic performance at the level of situated activity (i.e., while composing e-mail messages to his partner during class time):

The class period is only fifty minutes so when you get in there … you start reading what they have to say and then you got about a half hour left. Then you start trying to compose your ideas. I tried to write it in English first and then translate it into German. It was painstaking and slow and I'm like wait a second I got to correct these grammar mistakes first so you do that first and then you try to write as much as you can in German to get it out of the way … I know I could write English really fast so I'm trying to do the German first and by that time the class is almost over … and I really didn't get a chance to get across the true point of what I wanted to say.
When Mitch’s partner dropped out of the Proseminar after the third week of the German semester, he experienced it in the following way: "It was kinda just like a relief that it was over."

These examples clearly suggest the relationships between macro-level data, that is, the teaching and societal valuation of specific foreign languages, and linguistic action at the micro-interactional level of situated activity. Gabi did not correct JOE as much as she would have if his proficiency level had been higher; Marike indicated that Jackie's proficiency level had a significant effect on her ability and desire to engage in content-related discussions of parallel literature; and Mitch gave a vivid account of the effect of his limited German ability on the linguistic composition of emails in German within the confines of the 50-minute class period.

The differences in foreign language exposure may have significant influence on learning expectations and perceived learning outcomes in telecollaboration. For instance, in written project assessments, most German students reported that they did not profit in the course of telecollaboration with respect to the target language and culture. For example, 20-year-old Ilse wrote, "Personally I didn't notice any improvement in my linguistic abilities...I also didn't learn very much about cultural differences. Everything that I know about that I learned outside of class." Ilse's assertion about cultural learning may reflect the infiltration of German popular culture by American cultural artifacts. Judy, an 18-year-old U.S. student, described her experience of this phenomenon well in an interview with the author: "...when I was over there the music they listen to is all our music it was in English and you know there was tons of billboards and signs that were in English and movies they watch movies that played in English..."

Other German students tended to agree with Ilse. In fact, Gabi remarked that she did not value linguistic development in the course of the project, a comment which may point to the differing expectations of the American and German students in general: "Linguistically I also didn't profit [from the partnership], but I also didn't set any store by that." The U.S. students, on the other hand, tended to perceive that both their linguistic and cultural knowledge improved over the course of the partnership. Eighteen-year-old Suzanne's assessment of the partnership is representative of their commentary: "My German is now better than before the project began. I find that it is easier to write in German. Now I know more words than before ... Every email that I wrote I learned something from my partner."

Differences in the social and economic values of German and English as foreign languages may create logistical issues which have meaning for telecollaborative language learning at the micro-interactional level. The German-English subnet of the International Tandem Network, an agency which facilitates the pairing of autonomous networked tandems for the purpose of language learning, recorded that German-speaking learners of English outnumber English-speaking learners of German by 366 to 1. The higher demand for speakers of English (based perhaps on the social and economic value of the language in Germany) was reflected in the JLU-PSU partnership where, in four cases, two German students were paired with one U.S. student and approximately 20 JLU students were turned away at the beginning of the German semester. Clara, a 21-year-old German student who shared a U.S. partner with Ilse, thought this arrangement was disadvantageous when she related that it hindered her ability to establish a personal relationship with her partner, the very criterion which Little and Brammerts (1996) and Müller-Hartmann (2000) consider to be significant for long-distance intercultural telecollaborative foreign language study: "It is much easier to establish a personal relationship, if one has his own partner." Ilse indicated that sharing a partner caused her to feel stress, which may have interfered with the type of language she offered her American partner:

I or rather we ascertained during the project that it's not so easy to share a[n American] partner. You sit together with your [German] partner in front of the PC and feel pressured by him. If you can't think of something, or if you're considering what to say, how you should say something, you always have the feeling that this is bothering your [German] partner.
Ilse directly related aspects of the situated activity, sharing a U.S. partner with another German student, to the online processes of language production with respect to content and lexis. It should be noted that this arrangement may be shaped by the differing social valu-ations of English and German, that is, a higher demand for native speakers of English as e-mail partners. Ilse's commentary is particularly significant if one assumes that foreign language input is a primary factor in the development of foreign language competeny.

_Technological Access and Know-How_ Americans tend to have greater home access to computers and the Internet than their German counterparts do. According to the Statistisches Bundesamt, 47% of German households owned a personal computer in 2000 and 17.4% of all German households in the former West German states had Internet access. In contrast, the U.S. National Telecommunications and Information Administration (NTIA) reports that 51% of all U.S. households owns a computer in 2000 and 41.5% of all households has access to the Internet. More relevant to the current study, the NTIA reported that 74% of all U.S. households with college graduates owned a computer and 64% of the same population had Internet access. In the context of elementary and secondary education, one observes disparity between the US and Germany in relation to Internet access as well. In the Digest of Educational Statistics 2000 (Snyder, 2001, p. 472), the U.S. National Center for Education Statistics reports that 89% of U.S. schools has Internet access in 1998 and 95% of all schools has internet access a year later in 1999. In contrast, in Schulen am Netz in Deutschland, the German Ministry for Education and Research reports that 36% of German schools had Internet access in 1998 (see also Brammerts, 1996, p. 127).

