Informal Language Learning and Self-Instruction: The Learning Ecosystem of Learners of Macedonian

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Abstract

In a landscape where research on online language learning and learning less commonly (LCTLs) and almost never taught languages (ANTLs) is focused on experiences in formal learning settings, there is a large gap in knowledge about the experiences of learners outside of the classroom, using online self-instructional materials and tutoring. The present research aims to fill that gap by answering the question how an ecologically-conceptualized context impacts informal learners of one ANTL, Macedonian. The research approach is qualitative, taking as primary data Skype interviews with learners recruited through the online non-profit language learning resource center, Macedonian Language E-Learning Center. Framing the research within ecological systems theory, the researcher found that within their microsystems, the learners found support but not resources for their study; for resources they had to turn to the Internet. Furthermore, macrosystemic influences negatively impacted their study of Macedonian. Finding themselves challenged by their ecosystem, the learners persisted with their study, demonstrating a high level of self-motivation. The research is significant not only because it offers a glimpse into the experiences of informal language learners with online resources, including tutoring, but also because it exemplifies a cross-disciplinary theoretical approach for research with other learners of LCTLs which takes into consideration the impact of the learners' entire ecological system on their learning choices and progress.

Many researchers have called for more research on the teaching and learning of the LCTLs (Felix, 2005; White, 2006; Garrett, 2009), among which are the so-called "almost never-taught languages" (ANTLs)(Friedman, 2007; Bhatia & Ritchie, 2009; Garrett, 2009). Furthermore, nearly all the current research on language learning and

technology is focused on the formal setting, including distance education through universities. But for ANTLs, there are inherently few formal learning opportunities and therefore this setting is not the most appropriate for research. In the absence of formal learning opportunities, learners today turn to the Internet for informal language learning resources, which are often created for self-instruction. Because access to these learners is not readily available, since most researchers are from the ranks of academia, there is a large gap in research about informal online learning of LCTLs (Bown, 2009), such as using online resources, online tutoring, and self-study.

The current research begins to fill this gap by examining the learners' perspective with the aim of answering the question: when conceptualized ecologically, how does the learners' context impact informal language learning, self-instruction, and learners' motivation? The context was ecologically conceptualized in order to capture the broadest influences on learners' experiences with language study. The data was gathered through Skype interviews with informal learners of the ANTL Macedonian. The significance of the research lies not only in the glimpse it offers into the world of informal learners of ANTLs, but also because it suggests and exemplifies a cross-disciplinary theoretical approach for research with other learners of LCTLs which takes into consideration the impact of the learners' entire ecological system on their learning choices and progress. Before describing the study and results, it is necessary to define some terminology and briefly explain the theories on which the research is predicated.

Ecological Linguistics

The ecological approach is one line of research in second language acquisition (SLA) that has gained prominence very recently (Tudor, 2001; van Lier, 2003, 2004; Ingeborg, 2007; Lafford, 2009; Blyth, 2009; Menezes, 2011) and is closely related to the socio-cultural theory approach (Berglund, 2009). The ecological view includes the notions that language learning is context-situated (which includes nested linguistic ecosystems), relational (dynamic process of negotiation between learner and environment), and functional (occurs through interaction and socialization into communities of practice),

rather than just grammatical. Ecological linguistic analysis focuses on relationships and processes rather than products and outcomes.

As with language learning and technology, most of the publications within the ecological linguistic perspective focus on the classroom (Warschauer, 1998; Tudor, 2001; van Lier, 2003, 2004; Ingeborg, 2007; Borrero & Yeh, 2010) and distance education (White, 1999; McCann 2004). One counterexample is the recent collection of research papers edited by Benson and Reinders (2011), which addresses informal language learning and self-instruction including some LCTLs. The research presented in this paper continues in the direction outlined by Benson and Reinders (2011).

The current research also draws on developmental psychology, specifically Urie Bronfenbrenner's ecological systems theory (1979), which is useful for research espousing an ecological worldview because it is activity-based and focused on the connections within and across nested systems (van Lier, 2003, 2004). These nested sub-environments include the microsystem (individual's direct social interactions), mesosystem (multiple interrelated microsystems; e.g. support that is available for language learners to study and practice the language), exosystem (social systems with which the individual does not interact directly but that influence the individual's language learning) and macrosystem (broader cultural context) (Bronfenbrenner, 1979, 1998). The macrosystem influences the learner's identity, whether as a member of the native culture (speaking the native language), the target culture (speaking the target language), or somewhere in between, "a third place," located at the intersection of multiple native and target language learning cultures (Kramsch, 1996).

