Title

Learning from Locals: The Impact of Social Networks with Target-Language Speakers During Study Abroad

Permalink

https://escholarship.org/uc/item/5427b39g

Journal

L2 Journal, 15(2)

Author

Kennedy Terry, Kristen

Publication Date

2023

DOI

10.5070/L215260149

Copyright Information

Peer reviewed

Learning from Locals: The Impact of Social Networks with Target-Language Speakers During Study Abroad

KRISTEN KENNEDY TERRY

Sam Houston State University
Email: kmt090@shsu.edu

Social network analysis (SNA) examines the relationships that an individual speaker creates and maintains with others in order to explain and predict language behavior. Over the past 20 years, SNA has been used by a growing number of researchers to better understand the language learner and the language learning process, especially in the context of study abroad (SA) in the target-language (TL) environment. Some of the earliest applications to L2 acquisition operationalized SNA through primarily qualitative data about learners' attitudes toward the target culture and their interactions with TL speakers (Isabelli-García, 2006; Lybeck, 2002), while later studies have focused on developing quantitative measures of network strength based on criteria such as network density, multiplexity, and dispersion (Baker-Smemoe et al., 2014; Dewey et al., 2012, 2013; Kennedy Terry, 2017, 2022a, 2022b; McManus, 2019). This research establishes the central role of social networks in L2 acquisition and demonstrates how and why SNA has become one of the most effective tools for analyzing and predicting L2 acquisition during SA. This review also considers the increasingly important role of technology in the creation and maintenance of social networks between learners and TL speakers in a world affected by recurring health crises.

INTRODUCTION

Social network analysis (SNA) in linguistics examines the relationships that individual speakers create and maintain with others in order to explain and predict language behavior. Beginning with the research of Milroy and Milroy (1978, 1985), foundational applications of social network theory in sociolinguistics examined the use of indexical features in first language (L1) speech communities and subsequent research extended SNA to explain language maintenance and shift in bilingual and immigrant communities (Gal, 1978; Li, 1994; Lippi-Green, 1989). The results of these early studies using SNA demonstrated that a dense social network may serve to enforce local community speech norms, while loose or open networks facilitate language shift or change toward the dominant language variety (Milroy, 1982). Moreover, these studies demonstrated that SNA has the ability to elucidate intra-community linguistic patterns where differentiation based on predefined categories of social class, gender, or age may not yield significant differences across groups of speakers (Milroy, 2002). Because of its flexibility, and its ability to reveal linguistic patterns among groups of speakers, SNA has more recently been applied to a wide variety of speech communities and contexts of language use, including second language (L2) acquisition during study abroad (SA).

This article considers nearly two decades of research demonstrating the unique ability of SNA to predict patterns of language development and use among groups of L2 learners who

are often relatively homogenous in terms of age, educational background, living arrangements, and time spent in the target language (TL) environment. The essential role of SNA in studies of L2 acquisition is underscored by the fact that the existing research on language development during study abroad (SA) presents a number of conflicting results related to the linguistic benefits of SA (DeKeyser, 2014; Isabelli-García et al., 2018; Kinginger, 2008; Llanes, 2011; Sanz & Morales-Front, 2018). For example, many studies comparing groups of at-home and SA learners in the acquisition of specific, categorical grammatical features of the L2 have not demonstrated a clear advantage for the SA context (Arnett, 2013 on L2 German; Collentine, 2004 on L2 Spanish; Howard, 2005, 2008 on L2 French; Isabelli-García, 2010 on L2 Spanish). Additionally, results of studies comparing at-home and SA learners in the acquisition of categorical elements of L2 phonology have also been inconclusive (Avello & Lara, 2014; Díaz-Campos, 2004; Mora, 2008; Muñoz & Llanes, 2014) with most studies failing to show an advantage for the SA learning context (Avello & Lara, 2014 on L2 English; Díaz-Campos, 2004 on L2 Spanish; Mora, 2008 on L2 English; cf. Muñoz & Llanes, 2014).

The research on the L2 acquisition of categorical grammatical and phonological elements contrasts sharply with research assessing the development of global oral proficiency during SA using the Oral Proficiency Interview (OPI, American Council on the Teaching of Foreign Languages, ACTFL), or the Simulated OPI (SOPI). Numerous studies conducted over the past 30 years have clearly demonstrated the critical role of SA in the development of global L2 oral proficiency (Brecht et al., 1995; Dekeyser, 2010; Freed, 1995; Isabelli-García, 2010; Magnan & Back, 2007; Segalowitz & Freed, 2004). More recent studies such as the LANGSNAP project ("Social networks, target language interaction, and second language acquisition during the year abroad: A longitudinal study," University of Southampton), have focused on specific aspects of oral proficiency using alternate assessment techniques (e.g., elicited imitation, monologic narratives, and semi-structured interviews) and have demonstrated that a period of SA contributes to gains in fluency, lexical complexity, and global grammatical accuracy in oral production in both L2 French and Spanish (Mitchell et al., 2017). The results of the LANGSNAP project are supported by those from a number of other studies on L2 Spanish (Huensch & Tracy-Ventura, 2017; Leonard & Shea, 2020), L2 Chinese (Wright, 2018) and L2 English (Juan-Garau, 2018; Llanes & Muñoz, 2009, 2013; Serrano et al., 2012) demonstrating the positive influence of SA on L2 oral proficiency.

Additionally, studies of both L2 French and Spanish demonstrate a clear advantage for SA in the acquisition of sociolinguistic variation where learners acquire the ability to follow TL patterns in the use of variable sounds or forms (i.e., Type 2 variation, Rehner, 2002). Studies on L2 French (Chamot et al., 2021; Kennedy Terry, 2017, 2022a, 2022b; Regan et al., 2009; Sax, 2003) and L2 Spanish (Geeslin et al., 2013; Knouse, 2013; Pozzi, 2021; Pozzi & Bayley, 2021) have demonstrated that SA learners are sensitive to both stylistic and regional variation in the TL and are capable of aligning their own speech with the norms of their host community. Similarly, the existing research also demonstrates that a period of SA facilitates the acquisition of interlanguage pragmatics, or "those aspects of language that cannot be considered in isolation from its use, language in its situational context" (Isabelli-García et al., 2018, p. 456). These studies (Bataller, 2010; Iwasaki, 2010; Kinginger & Farrell, 2004; Lafford, 1995, 2004; Marriott, 1995) demonstrate that L2 learners make progress toward the acquisition of pragmatic constraints on L2 use, although most learners fall short of target-like application (see Pérez Vidal & Shively, 2019, for a review; also see Morris, this issue).

The studies described here demonstrate that the SA experience facilitates L2 development in certain areas of linguistic competence, most notably oral proficiency and the acquisition of variable and pragmatic features of the L2. Moreover, many of these same studies

underscore the benefits of interactions between the language learner and TL speakers, findings which are supported by evidence from second language acquisition (SLA) research demonstrating that output, interaction, and negotiation of meaning are critical to the development of all forms of linguistic competence (Ellis, 1985; Long, 1996; Mackey, 1999; McLaughlin, 1987; Swain, 1985; Swain & Lapkin, 1998). While it is clear that access to TL speakers and to interactions in the TL are critical to L2 development during SA, the process of documenting and examining interactions between L2 learners and TL speakers during SA is not a simple task. For example, a number of studies have attempted to capture total language use (speaking, reading, writing, listening) during SA using surveys like the Language Contact Profile (LCP; Freed et al., 2004), but most have not been able to correlate total language use with proficiency gains during SA (Isabelli-García, 2010; Issa et al., 2020; Magnan & Back, 2007; Segalowitz & Freed, 2004; cf. Hernández, 2010).