These macro-level features of the respective societies seem to be reflected in the individual biographies of the project participants. For example, as self-reported on a technological survey, 4 of the 11 German respondents indicated that their primary point of computer access was in their place of residence, while 11 of the 13 U.S. respondents fell into the same category. In addition, the German respondents indicated an average daily computer usage of less than one hour, while the U.S. average was nearly 3 hours per day. On written project assessments some German students commented on the differences in technological know-how between the two groups. For example, Clara wrote, "I also got the impression that American students are significantly farther along [than we are] with respect to the internet. That might be a result of the brilliant homepages that they produce."

Social and institutional discrepancies in Internet access and technological know-how may have meaning for the situated activity of telecollaboration at the level of linguistic interaction. At the outset of Phase II, German students’ e-mail was punctuated with stories of computer difficulties. Twenty-three-year-old Christa, for example, described her familiarity with technology: "Today we finally got access to the FirstClass program, but it took some time until everything worked. -- Also, it's pretty confusing." In contrast, her American partner, 18-year-old Beth, took part in a German-American e-mail exchange in high-school and in a Spanish-American computer-mediated partnership in seventh grade.

Technical problems also seemed to plague the partnership between Elizabeth and Jana. Jana opened six of the nine e-mails she wrote to Elizabeth in Phase II of the project with stories of computer difficulties: "Today I had some technical problems in class. First I couldn't log on and then a written letter was deleted. I am really sorry about that!! Please don't be frustrated."

The German and U.S. academic calendars overlap for a maximum of 8 weeks in the Fall or Winter term. This misalignment may exacerbate the meanings that technical difficulties may have for the development of language competency and intercultural awareness within the partnership. To illustrate, on the first day of the German Proseminar, the German students needed to a) become oriented to the project as a whole; b) become familiar with the technology required to execute it; c) pick a U.S. partner based on the student biographies posted at Web Project I; and d) compose a first e-mail to the U.S. partner. In contrast, the U.S. students have had nearly 2 months to learn about the project-mediating technology and were quite eager for the e-mail correspondence to begin. Alice summarized this sentiment well in her first e-mail to
her partner: "It took a long time for this project to really begin! We've already been in class for two months and we've already done a lot of work on this project. We've all waited a long time to meet our partners!" Technological difficulties at this point in particular, such as the non-delivery of messages, may have lessened the likelihood that a productive transatlantic partnership would develop.

Technological discrepancies between the two groups influenced telecollaboration for some pairs/triads for the duration of the project. For example, lack of Internet access at home limited the frequency of correspondence to the weekly class meeting for some of the Germans. This feature of the institutional setting constrained telecollaboration to such an extent for Anke and Catharina that they suggested that Internet access at home become a prerequisite for enrollment in the JLU Proseminar. When some German students did try to correspond out of class time, they ran into problems which were unlikely to be experienced by their U.S. counterparts. For example, 21-year-old Katrin explained to Joe how computer wait time influenced her correspondence with him in an e-mail from Phase II: "Dear [Joe], I hate this situation ... I have about 5 min to write a mail and there is no available computer [emphasis added] and what I hate the most in the world is to write in a hurry" (see Appel, 1999, pp. 19-20; Meskill & Ranglova, 2000, p. 34, for technological mismatches in other telecollaborative partnerships). Kerlin, the Director of Education Outreach at the Center for Education Technology Services at PSU, reported that wait time in PSU computer labs is virtually non-existent with 4,372 university-owned computers available for an undergraduate student population of approximately 30,000 (personal communication, January 2001). In contrast, the 20,000 JLU students have access to approximately 250 university computers (Müller-Hartmann, personal communication, March 2001).