Informal Language Learning and Self-Instruction

Several researchers have written about the settings where learning takes place and regardless of differences in classification or terminology, the researchers agree that learning does not only take place in formal settings such as schools, but also through day-to-day activities, on the job, and in the community. The traditional view identifies three separate settings: formal, non-formal, and informal (Merriam & Clark, 2006; Merriam, Caffarella & Baumgartner, 2007); a classification that has been criticized by other researchers in adult

learning who have proposed their own definitions (Mocker & Spear, 1982; Rogers, 2004; Zurcher, 2010). For the purposes of the present research, formal learning is defined as directed by a representative or representatives (instructor, teaching assistant, etc.) of an educational institution and includes distance education classes. In contrast, informal learning takes place outside of the traditional educational establishment, including on-the-job training, consultant-led training, tutoring, and community workshops. In this definition, informal learning has a broader scope than in other definitions and subsumes what has previously been defined as non-formal learning.

The curriculum in informal learning, thus defined, can be set by the learners themselves (as in the case of self-instruction) or an instructor, tutor, or consultant, but that curriculum is not endorsed by a school or university. While the same materials may be used in both settings, their application is different: in the formal setting, the materials are part of a curriculum that also requires the learner to produce proof of learning, such as through assignments and assessments, for which the learner is provided feedback and (in most cases) rewarded with a grade. In the informal learning setting, the proof of learning is not required; instead it is up to the learners to evaluate their own learning and seek out further resources (including assessments) if they feel that they need them. Learners can check their knowledge and receive feedback (such as from an instructor, consultant, tutor, or computer program), but that feedback is for the learner's own benefit and not formalized through a grade. Because informal language learning is devoid of external motivators, such as grades, it is self-directed. The learners may locate and use self-instructional tools: commercial software or self-access learning centers, or they may join online language learning communities, such as Babbel (http://babbel.com) and Livemocha (http://livemocha.com), or they may hire tutors to guide and assist their learning. Self-instructional software is often not available for ANTLs, such as Macedonian, because of companies' perceived lack of profitability for those markets. But there is one online language learning resource that is available for Macedonian, and it is the informal learning environment provided by the non-profit organization Macedonian Language E-Learning Center (MLEC) (http://macedonianlanguage.org), which is the recruitment site in the present investigation.

The Recruitment Site and Participants

Macedonian is the administrative language of the Republic of Macedonia, an Eastern European country located north of Greece, south of Serbia, west of Bulgaria, and east of Albania. Macedonian is an ANTL: there are less than ten universities in North America currently offering any instruction, including as independent study (Center for Advanced Research on Language Acquisition, http://carla.umn.edu/lctl/db/index.php) and only one offers Macedonian online, the University of North Carolina - Chapel Hill. In Australia, Macedonian had been offered onsite at Macquarrie University, but the course offerings were eliminated in 2011. Therefore, studying the case of Macedonian is ideal for assessing how Internet technologies can impact the teaching and learning of a language that is taught less and less commonly in the formal educational setting worldwide.

The online non-profit organization MLEC provides self-study resources and online one-on-one tutoring for learning Macedonian language and about Macedonian culture. The free asynchronous learning resources for self-study that are available on the site include multimedia tutorials, exercises, games, and podcasts, most of which are focused on beginning levels of language proficiency. The center's free online materials received the 2012 Access to Language Education award, presented by the Computer Assisted Language Instruction Consortium (CALICO), the Esperantic Studies Foundation, and Lernu.net.

The participants for the study were recruited via a Survey Monkey (http://www.surveymonkey.com) survey emailed to all registered MLEC users and posted on Facebook and Twitter. Of the 28 people who responded to the survey globally, 11 had enlisted the assistance of a tutor (tutored participants) and 17 had not (untutored participants). From those 28 potential participants, a sample was purposefully selected to reflect the greatest variation in demographics, including country of residence, education level, previous online language learning experience, frequency of contact with the target language and Macedonian heritage. Several participants who were first selected for the sample did not respond to an email regarding setting up the interview, and therefore the sample was redrawn several times

until a total of 11 participants agreed to participate. The demographics of the sample are presented in table 1 in the results section.