While researchers have struggled to find an accurate measure of 'TL interaction' that consistently correlates with learner gains during SA, a growing number of studies have successfully applied SNA to examine, understand, and even predict L2 development during SA. Overall, the results of these studies demonstrate that SNA facilitates a more complete description of how learners engage with and integrate into the TL community during SA, while at the same time providing an explanation for the wide variety of linguistic outcomes among SA learners. The current review considers two decades of research employing quantitative, qualitative, and full network approaches to SNA to measure and characterize learners' social networks during a period of SA. Moreover, in light of the recent pandemic, this review considers an emergent body of research exploring how L2 learners, language instructors, and SA program administrators may leverage technology to facilitate the creation of social networks with TL speakers when travel to the TL environment is not possible.

QUANTITATIVE APPROACHES TO SNA

The majority of the existing research applying SNA to L2 acquisition during SA has employed egocentric SNA which considers the relationships between an individual speaker (*ego*) and the members of ego's network, as well as the relationships between the members of ego's network. As explained by Milroy & Llamas (2013), direct relationships between ego and the members of ego's network are considered *first-order* network ties and relationships between the members of ego's network are considered *second-order* (or 'friend of a friend') network ties. The relationships that link first-order network ties to ego may also be classified as *exchange*, *interactive*, or *passive* ties, where *exchange* network ties refer to close family and friend relationships involving regular contact and mutual support and *interactive* ties refer to relationships characterized by regular contact, but not by the exchange of physical and emotional resources, such as the relationship one might have with a neighbor or colleague. Additionally, Li (1994) explains the role of *passive* network ties characterized by network contacts who are not physically present in ego's daily life, but who represent an important support system for ego.

The network ties that ego forms with others may be characterized as strong or weak ties and strong ties may be further differentiated as *multiplex*, *dense*, or both (Milroy, 2002). Network ties are considered *multiplex* if ego is linked to the network member in multiple ways (e.g., they are both friends and co-workers). Strong network ties may also be characterized as *dense* ties if many of the same people are linked to each other within a single network. In the case of a dense social network, a network diagram representing the relationships between ego and others, forms a closed circle. On the other hand, weak network ties that are neither dense, nor multiplex, are referred to

as *uniplex* and are typical of the relationship that an individual might have with an acquaintance or a frequent contact within a service context (see Milroy & Llamas, 2013, for a review).

The studies discussed in this section used quantitative measures, or scales, to assess the strength and breadth of the learner's social networks with TL speakers. These quantitative methods focus primarily on developing criteria to evaluate the strength of a learner's network based on aspects of network density and multiplexity (e.g., number of TL speakers in the network, number of hours spent with TL speakers, types of activities done with TL speakers) in order to determine a numerical 'network strength score'. This social network strength score is then compared to the network strength scores of other learners and compared to other factors potentially contributing to L2 acquisition during SA (e.g., time in the TL community, proficiency level before SA) and then correlated with specific aspects of L2 development during the SA period. This review considers two specific lines of inquiry: the acquisition of global oral proficiency and the acquisition of variable or regional linguistic features.

Global Oral Proficiency

The research of Dewey et al. (2012, 2013) demonstrates how networks with TL speakers may contribute to self-perceived oral proficiency gains during SA. In these studies, Dewey et al. used a *then-now* questionnaire which asked learners to rate their abilities to complete various real-life speech acts in the TL at the beginning and end of their sojourn abroad. The researchers used a Study Abroad Social Interaction Questionnaire (SASIQ) developed by the first author to correlate self-perceived oral proficiency gains with specific aspects of the social networks that learners developed with TL speakers: (a) the *size* of the network (number of TL speakers), (b) the *intensity* (strength of each relationship), (c) the *durability* (frequency of TL interactions), (d) the *density* (interconnectedness of network members), and (e) the *dispersion* of the network (number of different groups within the network).

In their study of L2 Japanese learners, Dewey et al. (2012), identified three primary predictors of perceived gains during SA: the learner's self-assessed pre-departure proficiency, time spent in the TL, and the dispersion of social networks with TL speakers. The results of this study demonstrate that TL speakers play a central role in the SA experience while at the same time facilitating two additional predictors of self-perceived gains: total time spent speaking the TL and time spent speaking the TL with native speakers (NSs).

Similarly, Dewey et al. (2013) used both the Language Contact Profile (LCP; Freed et al., 2004) and the SASIQ to examine self-perceived proficiency gains by 30 L2 Arabic learners during SA in Morocco and Jordan. Using the LCP and the SASIQ, Dewey et al. determined that although learners spoke Arabic and English in nearly equal amounts during the SA period, most of the English was spoken with L1 Arabic speakers. Additionally, the L2 learners in this study reported high levels of interaction in Arabic with TL speakers, which may have been a direct result of the L2 learners using "English to access Arabic" (p. 97) by offering English tutoring or conversation exchanges to meet and interact with TL speakers. This conclusion is supported by results indicating that the strongest predictor of self-perceived oral proficiency gains during the SA period was the English proficiency of the TL speakers in the learner's social network, with English ostensibly providing an opportunity for the learners to interact in Arabic. Additionally, the intensity of the relationships with TL speakers was positively correlated with self-perceived proficiency gains, as were interactions with TL speakers outside of the learner's social network.

In a related study using the SASIQ, Baker-Smemoe et al. (2014) compared the results of the SASIQ and an intercultural sensitivity measure with oral proficiency gains on the OPI.

In this large-scale study of over 100 L1 English participants, the researchers examined proficiency gains in L2 Spanish, French, Russian, Arabic, and Chinese during a period of SA ranging from eight to 16 weeks. Results indicated that the SASIQ measures of network intensity (strength of relationships) and network dispersion (number of networks) were the strongest predictors of gains in oral proficiency of all factors considered in the analysis.

The studies by Dewey et al. (2012, 2013) and Baker-Smemoe et al. (2014) using the SASIQ as a quantitative measure of social network strength highlight the importance of understanding both the size and the density of the learner's social network with TL speakers during SA, but also the composition of the network and the L1/L2 usage patterns among the network members. Specifically, these studies demonstrate that speaking the L1 during a period of SA does not automatically reduce the potential gains to be made in the L2 as long as the L2 is also being used within social networks of TL speakers. Moreover, the results of Dewey et al. (2013), indicate that conversation exchanges and tutoring programs may facilitate the creation of social networks between L2 learners and TL speakers—networks that allow learners to access and participate in TL interactions that extend beyond the pedagogical scope and commitment of the exchange or tutoring program. Similarly, the research of Hasegawa (2019), described in a later section, highlights the important role that a 'supporters' program and an 'International Friendship Club' played in creating opportunities for interactions and social networking between local and international students during SA in Japan.

Variable and Regional Linguistic Features

Studies on the L2 acquisition of stylistic and regional variation indicate that learners benefit from the opportunity to interact with TL speakers and demonstrate incipient acquisition of TL variation patterns after a period of SA or immersion in the TL community. In a number of studies on L2 French, the length of time spent residing in the TL community was the strongest predictor of the acquisition of variation (Regan et al., 2009; Sax, 2003); however, studies on L2 Spanish have demonstrated that even short-term SA programs can contribute to the acquisition of regional TL speech norms (Geeslin et al., 2013; Knouse, 2013; Linford et al., 2018). Moreover, the role of interaction with TL speakers outside of the classroom has been positively correlated with the acquisition of regional phonological features in L2 Spanish both during SA (George, 2014; Pozzi, 2021) and after SA participants have returned home (Geeslin & Gudmestad, 2008).