In other cases, German students did have Internet access at home but they had to pay for it. Twenty-three-year-old Inge, for instance, reported that she was constantly nervous when she was writing e-mails from home because it was expensive. Twenty-two-year-old Annike indicated that this aspect of her setting had a direct influence on the frequency and length of e-mail correspondence with her American partner: "I had the problem that I constantly had to be online and that was pretty expensive in the long run. If that hadn't been the case I might have been online much longer and in more detail." Such considerations were perhaps difficult for the PSU students to entertain since, upon matriculation, each student received a free e-mail account, Internet access, and server space and all dormitory rooms offer free ethernet connections (Kerlin, January 2001, personal communication). In some cases, the U.S. partners may have experienced the relative lack of response from their German partners as a social threat to face rather than as a technological constraint on participation particular to the German institutional setting. For example, Annike's partner, Jennifer, discussed Phase II of the project in this way:

At first I was pretty happy … but then it just like really frustrated me that I'd only get an email once a week especially when we wrote twice a week cuz like what could you say? You'd write an email you'd ask questions and then you wouldn't get anything back … it's just so hard when you're writing all the time and you're not getting anything … I think they should have to write outside of class.

Writing outside of class time, however, was subject to institutional and social constraints particular to the German end of the partnership.

**Institutional Level of Setting**

Studies in comparative education have documented the many differences between educational systems in the US and Germany (e.g., Ash, 1997, pp. 127-219; Ashwill, Foraker, Nerison-Low, Milotich, & Milotich, 1999; Perkins & Burn, 1978). Noack (1999, p. 773) writes quite illustratively that comparing these two systems is like comparing "apples and sauerkraut." While Phase II of this project ran relatively smoothly, major difficulties in socio-collaboration arose in Phase III, which, in some cases, led to transatlantic electronic confrontations (see Fischer, 1998, pp. 62-63; Wallace, 2001, pp. 88-105). In this section, I focus on course accreditation, a major difference between the German and US post-secondary
educational systems. These systems may have meaning for student participation and thus foreign language learning and use in the telecollaborative partnership.

**Course Accreditation** The German post-secondary educational system favors intermittent high-stakes learning assessments, while the U.S. system emphasizes frequent low-stakes learning assessments (e.g., homework, quizzes). For example, German students are required to take comprehensive content examinations such as the *Staatsexamen* at various points in their university careers, while such assessments play no role at all in U.S. undergraduate studies.

Course accreditation differs dramatically in the two systems. German students may drop an individual course from their schedules without penalty at any point in the semester. In fact, two German students, Verena and Christa, dropped out of the JLU *Proseminar* after Phase III was completed. U.S. students, on the other hand, have the opportunity to drop an individual course from their semester schedule without monetary or grading penalty only up until a certain deadline. After that point, they receive a grade for the course in their permanent academic records. German students may choose to receive accreditation in a particular course at any point in the semester and sometimes months after the course has concluded. Accreditation comes in the form of graded or un-graded certificates of participation (*qualifizierte* or *unqualifizierte Scheine*) and is typically based on the completion of a single high-stakes exam or project. U.S. students' learning and participation in a particular course are evaluated constantly throughout the semester and accredited immediately after the course has taken place according to a sometimes complex formula of frequent low-stakes assignments and, in some cases, a final examination or project.

In the JLU-PSU partnership, German students were required to participate in the e-mail partnership and to submit a portfolio by the beginning of the next term in order to receive a graded certificate for the course. Elizabeth registered her surprise vis-à-vis German evaluation and accreditation procedures during a synchronous chat with her German partner Jana: "I asked her one day in a chat session like how grading works over there [in Germany] and she said I haven't decided if I want to take the grade for this class or not!" In contrast, the U.S. students were required to participate regularly, complete numerous homework assignments, complete Web Projects I and II, present a formative portfolio in an oral conference with the instructor at mid-semester, and present a summative portfolio at the end of the semester.

Despite the fact that participation in the telecollaborative partnership was presented and treated as the cornerstone of each class, the distinctions between the two systems in course accreditation may have influenced the two groups' differing conceptualizations of the relative significance of participation in the partnership. Corinna and Mitch illustrate this well. After Mitch corrected some of Corinna's English mistakes (a required task) in an initial e-mail, Corinna had the following reaction: "Yes, my English is not perfect, I know that. I thought, this seminar is only an fun-e-mail-writing-thing! Do not be too hard with me, okay?" In a post-semester interview Mitch commented on Corinna's characterization of the class as a "fun-e-mail-writing-thing": "Ah! (laughter) Ow! … I'm like what are you talking about? I'm like this is like some big project … Are you crazy? Like this is like our grade!" Clearly, at least some members of the two groups had different conceptualizations of the activity in which they were involved and thus their need to pay attention to it, and these may have been contingent on the location of evaluative scenes in German and American classroom scripts (Hatch, 1992, pp. 92-101) as well as aspects of individual learners' psycho-biographies. Evaluative scenes which entail student participation (e.g., *Staatsexamen*) are not located within the temporal confines of a course at the German university to the same extent that they are at American universities.