Literature Review

The research question that guided the study was: How does the learners' context, conceptualized ecologically, impact informal language learning and self-instruction? Furthermore, the study aimed to answer how motivation and perseverance with studying the language are supported or impeded in the learner's immediate social environment (microsystem), the broader social community (mesosystem), by the availability of resources for studying the language and the curriculum of those resources (exosystem), and the cultural views on studying foreign languages (macrosystem), which also impact the exosystem and the learner's motivation and sense of identity.

Because the field of research of informal language learning of LCTLs is nascent, this literature review briefly addresses what has been found in formal settings and in learning other subjects. For example, one characteristic often recognized as typical in distance learning programs for LCTLs is that the learners are highly motivated, mature, and sophisticated (Henderson, 1974; Doughty & Long, 2003) and Dickinson (1987) echoes the sentiment for self-instructed learners. Motivation has been hailed as critical to effective learning and an often convincing predictor of language success or failure (Nseendi, 1984; Hurd, 2006). But motivation is not only a characteristic of the learner, it is also impacted by the context (Nseendi, 1984; Styer, 2007).

Subscribing to the notion that language is a social construct means that language learning must also be viewed in terms of social practice (Kurata, 2011), i.e. interactions within the micro and meso-systems, especially when that language learning is taking place outside of the formal classroom (Palfreyman, 2011). The idea of language learning as participation or enculturation into a community of practice is not meant to replace the idea of language learning as acquisition or accumulation of rules and facts in the brain (Sfard, 1998), but to reveal an additional layer of complexity to the learning process (Pavlenko & Lantolf, 2000). Looking at academic literacy socialization of foreign exchange students, Zappa Hollman (2007) proposes the term "individual network of practice" (INoP) to describe an individual's

social ties that are relevant to a particular phenomenon. This term is useful to socially contextualize an individual's support for and process of language learning as well. One part of the INoP to examine for language learning opportunities and impact on motivation is the family. The influence of the family as a learning community was noted by Palfreyman (2006, 2011), who found that the influences can be both encouraging and impeding both for target languages study (in this case, English) and for maintenance of the native language, depending on the target language proficiency of family members.

When looking at learners' social networks, both density and heterogeneity can impact language acquisition. Smith (2002) found that in an expatriate setting, language is best acquired through loose social networks with many native speakers; however, the language acquired thusly may only be appropriate for the realm of public interactions and not for dealing with private, relationally-deep topics. Similarly, in a study of bilingual adolescents, Wiklund (2002) found that language acquisition was aided by social networks consisting of many native speakers with whom the learners interacted frequently. Kurata's (2011) research of how foreign language learners construct opportunities for informal language learning pointed out that these opportunities, which are often taken for granted in certain contexts (such as in Smith, 2002 and Wiklund, 2002) are difficult to construct in others, such as for example when the learners' native language is English and they are trying to acquire Japanese. Sometimes the influences can be traced to the macrosystem, specifically social norms and roles which limit opportunities for interaction with native speakers in the target language (Kurata, 2011) and impact learners' beliefs and fears about their competence (van Lier, 2004).

Looking at exosystemic factors in language learning, Doughty and Long (2003) state that one of the characteristics of distance learning programs for LCTLs is the typical absence of exposure to the target language outside the courses themselves. However, this proposition would not be true for heritage speakers, who normally live in communities of immigrants speaking the target language (Johnson & Hall, 2007). Nonetheless, the statement speaks to the intended audience for distance education language learning programs (and therefore curricular assumptions) as well as the distance education establishment's perceived lack of available resources for using the

language in social settings outside of the courses. This has an impact in the types of courses offered in this setting: "traditional programs, geared only to domestic language learners, have had the fairly narrow, instrumental goal of developing in learners basic language skills, using the educated native speaker of the target language as the standard" (Johnson & Hall, 2007, p. 2). This goal can disadvantage heritage speakers, who have exposure to regional variants and dialects as well as varied levels of knowledge of the target culture, and brings up issues of individual and cultural identity. In addition, it brings into question cultural norms about identity, cultural acceptance of variance in languages vis-a-vis a 'standard' or 'literary' form as norm, and of the ideal that a language learner should strive for: native-speaking ability or a multilingual, multicultural skillset (Lemke, 2002; Johnson and Hall, 2007; Blyth, 2009; Thorne, Black & Sykes, 2009). Indeed, even the notion of a "native speaker" and how one is defined (by birth or participation/acceptance in a community) can be challenged as the native/non-native dichotomy can also be viewed by society as a continuum (Pavlenko & Lantolf, 2000). These issues and relationships exemplify components of the macrosystem. There have been no studies of informal LCTL-learners that considered the impact from each of these levels of the learning ecosystem.