To examine how social networks with TL speakers contribute to the acquisition of stylistic variation by L2 French learners, Kennedy (2012) designed a *social network strength scale* (SNSS; Milroy & Milroy, 1978) for SA to measure the strength and breadth of the social networks that learners created with TL speakers during SA in France. The SNSS for SA includes two *density* measures to characterize the overall level of TL interactions and two *multiplexity* measures to assess the 'richness' of these TL interactions. In Density Measure 1, the learner listed all of the native French speakers with whom they spoke French for at least 30 minutes each week and received one point for each contact and one point per hour (per week) spent speaking French with this contact. For Density Measure 2, the participants used the list from Density Measure 1 to draw their social network and received one point for each network tie connecting the participant to a NS or connecting NSs to each other. Multiplexity Measures 1 and 2 investigated *what* activities the participant engaged in with NSs (e.g., play sports, watch a movie, go to a bar) and *what* they talked about with these NSs (e.g., current events, sports, friends, classes), assigning points for each different weekly activity shared with an in-network TL speaker,

as well as for the different conversation topics discussed on a weekly basis. Learners also received 1.5 points per hour spent with multiple TL speakers at the same time to account for the potentially beneficial exposure to unmodified TL input (Long, 1983).

The participants in Kennedy (2012) and Kennedy Terry (2017, 2022a, 2022b) included 17 American learners of French. The participants ranged in age from 19-27 years old and included seven students who remained in France for an academic semester and 10 students who stayed for an entire academic year. Nine of the 17 participants had completed upper division coursework in French prior to the SA period and six of the 17 students reported some previous contact with French outside of the classroom. Kennedy Terry met with all 17 learners at the beginning and end of the SA period and met with the year-long participants a third time (mid-year). Speech data were gathered using sociolinguistic interviews (Labov, 1966) that included 20-30 minutes of informal conversation. Data analysis (Rbrul; Johnson, 2009) incorporated a combination of linguistic and extralinguistic, or social, factors that have been shown to influence linguistic gains during SA (e.g., time in the TL environment and prior L2 coursework).

In these studies, Kennedy Terry analyzed the speech data for three phonological variables that are characteristic of the informal variety of Standard Modern French (SMF)[1] and that have been well studied in L1 French: the deletion of /l/ in third-person subject clitic pronouns (/l/ realized as [l] or null, as in *il vient* [il vjɛ̃] ~[i vjɛ̃] 'he comes/is coming'), the deletion of schwa in monosyllabic clitics (/ə/ realized as [œ] or null, as in *tu me dis* [ty mœ di] ~ [tym di] 'you tell me'), and the reduction of word-final obstruent-liquid consonant clusters (as in *notre maison* [no tʁœ mɛ ʒɔ̃] ~ [not mɛ ʒɔ̃] 'our house'). In L1 French, '/l/ deletion', 'schwa deletion', and consonant cluster reduction (CCR) are not stigmatized, nor are they exclusively associated with any single social class or education level (Hansen, 2000; Valdman, 1982).

At a group level, the results of Kennedy Terry (2017) demonstrate that social networks as measured by the learner's final score on the SNSS for SA were the only significant extralinguistic predictor of the acquisition of variable /l/ deletion. While certain linguistic factors, such as clitic type and phonological context, also contributed to learner variation patterns, of the six extralinguistic factors considered in the analysis, only the SNSS score predicted participation in target-like patterns of variation. For this variable, time in the TL community, other languages spoken at home, previous coursework in French, previous short-term contact with TL speakers, and study center in France were not shown to be significant predictors of the acquisition of variation. This does not mean that these factors did not play any role at all in acquisition, but it does indicate that these remaining extralinguistic factors were overshadowed by the stronger influence of social networks. The results of Kennedy Terry (2022a, 2022b) for the schwa deletion variable for the same group of 17 learners corroborate the significant role that social networks play in the L2 acquisition of variation; however, for this variable, both the SNSS score and time spent in the TL community were significant extralinguistic predictors of variation.

For variable /l/ and schwa deletion examined by Kennedy (2012) and Kennedy Terry (2017, 2022a, 2022b), both the group results and the results by individual learner demonstrate that an SNSS score of five or above (out of 10) is closely correlated with a favorable Rbrul factor weight (above .50) for each of the variables, where a factor weight above .50 indicates that a learner is more likely to use the variable than other learners in the study. Based on a sample of four learners, a score of five on the final SNSS correlates with three to five TL relationships and, on average, a social network density of six to 10 ties. In turn, these six to 10 network ties provided the L2 learners with the opportunity to speak approximately 10-20 hours of French per week with the TL speakers in their social networks. While attaining this level of interaction with TL

speakers can be difficult for learners to accomplish in a short amount of time, as these results demonstrate, it is precisely these dense social networks with TL speakers that allow learners to gain access to a socially and culturally appropriate, norm-enforcing language learning context during SA that is a critical component to the L2 acquisition of stylistic variation. As explained in the previous section, SA programs have an important role to play in creating opportunities for learners to meet and interact with local TL speakers. These opportunities may take the form of conversation exchanges, international friendship groups, or community service programs, all of which serve to bring together TL and L2 speakers who share a common interest in developing multicultural and multilingual competence.

In addition to the L2 acquisition of stylistic variables, SNA has also been shown to predict the acquisition of regional linguistic features during SA. Pozzi (2021) used a modified version of the SNSS for SA (Kennedy, 2012) to examine the influence of social networks with TL speakers in the L2 acquisition of *vos*, the informal second-person singular form commonly used in place of *tú* 'you' in many Latin American countries, including Argentina. In this study, participants included 23 American university learners of Spanish who spent a semester studying at different universities in Buenos Aires. The Spanish proficiency levels of participants varied from beginning to advanced and participants lived in a variety of accommodations during SA. Speech data were collected three times during the semester (beginning, middle, end) via Sykpe interviews with the researcher and each interview consisted of 20 minutes of informal conversation in which the researcher specifically used the *vos* form of address a number of times in her own speech. Each Skype interview also included an oral discourse completion task (DCT) and two role plays, all of which were designed to elicit the use of *vos* by the learners.

In this study, Pozzi examined the impact of social networks on L2 acquisition, as well as the role of certain extralinguistic factors known to influence L2 acquisition and use during SA: time in the TL community, proficiency level, task type, and whether the learner had received explicit instruction on the use of *vos* in Argentine Spanish. Of the six linguistic and extralinguistic factors considered, four factors were shown to be statistically significant predictors of the L2 use of *vos*: task type (DCT or role play), mood (indicative or imperative), proficiency level, and SNSS score. Results for the SNSS demonstrated that five learners who had a "high" SNSS score at the final interview used *vos* 99.1% of the time. These five learners were followed by 13 learners who had a "mid" SNSS score at the final interview and used *vos* 70.2% of the time, and finally by five learners who had "low" SNSS scores at the final interview and who used *vos* only 43.3% of the time. Pozzi also points out the correlation between a "high" score on the SNSS and advanced proficiency at the outset of SA: only learners who began SA with an advanced level of Spanish were able to form the dense and multiplex social networks with TL speakers that allowed them to achieve a "high" score on the SNSS.

It is useful to contrast the results of Pozzi (2021) with those of Pozzi and Bayley (2021) which examined the L2 acquisition of a phonological, rather than morphological, feature of Buenos Aires Spanish (BAS) among the same group of 23 American learners studying abroad in Argentina. In this study, Pozzi and Bayley focused on the acquisition of *sheísmo/ʒheísmo*, or the use of [ʃ] and [ʒ], respectively, for segments represented orthographically as "y" and "ll", such as in the pronunciation of the word llave [jaβe] 'key', pronounced as [ʃaβe] with *sheísmo* or [ʒaβe] with *ʒheísmo*. In the data analysis using Rbrul (Johnson, 2009), this study considered a range of potential linguistic factors, such as the phonological environment of the site for potential *sheísmo/ʒheísmo* and the morphological status of the word in which *sheísmo/ʒheísmo* would be used by BAS speakers.