The mismatch in academic calendars amplifies these institutional differences in assessment and accreditation. Thus, as the Germans were comfortably entering the fourth week of their semester at the onset of Phase III, the U.S. students were gearing up for the end of their semester, a period when demands on U.S. student investment in class work and projects increases significantly. From the outset, the U.S. students viewed Web Project II as an important component of their final grade in an accredited university
course, whereas the Germans did not. Annike again underscored the possible differences in each group's conceptualization of the project: "Everybody knew what the task was [in Phase III], but I had the feeling that the Americans and Germans had different conceptualizations of the project."

**American Perspectives on German-American Telecollaboration** Perhaps one result of these institutional differences in course accreditation was the common U.S. perception that the Germans did not participate adequately in Phase III of the partnership. In Phase II, 216 e-mail messages were exchanged: 102 were written by PSU students, while 114 were written by JLU students. During Phase III, however, there was somewhat less German participation in terms of total messages sent: PSU students sent 92 messages, while JLU students sent 82.

On a qualitative level, the U.S. students' evaluation of the German students' participation was sometimes quite negative (and may have been exacerbated by the point in the semester in which the U.S. students were located relative to the time structure of the German semester), as Jennifer's commentary illustrates:

> They wrote some stuff in German, they plagiarized stuff … after like the second email they sent us we realized they're only emailing us like in class they didn't do anything out of class so we were like alright we have to do this whole thing … and then I was really pissed because they sent an email like the Tuesday after it was due and uh were like could you at least send us an email to tell us if you got this it would be nice and I was like what the heck! you send me this a week after it was due and then you're mad that I didn't write back!

Apparently, the U.S. students expected increased participation in Phase III since Web Project II was their final project which comprised a significant portion of their final grade in a 4 credit-hour course. The German students, in contrast, were under no pressure in terms of grades to participate in Web Project II to the extent that the Americans did.

Mitch reported that the perceived behavior of his German partners in Phase III of the project contradicted beliefs that he held concerning the German work ethic:

> It kind of seemed interesting to me how lackadaisical they were about coming to class -- I come to class every day -- but they're supposed to be like we're coming to class we're doing this work you know -- it just seemed very funny that they just didn't show up, they just didn't write…

When asked in a post-semester interview how his characterizations of Germans had changed from the beginning of the semester due to his experiences in Phase III, Mitch replied, "I guess I don't think they're punctual anymore, because a lot of them didn't really do any work on the project." In the same format, Beth reported that her experiences in Phase III also flouted her expectations of German behavior: "You know all that stuff we said at the beginning of the semester? Like they're punctual and hard-working? Well, it's not true!"

Even U.S. students who appeared to experience mutual support and understanding (Little & Brammerts, 1996) from their German partners in Phase II of the partnership perceived a discrepancy in participation during Phase III. For example, Elizabeth, who was "so excited to get every single email" from Jana, reported that she was upset about her partner's level of participation during Phase III: "I got pretty worked up about it cuz I was getting like mad I was like they aren't doing any work on the project … it's not fair … I'm like this is my grade I really really care about this I want to do a good job…” Elizabeth's desire to "do a good job" was clearly related to her desire to get a good grade in the course.

In some cases, these differences in participation were related to Internet access. Like Jennifer, Elizabeth expressed surprise at the fact that her German partners Anke and Catharina appeared to be working on the project only during class time: "Eric and I did all the organizing for the project. They [Anke and
Catharina] just read our outline and did whatever they wanted … they're gonna do their part in class. And outside of class? you know like we're out of luck cuz you know they're not going to do anything."

Contrastively, the German partners Anke and Catharina expressed surprise at the fact that Eric and Elizabeth did not seem to realize that they only worked on the project during class time: "In our opinion, the group work with Eric and Elizabeth didn't go so well … We feel that it wasn't clear to them that we mostly didn't have the opportunity to check our accounts everyday and to get their changes right away."

Some U.S. students related the perceived lack of German participation to the German course accreditation system. Nancy commented on and rationalized Verena's perceived behavior in Phase III in the following way: "The only thing that she did contribute was a few ideas and a little bit to the conclusion at least she did that … because they weren't getting a grade -- they had less motivation about it not only because of that but also because they came once a week, they were older…" Jennifer, whose mother is a high school German teacher, related that although she found the perceived lack of German participation in Web Project II to be frustrating, she nevertheless accepted it based on her understanding of the German post-secondary educational system: "I just kinda accepted it [the fact that the Germans didn't participate] because I knew that they don't like get graded or anything." Jennifer went on to explain how she thought that the differences in the two educational systems affected the execution of Web Project II:

I thought that was the biggest problem with the whole project. Not like the way it was planned or anything. It was just like the differences in the structure of the two school systems because like there you know they have to like write their term paper and they have like up to a year pretty much to write it and to hand it in so like they don't understand like when this is due it's due and you better have it done…

Indeed, the German segment of Jennifer's group demonstrated the differential conceptualization of deadlines, semester structure, and project significance along national lines in their last e-mail to their American collaborators: "Hello partner group! First of all we want to apologize that things didn't work out the way we wanted them to be. We just got to know today that the last session we had was the final one [for you] and that you really get under pressure because you have to finish your homepage."