Methodology

The qualitative methodology employed was phenomenology because this approach focuses on understanding meanings and actions (Miles & Huberman, 1994), especially what events and interactions mean to ordinary people (Moustakas, 1994; Bogdan & Biklen, 2006). This approach is in direct correlation with the research question, which explicitly focuses on learners' perceptions of themselves and their experiences in the learning context. The research was framed as a case study because the sample researched and the population from which it was drawn was limited both by language (Macedonian) and site (the Macedonian Language E-Learning Center).

The data collection consisted of participant interviews using open-ended questions that were provided to the participants ahead of time. Of the 11 participants in the study, one person only responded to interview questions via email, and the remaining 10 were

interviewed via Skype. Of those 10, one person was not comfortable enough with English to conduct the interview in English so a combination of German, Macedonian, and English was used. The transcript was then translated into English. Additionally, learning journals were collected from four participants, one of which was a student of the researcher, who also had access to homework and Skype tutoring session notes. The researcher also had access to Skype tutoring session notes from another of her own tutored students, whom she also observed at a cultural event in the student's Macedonian immigrant community. While it needs to be acknowledged that the researcher's involvement with these participants as a tutor has ethical implications for the research, all precautions were taken for the participants not to feel obligated to participate or report their experiences overly favorably. Furthermore, the researcher's relationship and rapport with these learners positively impacted the research because she was in fact embedded in the learning process and ecosystem and observing it from within, rather than without. Altogether, over 120 pages of transcriptions, journals, and observation notes were collected and analyzed. Member checks were performed by nine of the eleven participants; the remaining two did not respond to the email request for a member check.

Data Analysis

As required by the chosen phenomenological research design, the analysis involved several iterations of reading, writing, and configuration of meaning from the data over an extended period of time until themes emerged. As these themes emerged, they were organized and compared using not only text, as is common practice in qualitative research, but also with graphic organizers, as proposed by Miles and Huberman (1994). The data for each participant was summarized in a word cloud based on the transcription of the interview, a critical incident chart describing the critical occurrences in the participants' lives that impacted their study of Macedonian and a social network matrix of each participant's "individual network of practice" (Zappa Hollman, 2007), constructed to represent the participants' networks of communication in Macedonian (such as Figures 1 and 2). Interactions in Macedonian are marked in orange,

whereas those in English and other languages are marked in gray. Dotted lines represent bilingual communication. The shorter the line representing the interaction is, the closer the relationship represented by that line; the thicker the line, the more frequent the interaction. The matrix does not aim to capture the participants' entire social network, but only the portions relevant to the INOP for Macedonian, which were considered in the study and discussed in the interview. A within-case analysis and a between-case analysis were conducted using the qualitative analysis software Atlas.ti, but for brevity, only the results of the between-case analysis are highlighted in the results of the study.

Results

The demographics of the participants are presented in Table 1. In addition to their age, gender, country of residence, and level of completed education, participants also provided information regarding whether they had had previous experience with online language learning (with options such as 'first experience,' 'have studied another language online before,' and 'have studied several other languages online before'), whether they are a heritage learner, and whether they had enlisted the help of a tutor. The participants' names were randomly assigned pseudonyms.

Name	Age	Gender (F or M)	Country of residence	Education level	Online language learning experience	Frequency of contact with the language	Heritage learner (Y or N)	Tutored (Y or N)
Ashley	21-30	F	Macedonia	Bachelor's	First	Daily	N	N
Beatrice	31-40	F	U.S.	Master's	First	Daily	Y	Y
Constantin	>61	M	Greece	High school	First	Weekly	Y	Y
Diana	31-40	F	Hungary	Doctoral	First	Weekly	N	N
Emma	21-30	F	Russia	Master's	Another before	Daily	N	N
Frank	>61	M	Macedonia	Doctoral	First	Daily	N	Y
Grace	>61	F	U.S.	Doctoral	First	Almost never	N	Y
Henry	41-50	M	Canada	High school	First	Daily	N	Y
Iris	51-60	F	U.S.	Doctoral	First	Daily	N	Y
John	51-60	M	U.S.	Master's	Several before	Almost never	N	N
Kaltrina	31-40	F	Albania	Master's	Another before	Monthly	N	N

Table 3. Demographics of study participants.