Among the extralinguistic factors considered in this study, the results revealed only time in the TL environment predicted significant and rapid gains in *sheísmo/zheísmo* over the semester of SA. That is, in sharp contrast to the results of Pozzi (2021) on the acquisition of *vos*, social networks with TL speakers were not a significant predictor of the use of *sheísmo/zheísmo*. This finding is underscored by the fact that, as a group, the learners in Pozzi and Bayley increased their use of *sheísmo/zheísmo* to 83.1% of the time by the second interview and then again to 89% of the time at the final interview. Pozzi and Bayley conclude that *sheísmo/zheísmo* is a phonological variable that is easily acquired and implemented by learners during SA, regardless of the strength of their social networks with TL speakers, because it is used in all phonological contexts, is considered a prestige form, is a stable linguistic variant, and is considered highly salient. The results of Pozzi and Bayley (2021) are especially important because they highlight the need for future SNA research that seeks to differentiate those elements of the L2 that are dependent upon the creation of dense social networks with TL speakers from those that are generally acquired by a broader population of SA learners during their time in the TL environment. Understanding these differences could potentially inform the pre-departure language and cultural preparation that SA learners receive, as well as determine the focus of language curriculum and programming provided in the SA context.

QUALITATIVE APPROACHES TO SNA

Some of the first studies applying SNA to L2 acquisition (Isabelli-García, 2006; Lybeck, 2002) used primarily qualitative social network data to provide a critical enhancement to our understanding of L2 acquisition during traditional SA or a period of time spent in the TL environment. These early studies gathered qualitative data about the attitudes of L2 learners toward the TL community, and the learners' motivation to integrate into the host community, in order to both reconstruct the social networks that learners had created with TL speakers and to link these networks with specific aspects of L2 development.

For example, Lybeck (2002) examined the role of *cultural distance* in the L2 acquisition of Norwegian pronunciation norms by a small group of American sojourners in Norway. In this study, Lybeck hypothesized that participants who were able to overcome the difficulties associated with integrating into the highly cohesive Norwegian society, and who were able to form 'nurturing' exchange networks with TL speakers, would achieve more native-like pronunciation than participants who did not. Using the qualitative data gathered during participant interviews, as well as network questionnaires, Lybeck was able to reconstruct each participant's social network to categorize the clusters of TL speakers with direct ties to the participant as either a 'supportive', 'moderately supportive', or 'unsupportive' network. Overall, Lybeck's results confirmed that lower *cultural distance* and stronger social networks with TL speakers lead to more native-like pronunciation: the two speakers who formed strong, exchange-based networks had the highest levels of native-like pronunciation (above 80%) and the highest use of Norwegian *r* (above 90%). Similarly, the participants with the weakest social networks and highest levels of *cultural distance* had the lowest levels of native-like pronunciation (below 61%) and the least frequent use of Norwegian *r* (below 5%).

Similar to Lybeck (2002), Isabelli-García (2006) used primarily qualitative data to reconstruct learners' social networks with TL speakers during a semester of SA. In this study of four L2 Spanish learners in Argentina, Isabelli-García explored how the motivation and attitude of the learner impacted the social networks that the learners were able to create with TL speakers during SA, hypothesizing that dense networks with other L1 English speakers

would inhibit contact with TL speakers and prevent language acquisition, whereas networks with TL speakers would facilitate L2 acquisition. Using a pre-program questionnaire, informal interviews, diary entries, and social network logs, Isabelli-García assessed learner motivation, attitudes, and social integration into the TL culture. From this primarily qualitative data, Isabelli-García assigned an overall rating for each learner's attitude toward the TL culture and motivation to learn the TL and reconstructed the social network of each L2 learner in order to establish the number of network ties with TL speakers in the first and second-order zones of the network (i.e., direct relationships and friend-of-a-friend relationships, respectively). Isabelli-García further differentiated learner experiences based on uniplex networks, where the L2 learner interacts individually with TL speakers, and multiplex networks where the learner interacts with multiple TL speakers at the same time.

Isabelli-García used a Simulated OPI (SOPI) to gather oral speech data at the beginning and end of the SA period, and results demonstrated that for two of the four learners, a positive attitude, high motivation, and second-order network ties with TL speakers correlated with gains on the SOPI. In contrast, a third learner also improved one level on the SOPI despite having a negative attitude, low motivation, and only three members in his first-order social network. A final learner with a generally negative attitude toward the TL culture, low motivation to learn the TL, and a restricted social network did not improve her posttest SOPI rating. Overall, the data from this study demonstrate a link between the learner's success in integrating into social networks and their ongoing motivation to learn the TL.

The early applications of SNA by Lybeck (2002) and Isabelli-García (2006) affirm the central role that social networks play in L2 language acquisition and underscore the ability of SNA to predict linguistic patterns for L2 learners, just as they do for L1 learners. This is especially important because, as the large body of research on SA indicates, no single learner characteristic or social factor has been exclusively associated with learner gains during a period of time in the TL environment (Isabelli-García et al., 2018). The following section highlights recent research using a qualitative approach to SNA to examine the L2 acquisition of variable and regional forms, as well as the role of social networks in creating opportunities for interaction in the TL.

Variable and Regional Linguistic Features

Chamot et al. (2021) gathered qualitative social network data on nine L2 French learners during SA and used this data to establish levels of 'integration' into the TL community. Based on their social networks with TL speakers, learners were classified as '+/− integrated' into the TL community and the results revealed a hierarchy of acquisition for three variables (*ne* deletion, schwa deletion, and /l/ deletion) characteristic of informal Standard Modern French (SMF). Results from this study align with those of Pozzi (2021) and Pozzi & Bayley (2021) which demonstrated that for very salient variables, such as *sheísmo/zheísmo* in BAS, learners will generally acquire the variable form regardless of the strength of their social networks. Similarly, in Chamot et al., variable *ne* deletion was used at high rates by both groups of participants: +integrated learners deleted *ne* at a rate of 62.38% and −integrated learners deleted *ne* at only a slightly lower rate of 59.26%. In contrast to these results, the results for the phonological variables examined in Chamot et al. demonstrated that acquisition is highly dependent on socialization with TL speakers, results which align with those of Pozzi (2021) and Kennedy Terry (2017, 2022a, 2022b). For example, learners in the +integrated group deleted schwa 25% of the time and

deleted /l/ 26.81% of the time after SA. In contrast, learners in the –integrated group deleted schwa only 2.7% of the time and did not use /l/ deletion at all following a period of SA.

Opportunities for Interactions with TL Speakers

A number of studies have used a qualitative approach to SNA to better understand how student placements and activities during SA impact their opportunities for interactions in the TL and with TL speakers. For example, as part of the LANGSNAP Project, Mitchell et al. (2015) examined the social networks of 29 L2 French learners who worked or studied abroad in France. In this study, Mitchell et al. focused specifically on how the learner's placement in either a university exchange, teaching assistantship, or work placement impacted the social networks that they created with TL speakers, their perceived language development, and their actual language development as measured by a number of oral production tasks.

Overall results from the study indicate that the first group, the exchange students, generally found it difficult to make French friends, but did report some interactions with conversation partners or other international students. The teaching assistants had many opportunities to speak French in the lunch or staff room, but many found that the other teachers wanted to practice their English. Finally, the third group, the students in work placements, reported that they had opportunities to eat lunch and participate in other social events with workmates, and they also used French most of the time at work. The researchers noted that in many cases, students had to "trade" English in order to access French speaking opportunities and that many formed multilingual relationships with the members of their social networks. Learners in all three placement types reported perceived improvement in their L2 French skills, especially in the areas of oral fluency and listening comprehension, and the group of workplace interns also noted improvements in their written French because of various tasks related to their work duties (e.g., writing emails, completing forms, taking notes).