The meaning that this institutional difference may have had for language learning in a telecollaborative partnership was illustrated at the lexical and conceptual level in this group. The U.S. members decided to write on racism for a component of Web Project II and used the German word Rassismus (racism) to refer to this phenomenon as they understood it:

Maybe we could talk about the differences in the types of racism in the US and in Germany. Of course, "If you come softly" is a more clear-cut example of racism, but we think it may be interesting to use Ben liebt Anna as a contrasting example. In the U.S. racism is typically over the color of a person's skin. It seems to us that in Germany racism is more about religious background, nationality, or ethnicity and less about people's outer appearance." (first e-mail to German partners in Phase III)

In response, the German collaborators wrote: "…all of us three believe that it is better to concentrate on If You Come Softly, because the problem of racism is conveyed much clearer there…" Throughout their text the American students used the word Rassismus, with its National Socialist connotations, to refer to the prejudice experienced by both Jeremiah, an African-American character in If You Come Softly and Anna, a Polish-born, German-speaking Aussiedlermädchen, in Ben liebt Anna. In an interview, Jennifer related that German friends at PSU explained to her later that it would have been better to use terms like Ausländerfeindlichkeit (animosity toward foreigners) or Fremdenhass (hate of the other) to describe the latter situation given the associations of the German Rasse (race) and Rassismus with National Socialism in mid-twentieth century Germany. Jennifer was disappointed that her German partners at JLU did not raise this point and related her lack of learning in this respect to the partners' perceived lack of participation which she, in turn, related to their institutionally constrained conceptualization of the
significance of Web Project II: "Our partners said at the beginning I don't think Ben liebt Anna is really racism but they didn't explain why and then I found out why and I was like ‘oh’ … like all the terms we used in German [in our essay] are like wrong."

**German Perspectives on German-American Telecollaboration** From the German perspective there tended to be two salient characterizations of perceived U.S. behavior in Phase II and in Phase III in particular: a) the U.S. students did not share (enough) personal information; and b) the U.S. students appeared to be more oriented toward project completion than topic discussion. Just as distinctions in course accreditation systems can have meaning for the typical U.S. perceptions regarding German participation, varying institutional constraints may have had meaning for each of these reactions as well.

Many German students commented in summative post-telecollaboration assessments that they did not get to establish a personal relationship with their American partners. Twenty-three-year-old Nadja, for example, related, "I didn't really like the fact that my partner didn't reciprocate my attempt to establish contact on a more personal level…" Similarly, 21-year-old Angelika commented that she perceived the personal touch to be missing in her correspondence with 18-year-old Jane: "However, the contact was more or less limited to aspects of the seminar and tasks that had to be completed for the seminar." These differences with regard to personal discussions in telecollaboration may relate to differences in course expectations. The U.S. students tended to expect to learn the German language in the course (what this entails was, in turn, influenced by institutionalized scripts for foreign language education and instruction, e.g., Hall, 1999; Hatch, 1992, pp. 85-120), while the Germans tended to expect to learn about U.S. culture or technology in language teaching, or to get to know an American person. Differential learning expectations may be reflected in the perceived discrepancies in learning outcomes, as discussed above.

The U.S. focus on the task (e.g., discussing the books and films) may reflect the course accreditation system in which they are embedded: They need to respond to frequent low-stakes assignments in order to get a socially and professionally acceptable grade. Anke and Catharina appeared to come to this conclusion as well with respect to Eric's perceived behavior: "He appeared to be very interested in his grades, which may be a representation of his culture."

In some cases, the institutional necessity that the U.S. students complete Web Project II by a specific deadline influenced processes of transatlantic meaning negotiation and topic choice within those negotiation processes. In a post-semester interview, Elizabeth explained how these institutional tensions were demonstrated in the discourse of synchronous chat sessions among the members of her virtual group:

I had talked to Jackie and they were like having problems even getting to a thesis by the time the project was due. She'd just be sitting there chatting with her partner pulling her hair out cuz they were like I thought you meant this why don't we do this and she was like you don't understand the project is due in like two days we need to get this done!