Turning first to a description of the participants' context, two categories of participants can be distinguished: those living in Macedonian-speaking communities during the data gathering for the study (Ashley and Frank in Macedonia, highlighted in dark blue in Table 3; Beatrice and Constantin in Macedonian communities in the diaspora, highlighted in light blue in Table 3) and those remaining participants who did not live near Macedonian-speaking communities. These categories impact not only the learners' microsystems, i.e. the direct social interactions in their immediate environment and mesosystems (multiple interrelated microsystems), but also the exosystem (availability of resources for study in various settings) and macrosystem (learners' sense of identity and of language study).

The microsystem of the two participants living in Macedonia ought to have been full of opportunities for interacting in Macedonian. And indeed, the social network matrices of these participants (shown in Figure 1) were characterized by the most non-dotted lines of all the participants, meaning that they used only Macedonian to interact with members in their network the most frequently of all participants. However, in the matrices, some of this communication was casual and infrequent. In fact, Ashley reported that her only regular daily interaction solely in Macedonian was with her in-laws and that they spoke a different dialect than the standard language she was learning, which posed a challenge for her. Therefore, it is no surprise that even these two participants reported they did not have enough opportunities to practice the language they were learning.
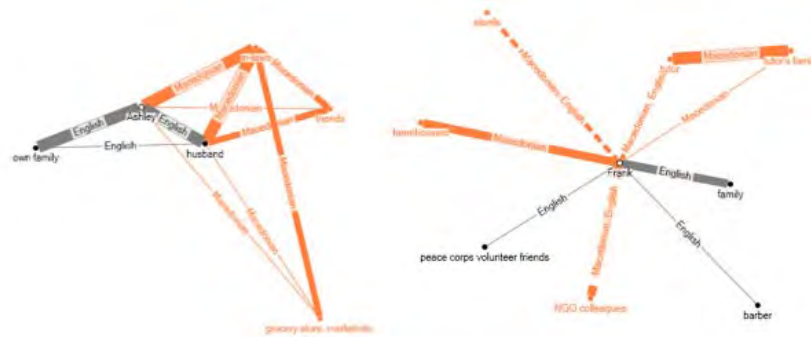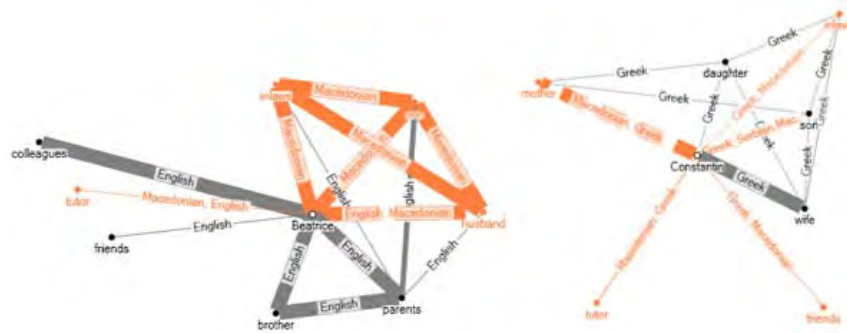

Figure 1. Comparison of INoPs of participants living in Macedonia

In Ashley's graph, there are clearly two microsystems, one that requires communication in English and one that requires communication in Macedonian, with virtually no overlap (her husband being the only common link). This is very similar to Beatrice's graph (Figure 2), who lives with her husband and in-laws in a Macedonian immigrant community in the U.S. The similarity in delineation of microsystems for Macedonian language communication (the in-laws) and for English language communication illustrates the role that family plays in providing opportunities for practicing Macedonian and impacting motivation for studying the language.

Figure 2. Comparison of INoPs of heritage speaker participants

However, not everyone with a family that speaks Macedonian had enough opportunities and motivation for learning, as demonstrated by Henry, who was living with a native Macedonian spouse but not near a Macedonian-speaking community. His Macedonian language-speaking INoP was much sparser than those of Beatrice's and the opportunities he had to use Macedonian were fewer (as shown in Figure 3), which negatively impacted his ability to find time to study as well as to make it a priority. Therefore, just having a microsystemic connection to a native speaker (spouse) was not enough for him to make time for and put focus on learning Macedonian.
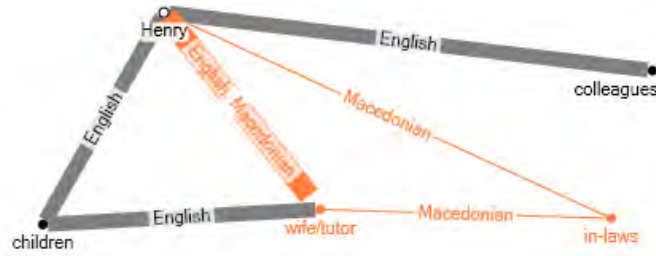
Figure 3. Henry's INoP