The perceptions of the learners in Mitchell et al. were supported by their documented gains over time in oral proficiency, lexical diversity, and oral fluency which were measured using interviews and structured elicitation tasks. Yet, while the learners showed improvement in all three areas over the course of the period abroad, the main effect for time achieved statistical significance for oral proficiency only, and placement type was not shown to be a significant predictor of any of the oral production measures. At the same time, the qualitative data gathered through the participant interviews in both French and English elucidate important elements of the residence abroad experience, especially the role of English as a *lingua franca* and the many ways in which L2 learners abroad must negotiate "mixed networks" characterized by communication in both their L1 and the TL. These results echo those of Dewey et al. (2013) and Hasegawa (2019) which underscore the potential benefits to learners who leverage their English skills in order to access opportunities to use the TL and who seek out TL speakers who share an affinity for, and an interest in, making multilingual and multicultural connections.

Additional studies, such as Shiri (2015) on L2 Arabic and Sauer and Ellis (2019) on L2 English have used questionnaires, diary entries, and participant interviews to gather primarily qualitative data about learner socialization, social networks, and integration into the TL community during SA. This research demonstrates a correlation between social networks and global oral proficiency gains during SA (Shiri, 2015) and highlights the impact of social networks on the L2 development of grammatical complexity and accuracy, lexical diversity, and fluency (CALF; Sauer & Ellis, 2019). These studies are further supported by complementary research that provides detailed examinations of learner-TL speaker

interactions during SA, such as the research of Diao (2017), Kinginger and Carnine (2019), and Shively (2016). Although these studies do not employ a formal approach to SNA, the qualitative data that they provide about learners' social networks and interactions with TL speakers highlight important aspects of the SA experience, such as the central role of learner motivation, attitude, and identity in creating relationships with TL speakers and the role of host family members in providing opportunities for socialization in and through the TL.

FULL NETWORK APPROACHES TO SNA

Hasegawa (2019) points out that most research on social networks in language learning during SA has focused on egocentric networks where all relationships are considered from the viewpoint of the language learner (*ego*); however, other research disciplines employing SNA focus on *sociocentric* networks which consider the viewpoints of all actors within a social network or networks. Hasegawa encourages researchers in SLA to take advantage of the sophisticated network modeling tools that allow for sociocentric analysis of L2 learners during SA. For example, Hasegawa used *Gephi* (Bastian et al., 2009) to conduct a macro-level, sociocentric network analysis of the social networks of three different groups of L2 Japanese learners enrolled in three different short-term SA programs in Japan. Hasegawa's study represents one of first attempts to combine both conversation analysis (CA) and SNA through multiple sources of data (e.g., participant observations, social network surveys, interviews, activity logs, recordings, documents) at multiple research sites, which allowed for a close examination of the impact of local factors on socialization and network formation during SA. For SNA, Hasegawa used a 'name generator' method where learners are asked to provide the names of TL speakers in their networks, as well as a 'name interpreter' method in which learners were provided with the names of other SA participants and asked to describe their relationship with each participant. Interviews were conducted in both Japanese and English and Hasegawa asked participants three specific questions about each network relationship: the role that the person played (e.g., friend), how close they felt to this person, and how often they interacted with the person (e.g., every day).

 Although Hasegawa's study did not focus specifically on language acquisition during SA, it makes an important contribution to the field of SNA in terms of how social networks are formed during SA, with whom, and what opportunities they provide for interaction in the TL. For example, Hasegawa describes Program A as taking place on an insulated university campus where the sociocentric network structure remained fairly closed for the length of SA and where most relationships were formed along the lines of residence because SA learners were housed with Japanese students in three different residences. For this program, students signed a language pledge regarding their use of L2 Japanese and Hasegawa noted that although there was a high density of network ties, the number of network members reported as 'friends' did not change as much as the level of closeness and interaction over time.

 In contrast to Program A, Program B was associated with a large university, on the campus of the School of Foreign Studies. This program had a 'supporters' program where Japanese students could volunteer to help or hang out with the international students and the International Friendship Club planned events for both local and international students. Housing for Program B was either in a family homestay far from campus, or in an apartment within walking distance to campus. Sociocentric network analysis revealed that the network density for Program B was much lower than for program A, and it remained the same over the course of SA. Unlike Program A, many of the students in Program B formed unique

relationships with local students. Hasegawa notes that Program B allowed for more agency among L2 learners, but questions whether this level of independence would benefit shy students as much as students with a more outward orientation. That is, Hasegawa hypothesizes that shyer students might achieve more success in a program like Program A where their connections are more structured.

Finally, Program C was located at a Center for International Studies and had a heavy focus on the use of English. The Japanese students were encouraged to interact with international students through a university-run conversation exchange program. The students in this program had a lighter workload than students in the other two programs and had more free time. All students in Program C lived in an international student dorm with a Japanese roommate. Hasegawa refers to Program C as a 'collapsed' network because of the low level of interaction between the participants in this program, but did point out that the sociocentric analysis showed that the total number of network actors and ties increased significantly over the course of the SA period.

Through a combined CA and SNA approach, Hasegawa concludes that while opportunities for interaction initially create the social network, the relationships within the network ultimately shape the scope and variety of interactions that SA learners will have with TL speakers. Hasegawa provides the example of "Rose," who was usually found in groups and was diligent about not using English but had mostly short interactional stretches. That is, Rose seemed to be interacting a lot with others, but her interactions remained short and superficial. Hasegawa contrasts Rose with "Joe," who appeared to be a loner in terms of the size and density of his social network, but who had high levels of closeness with a small number of Japanese speakers and therefore often engaged in conversations that were both meaningful and diverse. Using sociocentric SNA focused on three different groups of SA learners, Hasegawa's results demonstrate that in order to develop interactional competence in the L2, SA learners need access to a diverse network of TL speakers. Hasegawa concludes that "diversified interactional occasions require diversified interpersonal relationships" (2019, p. 197) and that SA program design has an important role to play in whether learners will have access to these necessary relationships with TL speakers. While the recent pandemic severely limited language learners' opportunities to create and participate in such diversified interactions, Hasegawa's research findings have important implications that should inform SA program design in the future.

The results of Hasegawa are supported by those of Van Mol and Michielsen (2015) who used an online survey to examine the interaction patterns and social network formation of over 700 European university students from six different countries participating in a short-term Erasmus SA program in another European country. Results of this study demonstrated that for all student groups except students from the UK, the highest levels of interaction during SA were with other international students, while the students from the UK interacted most frequently with other co-nationals. Additional qualitative data gathered through interviews and focus groups confirmed that many social networks with co-national and international students were formed online prior to the start of SA, that students tended to rely on these social networks upon arrival in the host country, and that these relationships were encouraged through orientation programs and events that bring students together on a consistent basis during SA. Given the importance of online social networking prior to departure, SA programs should leverage the power of social media to foster connections between SA students and TL speakers, rather than between co-nationals and other international students, in order to facilitate the maintenance and expansion of these relationships once the learners arrive in the TL environment.

Additionally, a full network approach has also been used to examine the impact of social networks with co-nationals and other L1 speakers on the acquisition of stylistic variation

(Gautier & Chevrot, 2015), sociolinguistic competence and oral fluency (Trentman, 2017), metapragmatic awareness (Li et al., 2021), and lexical complexity (McManus, 2019) during SA. Although they investigated a number of different aspects of L2 development, all of these studies demonstrated that mixed networks that include TL speakers with whom the learner uses the TL regularly facilitate L2 acquisition, and dense networks with primarily co-nationals or L1 speakers inhibit L2 acquisition. As numerous studies using a full network approach demonstrate that learners benefit from participating in mixed networks in which both the L1 and the L2 are used with TL speakers, SA programs should focus on fostering these mixed networks prior to, during, and following the SA period.