Inge, one of the German members of this group, described her experiences in the group in that she directly related American behavior to the pressures of the educational system:

*What occurred to me again is that the College [sic] system is very much like elementary school [i.e., verschult] and this causes the students to be quite inflexible. In this way the danger exists that they will cling too much to assigned [tasks] and/or that they won't let go of an idea once they get it into their heads.*

If it is the case that institutional parameters such as the immediacy of grades influenced transatlantic meaning negotiation, then these social dimensions of the situated activity of telecollaborative language learning may turn out to be of more consequence in language acquisition processes in some cases than individual psycholinguistic factors.
When asked about Inge's comment in a post-semester interview, Jackie, one of Inge's American partners in Phase III, remarked,

I guess that's probably true um cuz I know a lot of the times when we were discussing things because of the structure that we were given for the essay we'd say no no no we have to have this we have to have this and maybe we didn't feel that we needed all of that but we knew that in order for us to get the grade that we wanted we'd have to have that so I think I would agree with that.

In this instance it does appear to be the case that U.S. participation in the project was guided more by locally contingent task requirements and course accreditation procedures (which are beyond instructor control) than the opportunity to discuss a cultural issue with native speakers of the target language. Elizabeth, who also appeared to agree with Inge's assessment, raised more difficult questions in her response:

She [Inge] doesn't realize that we don't have a choice that's the way universities work here ... I think they kinda need to learn about how the school systems work over here and then realize that you know it's not our fault that we're this way it's like if we want to graduate we got to be like this you know and if we want to get a job that's how we're like expected to act.

DISCUSSION AND CONCLUSIONS

This investigation indicates that the social action of telecollaborative foreign language study is a complex and multifaceted human activity. This activity is shaped by an intricate inter-relationship of social and institutional affordances and constraints, aspects of individual psycho-biography, as well as language and computer socialization experiences and particular power relationships. These inter-relationships are first summarized at the levels of context and setting. Then the multi-directional nature of structure and agency is illustrated by providing several examples of cases where learner agency appears to override particular institutional pressures. In a concluding section telecollaborative best practices for German-American partnerships are addressed.

Context

National differences in technological know-how and computer access raise important ethical and methodological questions for telecollaborative foreign language study. For example, should participation in German-American partnerships be limited to students who have Internet access at home, as the Germans Anke and Catharina suggested (see Wegerif, 1998, p. 46, for a similar recommendation)? This type of participation prerequisite may alleviate socio-collaborative difficulties in dyadic or group work configurations, but it will also preclude technologically (and almost invariably) economically more disadvantaged students from certain learning communities. As the NTIA reports, in the US, at least, computer ownership co-varies with racial and ethnic identity. For example, 55.7% of white non-Hispanic U.S. households owns a computer in 2000; 23.2% of Black non-Hispanic households; 65.6% of Asian American and Pacific Islander households; and 33.7% of Hispanic households. In sum, while technological prerequisites for telecollaborative participation may benefit language learning in terms of increased target language exposure and interaction, it may also result in discriminatory educational practices (see Warschauer, 1998b, for the relationship between ethnicity and computer know-how).

Setting

Institutional differences in computer access, academic calendars, and accreditation systems may have meaning for perceived participation levels and the establishment and facilitation of personal interaction and thus personal rapport between keypals. Personal rapport is considered to be a significant factor in successful telecollaborative foreign language study (Fischer, 1998, p. 72). For example, in Web Project I,
each American student built an electronic response box into his or her Web biography where the German students could answer questions they had posed. Responses to each question were to be mailed to all members of the American class and the instructors. No German students replied to any of these questions using the response boxes. In an interview Jackie expressed her reaction to this situation: "I guess I expected a little more reaction to our biographies ... none of them used the little response boxes or answered our questions ... I was disappointed that they didn't answer." More detailed knowledge of the German institutional setting clarifies this development. In a June 21, 2001 e-mail to the author, the JLU instructor explained the circumstances surrounding the German students' first contact with Web Project I on their first day of class in mid October 2000:

I had 1 1/2 hours to get rid of surplus students (there were about 35-40 in the class at first), explain the idea of the course to them, have them choose their partners from the short descriptions I chose from the websites, change rooms ... and have them write first letters. It is at this stage that students were able to look at the webpages ... Since they had to write their e-mail letters to present themselves I think they just didn't consider to write anything in the response fields.

The misalignment of the German and American academic calendars compelled the JLU instructor to accomplish a great deal in the first class period. Perhaps the greater social valuation of English in Germany shaped the greater demand for the Proseminar. This administrative work took away from the time that students had to interact with Web Project I. Less readily available home and university Internet access may have precluded students from re-accessing Web Project I and responding to the input boxes at a latter date. In a July 3, 2001 e-mail, the JLU instructor related that part of the confusion on the first day of class was because

the technician had removed FirstClass the week before the course started (and I only realized this the night before I wanted to use the room) ... he had rearranged the interface and just removed all the programs that were of no use for the computer linguists without consulting anybody in TEFL.