Beatrice and Constantin were using Skype weekly to study with a tutor, with whom they spoke both their respective native language and Macedonian in their lessons. For these participants, even though speaking Macedonian was part of their daily routine in their microsystem (in Figure 2), technology facilitated access to a tutor with whom they were able to study Macedonian weekly. These participants turned to online tutors because they could not find anyone in their community that met their needs, Constantin because of influences of the exosystem (Greek government negating opportunities for Macedonian language study and practice), Beatrice because of influences of the macrosystem of Macedonian culture, which she perceived as judgmental of members of the community who did not already speak Macedonian.

The microsystems of the remaining participants were marked with isolated communication in Macedonian, and always in parallel with another language. One example is provided in Figure 4. In fact, when she began studying Macedonian, the participant referred to as Iris only knew one Macedonian: her tutor, the Australian-born son of Macedonian immigrants. Furthermore, Iris, like another participant – John, did not feel comfortable seeking out a Macedonian-speaking immigrant community because they were aware of in/out-group differences that put them at a disadvantage. John, who had lived among ethnic Macedonians in Greece, recounted that as an outsider in the Macedonian community in Greece, he had a difficult time finding anyone who would use Macedonian with him because of the macrosystem's influence: the Greek state does not recognize the existence of Macedonia as a state, its culture, its people, nor its language. Other participants sought out Macedonian-speaking communities either physically (Grace in the U.S., Diana by traveling to

Macedonia) or virtually (Emma) and had positive experiences with the communities they reached out to, but could not spend a lot of time in those communities because of constraints of time and finances.
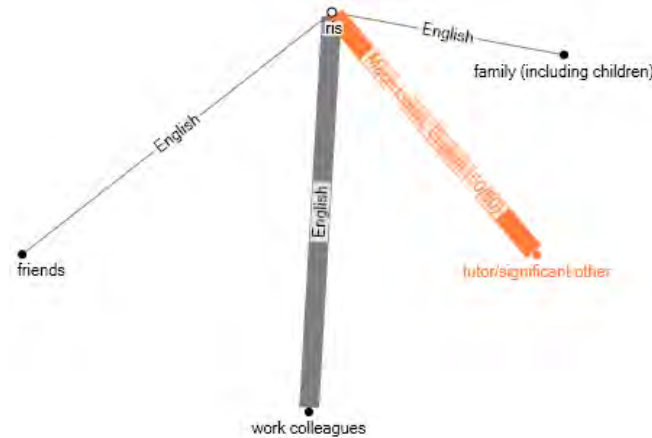
Figure 4. Iris' INoP is an example of the INoPs of non-heritage speaker participants who are residing outside of Macedonia

Turning to opportunities in the exosystem, only three of the participants had at one time studied Macedonian through formal means: Diana through seminars in Macedonia, Frank through a 10-week Peace Corps pre-service training in Macedonia, and Grace through an intensive summer course at her U.S. university. While Diana reported that the seminars had a positive impact on her language learning, Grace's experience was "horrid." She elaborated: "...the teacher was just a terrible teacher. He told me the fifth week of class he knew I didn't like his language." Frank also criticized the Peace Corps language training because it did not incorporate any elements of the Macedonian culture.

The disconnect between learning the language and learning about the culture was illustrated in Ashley's case to an even greater extent. The informal language learning resources Ashley used to study also did not prepare her for life in Macedonia, particularly for dealing with certain cultural expectations and practices. For example, Ashley's husband described that when Ashley shops at the market, "as soon as she opens her mouth, the price goes double." This result is one of the effects of in/out-group mentality, coupled with the desire to make as much money as possible from a particular sale and the belief that

foreigners have more money than locals. Where the materials she was using for language study failed, her husband jumped in, trying to prepare her. But even then, Ashley stated "there are a lot of things in Macedonian culture that I wasn't prepared for. ... So that was kind of confusing me." She tried to relate the behaviors she was encountering to her own experiences in the US as a macrosystem and with her family of Italian ancestry as a microsystem, and ended up frustrated by her perception of Macedonians being very hospitable one moment and then uncultured and impolite the next. Her husband, as a member of the in-group, tried to protect her by warning her not to speak to "random people in the streets." Therefore, even for Ashley, the opportunities to interact in Macedonian were mostly limited to her in-laws and their family and friends.