FUTURE DIRECTIONS

The tools available for researchers to characterize and examine the social networks of language learners during SA have changed markedly in the last 20 years and continuing advances in technology will facilitate SNA research in both physical and online contexts. For example, software programs such as *Netdraw* (Borgatti, 2002) and *Gephi* (Bastian et al., 2009) have made it possible to depict social networks with hundreds, if not thousands, of network ties and multiple network zones, allowing researchers to pursue new lines of inquiry in L2 acquisition during SA such as the impact of relationships with co-nationals and other international students, as well as with TL speakers, using a full network approach. The use of computer-assisted network diagramming techniques has also facilitated the analysis of previously unexplored elements of the relationships within learners' social networks during SA, such as the effects on L2 development of 'incoming' vs. 'outgoing' interactions (i.e., who provides output and who receives input) and 'weighted degree centrality' (i.e., the intensity of the relationship), which are explored in the research of Paradowski et al. (2021). While certainly not unique to the field of linguistics, sophisticated network diagramming tools have given SLA researchers access to previously unreachable and undiscovered aspects of L2 interaction and development. Although these tools have primarily been employed by SLA researchers examining the impacts of physical, in-person networks with TL speakers in the TL environment, the recent pandemic highlights the need for future research that leverages computer-assisted SNA to analyze the impact of online interactions and virtual social networks on L2 development.

In addition to facilitating a closer examination of the composition of a learner's egocentric and full social network during SA, technology has fundamentally altered the way that learners interact with the TL both inside and outside of the classroom. While research on SA has traditionally focused on face-to-face interactions between the L2 learner and TL speakers, and only those interactions that occur in the TL environment, new forms of virtual interaction (e.g., Instagram, Snapchat, Talk Abroad, TikTok, Twitter, WeChat, and WhatsApp) offer potentially rich sources of L2 data to complement the live interviews and written and oral elicitation tasks that currently form the core of SLA research.

Additionally, virtual forms of interaction provide alternate ways for L2 learners to connect, and potentially form lasting social networks, with TL speakers. A number of studies have already explored the role of social networks in online exchanges involving both L1 and L2 speakers, including Back (2013), who analyzed TL interactions on Facebook by L2 Portuguese learners during SA in Brazil, and Eleta and Golbeck (2014) who correlated the composition of online social networks with language choice by multilingual users of Twitter. More recently, Warner-Ault (2020) demonstrated that virtual exchanges between a group of intermediate L2 Spanish learners and TL

speakers through Talk Abroad resulted in both oral proficiency gains and increased cultural awareness, as well as a desire to travel and study in a Spanish-speaking country.

These virtual opportunities for TL interactions have the potential to offer a supplement to traditional, in-country SA programs both in the form of pre-SA linguistic and cultural preparation, and as a means of continuing relationships with TL speakers following SA. Moreover, as the recent pandemic has demonstrated, L2 learners may not always have the ability to travel to the TL environment in order to reap the potential benefits of SA. Even before COVID curtailed the SA opportunities available to L2 learners, many learners faced financial and familial barriers that precluded them from spending a semester or academic year in the TL community. While we must continue to advocate for institutional support for in-country SA programs and to promote organizations focused on increasing levels of SA participation among a more diverse population of students (e.g., Generation Study Abroad; Institute for International Education, 2021), we must also acknowledge that advances in technology and their ability to connect language learners and TL speakers have become increasingly relevant in a post-pandemic world.

As the research reviewed here clearly demonstrates, social networks with TL speakers are critical to multiple aspects of L2 development during SA, including oral proficiency and fluency, stylistic and regional variation, and pragmatic and sociolinguistic competence. This research also demonstrates that in the modern SA context, most learners participate in mixed language networks where the use of the TL is possible, but not required. Moreover, these mixed networks also frequently rely on English as a *lingua franca* among groups of international students, representing an additional potential barrier to L2 development if learners do not consciously seek out opportunities to interact in the TL with TL speakers. Given these important findings, it is essential that SLA researchers continue to explore the impact of social networks in the SA context and that SA program designers and administrators assist language learners in accessing the power of these networks, both physical and virtual, if the SA experience is to continue to play a central role in L2 learning in the post-pandemic world.

ACKNOWLEDGMENTS

NOTES

[1] In this article, SMF refers to varieties (both European and Canadian) that do not display regional characteristics, such as those used by the national and international media, and that are typically the object of second language acquisition (Russell Webb, 2009).

REFERENCES

Arnett, C. (2013). Syntactic gains in short-term study abroad. *Foreign Language Annals*, *46*(4), 705–712.
Avello, P., & Lara, A. (2014). Phonological development in L2 speech production during study abroad programmes differing in length of stay. In C. Pérez-Vidal (Ed.), *Language Acquisition in Study Abroad and Formal Acquisition Contexts* (pp. 137–166). John Benjamins.
Back, M. (2013). Using Facebook data to analyze learner interaction during study abroad. *Foreign Language Annals*, *46*(3), 377–401.

Baker-Smemoe, W., Dewey, D. P., Bown, J., & Martinsen, R. A. (2014). Variables affecting L2 gains during study abroad. *Foreign Language Annals*, *47*(3), 464–486.

Bastian, M., Heymann, S., & Jacomy, M. (2009). Gephi: An open source software for exploring and manipulating networks. In *Proceedings of the International AAAI Conferences on Web and Social Media, 3*(1), 361–362.

Bataller, R. (2010). Making a request for a service in Spanish: Pragmatic development in the study abroad setting. *Foreign Language Annals, 43*(1), 160–175.

Borgatti, S. P. (2002). *NetDraw software for network visualization.* Analytic Technologies.

Brecht, R., Davidson, D. E., & Ginsberg, R. B. (1995). Predictors of foreign language gain during study abroad. In B. F. Freed (Ed.), *Second language acquisition in a study abroad context* (pp. 37–66). Benjamins.

Chamot, M., Racine, I., Regan, V., & Detey, S. (2021). Une ou des immersion(s)? Regard sur l'acquisition de la compétence sociolinguistique par des apprenants anglophones irlandais de FLE. In E. Pustka (Ed.), *La prononciation du français langue étrangère: perspectives linguistiques et didactiques.* Narr Verlag.

Collentine, J. (2004). The effects of learning contexts on morphosyntactic and lexical development. *Studies in Second Language Acquisition*, *26*(2), 227–248.

DeKeyser, R. (2010). Monitoring processes in Spanish as a second language during a study abroad program. *Foreign Language Annals*, *43*(1), 80–92.

DeKeyser, R. (2014). Research on language development during study abroad: Methodological considerations and future perspectives. In C. Pérez-Vidal (Ed.), *Language acquisition in study abroad and formal acquisition contexts* (pp. 313–326). John Benjamins.

Dewey, D. P., Belnap, R. K., & Hillstrom, R. (2013). Social network development, language use, and language acquisition during study abroad: Arabic language learners' perspectives. *Frontiers: The Interdisciplinary Journal of Study Abroad*, *22*(1), 84–110.

Dewey, D. P., Bown, J., & Eggett, D. (2012). Japanese language proficiency, social networking, and language use during study abroad: Learners' perspectives. *The Canadian Modern Language Review*, *68*(2), 111–137.

Diao, W. (2017). Between the standard and non-standard: Accent and identity among transnational Mandarin speakers studying abroad in China. *System, 71*(2)*,* 87–101.