Thus it appears that the political situation with respect to academic disciplines at the German institution also had consequences for the ways in which the German students were able to interface with Web Project I and, in turn, for the ways in which some of the American students construed their reactions to the Web biographies in general and their use of the response boxes in particular.

**Multidirectional Interaction of Context, Setting, Situated Activity, and Self**

Although the focus of this paper has been on the ways in which society and institution may have meaning for the development and execution of a German-American telecollaborative partnership, one should not be tempted to conclude that this study is meant to represent a form of social determinism in foreign language learning, that is, that the sociocultural mediation of mind entails a strict one-to-one causal relationship between social structure and the ultimate course of human activity. Human beings are not mere pawns in the grips of social and institutional forces. In fact, Carter and Sealey (2000, p. 5), two forerunners in the application of social realist tenets to applied linguistics research, clearly state that "it is only human beings who can have intentions, purposes and reflexivity: it is only human beings who can act in the world and are thus the 'agents' of social action." Other sociocultural researchers in the field of Second Language Learning approach the social realist view of the inter-relationship between structure and agency in social action by insisting on the co-construction of language learner agency. For example, Lantolf and Pavlenko (2001, p. 148) argue that "agency is never [just] a 'property' of a particular individual; rather, it is a relationship that is constantly co-constructed and negociated with those around the individual and with the society at large."
To illustrate this point in the study at hand, I would like to present several instances in the data where an individual learner's agency (i.e., his or her psycho-biography and aspects of the situated activity) contributed to countering the social and institutional constraints at play in this particular learning community. In other words, I would like to demonstrate the multidirectional nature of the inter-relationship between structure and agency in shaping human action. First, in those cases where transatlantic partners were able to establish a positive rapport (Belz, 2001, p. 132-136), they were sometimes able to re-interpret their classroom roles in terms of expected participation levels, thus flouting aspects of their culturally-specific socialization into classroom behavior (e.g., Hatch, 1992). For example, Jana attributed her uncharacteristic heavy participation in the course to the personal relationship she established with Elizabeth: "I found it totally interesting to find out what Elizabeth (my partner) thought about, for example, American Beauty. The authentic communication which arose as a result of that really motivated me to write regularly, carefully, and with interest." Second, the thrill of acquiring new technological skills in the course of the telecollaborative partnership and thus becoming apprenticed into an electronic discourse community (EDC), might diminish the ability of institutional constraints on computer access and technological know-how to squelch the virtual partnership. For example, Patricia, a 24-year-old German student, vividly described the growing centrality of her membership in EDCs in the course of German-American telecollaboration:

"During the semester it became clear to me, that I have the possibility to play around with communication. I have the freedom to choose if I telephone, email, write, or chat. For a long time I wasn't able to appreciate that, because I had to first slowly figure out how to deal with email and chat. At the beginning my problems as a [computer] user hindered the content of my communication, but that's over now. It's really nice to observe this learning process."

Finally, the benefit of participation in the project may outweigh its locally perceived time-intensive nature for some students. To illustrate, Jana explicitly connects her heavy participation with the attainment of career goals: "Furthermore, the fact that Elizabeth is a native speaker of the language that I study and will later teach motivated me to participate."

**Telecollaborative Best Practices**

In post-semester interviews with the American students, many of them commented that they learned about differences between the German and American educational systems and the conceptualization of group work during their telecollaborative partnership. In other words, the American students appeared to indicate that the main cultural learning they did in the situated activity of telecollaboration was related less to the pedagogical goals of the tasks assigned (e.g., learning about the culturally contingent conceptualization of constructs like "racism," "nudity," "family") and more to epiphenomena which arose in the process of task completion. Best practices in the design and execution of intercultural telecollaborative foreign language learning will have to grapple with issues of the locus of intercultural learning. In other words, should telecollaborative projects be designed to minimize the difficulties associated with institutional interface in an effort to shift the locus of learning to the task (e.g., the parallel texts, the Web essay assignment), or should the cultural faultlines (Kramsch, 1993, pp. 205-232) inherent in the institutional interface be allowed to surface and function as the locus of intercultural learning?