One impact of the technology in the Russian exosystem on language use was described by Emma and focused on the use of written language in texting using the Cyrillic vs. the Latin alphabets. The exosystem, via mobile phone providers, endorsed texting in Latin, which is not the standard alphabet for Macedonian or Russian. Namely, texts in Cyrillic take twice as many characters as those same texts transliterated in the Latin alphabet, effectively making one text message in Latin transliteration count as two (and therefore doubly as expensive) in the native Cyrillic alphabet. This effect limits opportunities for communicating in Macedonian using the Cyrillic alphabet.

Motivation and Support for Studying Macedonian

Finding themselves limited in opportunities for studying Macedonian and for interaction in Macedonian did not impact the participants' motivation to study Macedonian. Those living in Macedonia reported being motivated by their Macedonian micro- and mesosystems. For example, Ashley stated: "I am motivated every time I have to step out of the house and speak to somebody… A conversation with a complete stranger will motivate me to study."

Those who had significant others who were Macedonian relied on them for encouragement. For example, Iris' tutor and significant other was "very encouraging," Henry considered his wife his tutor and Ashley said that her husband and family helped her with things like

shopping at the bazaar. Beatrice also relied on her husband and American friends for encouragement.

But these and the other participants are at the core - self-motivated learners. For example, Frank stated that being self-motivated is just "my way of studying anything. I just get up in the morning and say 'Today I will'." Discussing motivational help for language study from her parents, Emma stated: "Macedonian happened when I was an adult, so it's my choice." The sentiment that Macedonian is <u>one's own choice</u> was also echoed by Grace, mentioning the lack of help from her professional and personal micro- and mesosystems. This self-motivation may be a necessity when choosing to study a less commonly taught language, such as Macedonian, since the extrinsic resources in the learners' macrosystems are non-existent.

Discussion

All of the participants in the study had studied other foreign languages prior to Macedonian. They reported that their previous language learning experiences were facilitated by elements of the microsystem (for example, parents or grandparents who could speak a foreign language or say a few words in a foreign language), mesosystem (for example, growing up in bilingual or multicultural communities), and exosystem (for example, radio or TV programs using or teaching foreign languages). Several participants reported that required foreign language study in school had a negative or non-existent effect on people's desire and ability to learn foreign languages. Furthermore, it was interesting that more than two thirds of the participants reported that their own culture exhibited macrosystemic views that did not support foreign language study. These encouraging and hindering impacts of context (Styer, 2007), family (Palfreyman, 2006), and socialization in communities of practice (Smith, 2002; Wiklund, 2002) on language learning have also been noted in previous research.

Describing their ecological context for studying Macedonian, the participants painted quite a different picture than the one they described for language study in general. The two heritage-speaker-participants had heard their parents/grandparents speaking Macedonian, but the remaining participants had not. Furthermore,

while participants in general reported that their families were supportive of their study, more than two thirds of the participants did not consider their family as a resource for studying Macedonian. In addition, half of the participants could not practice their language with their families, friends, co-workers, or other members of their micro- and mesosystems and the remaining participants reported not being able to practice enough. In fact, all of the participants listed this lack of opportunities for practicing the language as their biggest challenge in learning Macedonian.

   More than two thirds of the participants had access to Macedonian media programming, whether through watching local TV channels (Ashley and Frank, who lived in Macedonia), satellite channels (Beatrice, Henry), U.S. radio programming in Macedonian (Iris and John), or via the internet (Constantin, Diana, John), so these participants found support for their study in this element of the exosystem. While there were opportunities for formal study available to four of the participants, only one (Diana) was taking advantage of these opportunities at the time of the data collection and she did not feel that her needs as a learner were being met through the instruction. For all of the other participants (Ashley, Beatrice, and Frank), these opportunities were inconvenient. Two other participants (Grace and Ashley) reported poor prior instructional experiences. In summary, although the participants found some support for language maintenance in their exosystems, they did not have access to positive learning experiences.