Díaz-Campos, M. (2004). Context of learning in the acquisition of Spanish second language phonology. *Studies in Second Language Acquisition*, *26*(2), 249–273.

Ellis, R. (1987). Interlanguage variability in narrative discourse: Style shifting in the use of past tense. *Studies in Second Language Acquisition*, *9*(1), 1–20.

Eleta, I., & Golbeck, J. (2014). Multilingual use of Twitter: Social networks at the language frontier. *Computers in Human Behavior, 41,* 424–432.

Freed, B. F. (1995). What makes us think that students who study abroad become fluent? In B. F. Freed (Ed.), *Second language acquisition in a study abroad context* (pp. 123–148). Benjamins.

Freed, B. F., Dewey, D. P., Segalowitz, N. & Halter, R. (2004). The language contact profile. *Studies in Second Language Acquisition, 26*(2), 349–356.

Gal, S. (1978). Variation and change in patterns of speaking: Language shift in Austria. In D. Sankoff (Ed.), *Linguistic variation: Models and methods* (pp. 227–238). Academic Press.

Gallagher, H. C. (2019). Social networks and the willingness to communicate: Reciprocity and brokerage. *Journal of Language and Social Psychology*, *38*(2), 194–214.

Gautier, R., & Chevrot, J.P. (2015). Social networks and acquisition of sociolinguistic variation in a study abroad context: A preliminary study. In R. Mitchell, N. Tracy-Ventura, & K. McManus (Eds.), *EUROSLA Monographs Series 4: Social interaction, identity and language learning during residence abroad* (pp. 169–184). The European Second Language Association.

Geeslin, K., Fafulus, S., & Kanwit, M. (2013). Acquiring geographically-variable norms of use: The case of the present perfect in Mexico and Spain. In C. Howe, S. E. Blackwell, & M. L. Quesada (Eds.), *Selected proceedings of the 15ᵗʰ Hispanic Linguistics Symposium* (pp. 205–220). Cascadilla Proceedings Project.

Geeslin, K. L., & Gudmestad, A. (2008). The acquisition of variation in second-language Spanish: An agenda for integrating studies of the L2 sound system. *Journal of Applied Linguistics, 5*(2), 137–157.

George, A. (2014) Study abroad in central Spain: The development of regional phonological features. *Foreign Language Annals, 47*(1), 97–114.

Hansen, A. B. (2000). Le E caduc interconsonantique en tant que variable sociolinguistique: Une étude en région Parisienne. *Linx*, *42.* 45–58.

Hasegawa, A. (2019). *The social lives of study abroad: Understanding second language learners' experiences through social network analysis and conversation analysis.* Routledge.

Hernández, T. A. (2010). The relationship among motivation, interaction, and the development of second language oral proficiency in a study-abroad context. *The Modern Language Journal*, *94*(4), 600–617.

Howard, M. (2005). The emergence and use of the 'plus-que-parfait' in advanced learner interlanguage. In J-M. Dewaele (Ed.), *Focus on French as afForeign language: Multidisciplinary approaches (Second language acquisition, 10)* (pp. 63–87). Multilingual Matters.

Howard, M. (2008). Morphosyntactic development in the expression of modality: The subjunctive in French L2 acquisition. *Canadian Journal of Applied Linguistics*, *11*(3), 171–192.

Huensch, A., & Tracy-Ventura, N. (2017). L2 utterance fluency development before, during, and after residence abroad: A multidimensional investigation. *The Modern Language Journal, 101*(2), 275–293.

Institute for International Education. (2021). Generation study abroad. Accessed 24 August 2021 at https://www.iie.org/Programs/Generation-Study-Abroad

Isabelli-García, C. (2006). Study abroad social networks, motivation, and attitudes: Implications for second language acquisition. In M. DuFon & E. Churchill (Eds.), *Language learners in study abroad contexts (Second language acquisition, 15)* (pp. 231–258). Multilingual Matters.

Isabelli-García, C. (2010). Acquisition of Spanish gender agreement in two learning contexts: Study abroad and at home. *Foreign Language Annals, 43*(2), 289–303.

Isabelli-García, C., Bown, J., Plews, J. L., & Dewey, D. (2018). Language learning and study abroad. *Language Teaching, 51*(4), 439–484.

Issa, B. I., Faretta-Stutenberg, M., & Bowden, H. W. (2020). Grammatical and lexical development during short-term study abroad: Exploring L2 contact and initial proficiency. *The Modern Language Journal, 104*(4), 860–879.

Iwasaki, N. (2010). Style shifts among Japanese learners before and after study abroad in Japan: Becoming active social agents in Japanese. *Applied Linguistics*, *31*(1), 45–71.

Johnson, D. E. (2009). Getting off the Goldvarb standard: Introducing Rbrul for mixed-effects variable rule analysis. *Language and Linguistics Compass*, *3*(1), 359–383.

Juan-Garau, M. (2018). Exploring oral L2 fluency development during a three-month stay abroad through a dialogic task. In C. Sanz & A. Morales-Front (Eds.), *The Routledge handbook of study abroad research and practice* (pp. 193–207). Routledge.

Kennedy, K. (2012). *What we don't learn in the classroom: The acquisition of sociolinguistic competence during study abroad.* [Unpublished doctoral dissertation]. University of California, Davis.

Kennedy Terry, K. (2017). Contact, context, and collocation: The emergence of sociostylistic variation in L2 French learners during study abroad. *Studies in Second Language Acquisition, 39*(3), 553–578.

Kennedy Terry, K. (2022a). At the intersection of SLA and sociolinguistics: The predictive power of social networks during study abroad. *The Modern Language Journal, 106*(1), 245–266.

Kennedy Terry, K. (2022b). Sociolinguistic variation in L2 French: what schwa deletion patterns reveal about language acquisition during study abroad. In R. Bayley, D. R. Preston, & X. Li (Eds.), *Variation in second and heritage languages: Crosslinguistic perspectives* (pp. 279–310). Benjamins.

Kinginger, C. (2008). Language learning in study abroad: Case studies of Americans in France. *Modern Language Journal, 92*(s1), 1–124.

Kinginger, C., & Farrell, K. (2004). Assessing development of meta-pragmatic awareness in study abroad. *Frontiers: The Interdisciplinary Journal of Study Abroad*, *10*(1), 19–42.

Kinginger, C., & Carnine, J. (2019). Language learning at the dinner table: Two case studies of French homestays. *Foreign Language Annals*, *52*(4), 850–872.

Knouse, S. M. (2013). The acquisition of dialectal phonemes in a study abroad context: The case of the Castilian theta. *Foreign Language Annals*, *45*(4), 512–542.

Labov, W. (1966). *The social stratification of English in New York City*. Center for Applied Linguistics.

Lafford, B. A. (1995). Getting into, through and out of a survival situation: A comparison of communicative strategies used by students studying Spanish abroad and 'at home'. In B. F. Freed (Ed.), *Second language acquisition in a study abroad context (Studies in bilingualism 9)* (pp. 97–121). Benjamins.

Lafford, B. A. (2004). The effect of the context of learning on the use of communication strategies by learners of Spanish as a second language. *Studies in Second Language Acquisition*, *26*(2), 201–225.

Leonard, K. R., & Shea, C. E. (2017). L2 Speaking development during study abroad: Fluency, accuracy, complexity, and underlying cognitive factors. *The Modern Language Journal, 101*(1), 179–193.

Li, W. (1994). *Three generations, two languages, one family: Language choice and language shift in a Chinese community in Britain*. Multilingual Matters.

Li, Li, W., & Ren, W. (2021). Tracking the trajectories of international students' pragmatic choices in studying abroad in China: a social network perspective. *Language, Culture and Curriculum, 34*(4), 398–416.