In order to provide a tentative answer to this question, I would like to draw on the psychologist A. A. Leont'ev (1981) and his work on second language pedagogy and Activity Theory, a branch of sociocultural theorizing. According to Lantolf and Pavlenko (2001, p. 157), two modern interpreters of Leont'ev, Activity Theory "is committed to the proposition that by changing the material circumstances (artifacts and social relations) under which individuals operate, it is possible to help people move their learning and development forward." Therefore, educational development may be effected by calculated pedagogical intervention. Lantolf and Pavlenko explicitly echo this sentiment when they write,
…it is not sufficient only to observe what transpires in those places, such as language classrooms, where learning happens, but [Activity Theory] compels the researcher to intervene in communities of practice in order to help find ways of ensuring that all individuals have access to full participation and with it the opportunity to develop to their fullest potential. (p. 157)

In short, the clash of cultural faultlines in telecollaborative learning communities such as the one under study should not be smoothed over or avoided based on the sometimes negative results of a study such as this one; indeed, they should be encouraged. As Kramsch (1993, p. 228) advises, foreign language educators should "teach the boundary" between the source and target cultures/languages. However, such clashes should not develop and persist in a counterproductive way (i.e., in a way which leads to the establishment of a new stereotype such as the American perception in this study that Germans are lazy) without the guidance of more expert intercultural explorers such as foreign language teachers (Byram, 1997; see also Agar, 1994, p. 254, for "languacultural experts").

To that end, I would suggest that in future German-American telecollaboration of this nature both American and German students participate in guided cultural sensitization on social patterns of communication and institutional conditions which may influence (but not determine) the execution of task-oriented electronic collaboration. For example, students may become more sensitized to the concept of intercultural communication itself, particularly at institutions located in more rural and culturally homogenous regions of the US and Germany, through the use of expository materials. Sections of Scollon and Scollon's (2001) *Intercultural Communication* may be suitable as reading material in Phase I of the project (Kinginger et al., 1999). Also in Phase I, more time could be spent on the critical comparison of the two partner institutions as represented by their official Web sites. Students may be guided in the development of their critical cultural awareness of both self and other (Byram, 1997, p. 63) by engaging with short literary texts such as Peter Schneider's (1991) *Amerikanische Biographie*, which present an outsider's view on perceived differences in the two educational systems (e.g., *schummeln* vs. cheating in school), among other things. Web-published journals by students who have spent a year abroad provide an invaluable source of information concerning the cultural reality of their immersion experience. Many such Web sites concentrate on educational differences. Particularly rich in cultural faultlines and opportunities for intercultural learning and reflection is the diary-like Web site of Timm Gehrmann, a teenage German Gymnasium pupil who spent a year living with his American host in a trailer in rural northern Florida. Such engagement may facilitate a shift in perspective, one of the steps toward developing critical awareness as a competent intercultural speaker according to Byram (1997). Suggestions for the German side of the partnership might include a critical viewing of the recent American Public Broadcast System (PBS) documentary *American High* which provides an inside look at various academic and social aspects of American secondary education. Both groups might read Ernst Noack's (1999) accessible comparative piece on secondary education in the United States and Germany. Finally, teachers might compose tasks such as sentence completions or situation reactions (see Furstenberg et al., 2001, p. 58) which would enable learners in the initial stage of Phase II to exchange information on their a) course of studies, b) course accreditation system, c) course load, d) methods of educational financing, e) course expectations, f) institutional facilities (e.g., computer labs, libraries, dormitories), g) social forms of instruction (e.g., seminars, lectures, labs, discussion sections), and h) geographical layout of university buildings and student housing. In other words, students and instructors might exchange, compare, and reflect on the particularities of their respective institutions and their working conditions in order to better understand and appreciate how these institutional factors might differentially facilitate and constrain the activity of intercultural telecollaboration. In this way, virtual partners may then have more adequate factual knowledge (Byram, 1997, p. 51) on the basis of which they may interpret cultural faultlines (e.g., things about the other they don't understand) without resorting to the perpetration or even the creation of (new) cultural stereotypes.
NOTES
1. This project is funded by a United States Department of Education International Research and Studies Program Grant (CFDA No. 84.017A). The author is a research associate on this grant and the instructor of the experimental German section.
2. I am using the term CALL broadly to refer to all uses of the computer in the service of second/foreign language learning and teaching including the use of network-based technologies such as the Internet and e-mail.
3. The JLU English Proseminar was taught by A. Müller-Hartmann.
4. All students’ names are reported as pseudonyms.
5. I present commentary from the PSU German students in plain text and commentary from the JLU English students in italics. Comments which were originally given in German are provided here in English translation only. All translations from German to English are mine.
6. As reported on line on January 22, 2001.
7. Müller-Hartmann (personal communication, February, 2001) reports that the situation has improved drastically since 2000 when AOL and Telekom began to provide free Internet access to German schools. However, the university students reported in this study would have been in school prior to this intervention and thus may have experienced relatively low levels of participation in electronic discourse communities in the school setting.
8. A stipulation of the task is that learners write in their target language; thus, the Germans writing in German is perceived as a violation of the assignment by the Americans.

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