   Since language learning is impacted by context (Styer, 2007), social life (Horwitz, 1995), and social networks (Smith, 2002; Wiklund, 2002; Kurata, 2011; Palfreyman, 2006, 2011) among other factors, the learning ecology that the participants described challenged them as learners of Macedonian. While Smith (2002) and Wiklund (2002) concluded that large, dense, heterogeneous networks promote language acquisition, participants in the current study showed that language can be (and is) studied even in the absence of such networks, although the learners perceived the lack of such networks/opportunities as a hindrance to their language study.

   Taking these findings about the language learning ecology into consideration, the learners' persistence with Macedonian language learning attests to their high level of self-motivation, which was

previously posited by Henderson (1974) and Dickinson (1987) for self-instructed language learners of more commonly taught languages. Some of these self-directed learning strategies that the participants exhibited included "actively controlling the learning situation" (Ulitsky, 2000) by seeking out resources and continuing to search for supplementary resources, including tutoring; "evaluating metacognitive learning strategies" (Ulitsky, 2000), such as "self-talk" (White, 1999) and "time lapse" (White, 1999); "developing regulatory and predictive techniques" (Ulitsky, 2000); and creating a routine (Hsu, Ching, Mathews, and Carr-Chelman, 2009): most of the participants described a regular schedule or set of activities they engaged in as part of their learning process. For several participants, the regularity of the process was a way to fit learning into their busy lives.

Lastly, all of the participants in this study had turned to the Internet for resources to learning Macedonian. But nearly all of them were using resources in addition to the materials provided by MLEC, the recruitment site for the study. They were supplementing the MLEC-provided online resources with websites which stream Macedonian content, such as news, movies, music, and e-textbooks from Macedonia, other websites which explain Macedonian grammar and vocabulary, online dictionaries and Google translate, Facebook, Skype, radio, and online flashcards, pointing to a potential normalization (Bax, 2003) of online technologies for LCTL study. The finding that the learners felt they needed supplementary resources echoes White's (1999), Bidlake's (2009), and Nielson's (2011) studies with adults studying foreign languages using self-instruction and CALL materials. However, what was surprising was that none of the participants spoke about evaluating the quality of the resources (including physical and human) that they found. Taking into consideration that nowadays schools are beginning to teach students about evaluating the quality of internet resources they find, this finding represents a large gap in the knowledge and awareness of learners that needs to be addressed.

Conclusions

In answering the research question how the learners' context (ecologically conceptualized) impacts language learning, the data showed that the impact was different for foreign language study in general vis-a-vis studying Macedonian. All of the participants in the study had studied other foreign languages prior to Macedonian. One difference between their study of other foreign languages and Macedonian was that the former was often in formal settings, such as in schools, whereas they studied Macedonian informally. Additionally, the participants' first experiences with studying foreign languages were with the more commonly taught (and heard) languages, such as English, Spanish, German, and French, and then they began to study Macedonian.

Another difference between these experiences is in the impact from the context, specifically the support they found in their ecosystem for learning and using the languages. For the most part, the participants reported that their previous foreign language learning experiences were facilitated by elements of the microsystem (for example, parents or grandparents who could speak a foreign language or say a few words in a foreign language), mesosystem (for example, growing up in bilingual or multicultural communities), and exosystem (for example, radio or TV programs using or teaching foreign languages). On the other hand, describing their ecological context for studying Macedonian, the participants painted a picture of a less helpful context than the one they described for language study in general: most of the participants reported support for their language learning/maintenance in their microsystem (although even this support was very limited) and through Internet resources in their exosystem, whereas their macrosystem exerted a negative impact upon their language study. While participants in general reported that their families were supportive of their study, more than two thirds of the participants did not consider their family as a resource for studying Macedonian. In addition, half of the participants could not practice their language with their families, friends, co-workers, or other members of their micro- and mesosystems and the remaining participants reported not being able to practice enough. In fact, all of

the participants listed this lack of opportunities for practicing the language as their biggest challenge in learning Macedonian.

This conclusion takes on an even greater significance when taking into consideration a previous study with the same population, which showed that many learners of Macedonian are motivated by one strong bond, such as would exist with a spouse or a significant other (Belamaric Wilsey, 2013). These learners are choosing to study Macedonian because of one strong social bond but are then not able to find a way to practice the language anywhere, including within the realm that inspired them to learn it in the first place.

It is in this environment that learners turn to resources in the exosystem via the Internet. Therefore, tutors and developers of resources for self-instruction need to take into consideration the learners' ecosystem and meet learners' needs for practicing communication, needs that are not being met in their physical environment.

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