Linford, B., Zahler, S., & Whatley, M. (2018). Acquisition, study abroad and individual differences: The case of subject pronoun variation in L2 Spanish. *Study Abroad Research in Second Language Acquisition and International Education, 3*(2), 243–274.

Lippi-Green, R. (1989). Social network integration and language change in progress in a rural alpine village. *Language in Society, 18*(2), 213–234.

Llanes, À. (2011). The many faces of study abroad: An update on the research on L2 gains emerged during a study abroad experience. *International Journal of Multilingualism, 8*(3), 189–215.

Llanes, À., & Muñoz, C. (2009). A short stay abroad: Does it make a difference? *System, 37*(3), 353–365.

Llanes, À., & Muñoz, C. (2013). Age effects in a study abroad context: Children and adults studying abroad and at home. *Language Learning, 63*(1), 63–90.

Long, M. H. (1983). Native-speaker/non-native speaker conversation and the negotiation of comprehensible input. *Applied Linguistics, 4*(2), 126–141.

Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. Ritchie & T. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413–468). Academic Press.

Lybeck, K. (2002). Cultural identification and second language pronunciation of Americans in Norway. *The Modern Language Journal, 86*(2), 174–191.

Mackey, A. (1999). Input, interaction and second language development: An empirical study of question formation in ESL. *Studies in Second Language Acquisition, 21*(4), 557-587.

Magnan, S. S., & Back, M. (2007). Social interaction and linguistic gain during study abroad. *Foreign Language Annals, 40*(1), 43–61.

Marriott, H. (1995). Acquisition of politeness patterns by exchange students in Japan. In B. F. Freed (Ed.), *Second language acquisition in a study abroad context (Studies in bilingualism 9)* (pp. 197–224). Benjamins.

McManus, K. (2019). Relationships between social networks and language development during study abroad. *Language, Culture and Curriculum, 32*(3), 270–284.

Milroy, J., & Milroy, L. (1978). Belfast: Change and variation in an urban vernacular. In P. Trudgill (Ed.), *Sociolinguistic patterns in British English* (pp. 19–36). Arnold.

Milroy, J., & Milroy, L. (1985). Linguistic change, social network and speaker innovation. *Journal of Linguistics, 21*(2), 339–384.

Milroy, L. (1982). Social network and linguistic focusing. In S. Romaine (Ed.), *Sociolinguistic variation in speech communities* (pp. 141–152). Hodder Arnold.

Milroy, L. (2004). Social networks. In J.K. Chambers, P. Trudgill, & N. Schilling-Estes (Eds.), *The handbook of language variation and change* (pp. 549–572). Blackwell.

Milroy, L., & Llamas, C. (2013). Social networks. In J. K. Chambers & N. Schilling (Eds.), *The handbook of language variation and change* (2ⁿᵈ ed.), pp. 407–427). John Wiley & Sons, Inc.

McLaughlin, B. (1987). *Theories of second language learning.* Edward Arnold.

Mitchell, R., McManus, K., & Tracy-Ventura, N. (2015). Placement type and language learning during residence abroad. In R. Mitchell, N. Tracy-Ventura, & K. McManus (Eds.), *EUROSLA Monographs series 4: Social interaction, identity and language learning during residence abroad* (pp. 115–138). The European Second Language Association.

Mitchell, R. F., Tracy-Ventura, N., & McManus, K. (2017). *Anglophone students abroad: identity, social relationships and language learning.* Routledge.

Mora, J. C. (2008). Learning context effects on the acquisition of a second language phonology. In C. Pérez-Vidal, M. Juan-Garau, & A. Bel (Eds.), *A portrait of the young in the new multilingual Spain* (pp. 241–263). Multilingual Matters.

Morris, K. (2023). When in Rome: Maximizing L2 pragmatic development in study abroad. *L2 Journal, 15*(2), 109-128.

Muñoz, C., & Llanes, À. (2014). Study abroad and changes in degree of foreign accent in children and adults. *The Modern Language Journal, 98*(1), 432–449.

Paradowski, M. B., Jarynowski, A., Jelińska, M., & Czopek, K. (2021). Selected poster presentations from the American Association of Applied Linguistics conference, Denver, USA, March 2020: Out-of-class peer interactions matter for second language acquisition during short-term overseas sojourns: The contributions of social network analysis. *Language Teaching, 54*(1), 139–143.

Pérez Vidal, C., & Shively, R. L. (2019). L2 pragmatic development in study abroad settings. In N. Taguchi (Ed.), *The Routledge handbook of second language acquisition and pragmatics* (pp. 355–371). Routledge.

Pozzi, R. (2021). Learner development of a morphosyntactic feature in Argentina: The case of *vos. Languages 6*(4), 193.

Pozzi, R., & Bayley, R. (2021). The development of a regional phonological feature during a semester abroad in Argentina. *Studies in Second Language Acquisition, 43*(1), 109–132.

Regan, V., Howard, M., & Lemée, I. (2009). *The acquisition of sociolinguistic competence in a study abroad context.* Multilingual Matters.

Rehner, K. (2002). *The development of aspects of linguistic and discourse competence by advanced second language learners of French* [Unpublished doctoral dissertation]. Ontario Institute for Studies in Education, University of Toronto.

Russell Webb, E. (2009). Minimalism and French /ʀ/: Phonological representations in phonetically based phonology. *French Language Studies*, *19*(1), 87–115.

Sanz, C., & Morales-Front, A. (2018). Introduction: Issues in study abroad research and practice. In C. Sanz & A. Morales-Front (Eds.), *The Routledge handbook of study abroad research and practice* (pp. 1–16). Routledge.

Sauer, L., & Ellis, R. (2019). The social lives of adolescent study abroad learners and their L2 development. *The Modern Language Journal, 103*(4), 739–762.

Sax, K. (2003). *Acquisition of stylistic variation by American learners of French* [Unpublished doctoral dissertation]. Indiana University, Bloomington.

Segalowitz, N., & Freed, B. F. (2004). Context, contact, and cognition in oral fluency acquisition: Learning Spanish in at home and study abroad contexts. *Studies in Second Language Acquisition*, *26*(2), 173–199.

Serrano, R., Tragant, E., & Llanes, À. (2012). A longitudinal analysis of the effects of one year abroad. *The Canadian Modern Language Review*, *68*(2), 138–163.

Shiri, S. (2015). The homestay in intensive language study abroad: Social networks, language socialization, and developing intercultural competence. *Foreign Language Annals, 48*(1), 5–25.

Shively, R. L. (2016). An activity theoretical approach to social interaction during study abroad. *L2 Journal, 8*(2), pp. 51–75.

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235–253). Newbury House.

Swain, M., & Lapkin, S. (1998). Interaction and second language learning: Two adolescent French immersion students working together. *Modern Language Journal, 82*(3), 320–337.

Trentman, E. (2017). Oral fluency, sociolinguistic competence, and language contact: Arabic learners studying abroad in Egypt. *System, 69*, 54–64.

Valdman, A. (1982). Français standard et français populaire – sociolectes ou fictions? *The French Review, 56*(2), 218–227.

Van Mol, C., & Michielsen, J. (2015). The reconstruction of a social network abroad. An analysis of the interaction patterns of Erasmus students. *Mobilities*, *10*(3), 423–444.

Warner-Ault, A. (2020). Promoting intercultural learning through synchronous video exchange: A talk abroad case study. *International Journal of Computer-Assisted Language Learning and Teaching, 10*(1), 1–14.

Wright, C. (2018). Effects of time and task on L2 Mandarin Chinese language development during study abroad. In C. Sanz & A. Morales-Front (Eds.), *The Routledge handbook of study abroad research and practice* (pp. 166–180). Routledge.