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The Influence of Prior Language Learning Experiences on Learning of Unrelated or Distantly Related Languages

*Ewa Golonka*¹

Existing research provides evidence that learning one foreign language, and learning it well, makes learning another much easier. Learning another foreign language as an adult is easier both for those who acquired a second language (L2) in childhood and for those who acquired a second language as adolescents or adults in school. The learning of multiple languages within school settings in European countries, such as Benelux, Germany, Switzerland, and Austria, is a common experience. In the United States, deliberate adult third language (L3) instruction—which accounts for learner’s knowledge of other foreign languages—has been primarily in U.S. government training institutes.² In these training institutes, two types of third language instruction are practiced: conversion and cross-training. *Conversion* refers to the retraining of individuals with demonstrated proficiency in one foreign language into a closely related language; for instance, L2 speakers of Russian learning Serbian/Croatian. *Cross-training* refers to L3 instruction in which learners acquire an unrelated language, e.g., L2 speakers of German learning Arabic.

Where does the evidence come from?

The bulk of empirical evidence supporting the claim that learning L3 is easier than L2 comes from studies that demonstrate the positive and facilitative effects of bilingualism on the acquisition of subsequent languages. For instance, several studies found that bilingual subjects showed a higher level of L3 proficiency than monolingual ones while learning a third language for the same period of time (Cenoz & Valencia, 1994; Lasagabaster, 2000; Muñoz, 2000; Sanz, 2000). Other evidence of advantages of bilinguals over monolinguals while learning L3 comes

¹ I wish to thank Fred Eckman, Cathy Doughty, Bill Rivers, and Kathy Rhoad for their contributions to earlier versions of this article.

² In higher education, L3 learning is usually not deliberate; students enrolled in the same courses often have background in other languages, but the instruction does not account for that.

from a broad scope of investigations that included metalinguistic awareness (Jessner, 1999), writing (Sagasta Errasti, 2003), pragmatic competence (Safont Jorda, 2003), vocabulary acquisition (Keshavarz & Astaneh, 2004), and language learning aptitude (Eisenstein, 1980).

There are some documented cases (and many more anecdotal, self-reported instances) of adult L3 courses that were shorter than regular L2 courses but produced similar results. For example, Corin (1994) reported on a Serbian/Croatian conversion course at the Defense Language Institute that retrained 40 Czech linguists in Serbian/Croatian in a three-month period, rather than the typical nine-month period that Category II languages usually require. Based on the outcomes of the course reported using the Interagency Language Roundtable (ILR) scale, the median oral proficiency score in this course was level 2 and the mode was level 1+, which was comparable with the results of typical nine-month courses. Rivers (1996) reported that cross-training courses in Georgian and Kazakh (with Russian as L2) were one third the length of basic courses in these Category III languages.

What do we know about L3 acquisition?

The evidence currently available suggests that previous linguistic knowledge and previous language learning experience affect the individual's learning of consecutive languages. Learners tend to establish links between the target language (TL) and previously learned languages and to look for similarities among known languages (Rivers & Golonka, 2009 a, b). This ability to establish links between languages is possible due to cross-linguistic similarities among languages, both actual and perceived. Perceiving similarities, and in fact using them, are necessary for linguistic transfer to occur (Jarvis, 2000; Kellerman, 1995; Odlin, 2003; Ringbom, 2001). There is a general agreement among specialists that the more closely related the languages, the more transfer is possible. Specialists also agree that transfer from L2 to L3 is most salient in the lexical domain because learners can rely on a large number of cognates in related languages.

Most recent studies (e.g., Ringbom, 2007; Ringbom & Jarvis, 2009) distinguish different levels of transfer—item transfer (transfer of individual forms, such as sounds, morphemes, or words); procedural transfer (transfer of functions of the words or grammar rules); and overall transfer (transfer of both the form and the function). If the languages are closely related, quick and effective learning of items can occur, even at early stages of learning the L3 and at lower L2 proficiency. Procedural transfer, however, requires higher L2 proficiency levels in a closely related language. Additionally, the perceived

similarities can facilitate L3 comprehension regardless of the learner's level of L2 proficiency. However, to facilitate L3 production, a high level of proficiency in a closely related language is needed. If that is not the case, the perceived similarities can cause errors in production. All in all, learners with higher L2 proficiency benefit more from conversion training.

Relevant literature has very little, if anything, to say about whether any positive linguistic transfer is possible in a situation when there is a zero or near-zero relation of one language to another (e.g., English and Chinese). There is, however, evidence that even if languages are unrelated, the experience gained in L2 learning can still make learning a third language easier, because experienced language learners have a much better idea of how to learn a new language. In fact, metacognitive awareness is often cited as a critical factor acquired during L2 learning that can be beneficial in learning a new language; however, little empirical evidence exists on the topic (Thomas, 1988). In addition, L3 learners show a high tendency towards learner autonomy—that is, they tend to take the entire learning process into their hands (Rivers, 2001). Students who have prior experience with language learning understand the language learning process, build awareness of their learning styles and preferences, and develop appropriate learning strategies (Ramsay, 1980; Wenden, 1999).

What do we know about L3 instruction?

In spite of the growing body of literature on L3 acquisition, the field still lacks a systematic investigation of L3 instruction. Publications concerning L3 instruction often have not had a strong research base; they have been based on teacher observations or expert opinions rather than on empirical data. In general, the authors of these studies tend to suggest that L3 instruction should maximize the students' prior language knowledge and learning experience.

For closely related languages, there are documented efforts of developing instructional materials that take students' prior languages into account based on the principle that there is a high degree of mutual intelligibility between the languages (Gribble, 1987; Jensen, 1989; Jordan, 1991; Townsend 1995). However, the efficacy of these courses, which are highly contrastive in nature, has not been measured. In fact, contrastive analysis is often cited as a type of method that has potential to enhance L3 acquisition. However, contrastive analysis has been shown to be ineffective in L2 acquisition and its efficacy in L3 instruction is unproven.

Additionally, student and teacher selection for L3 courses is crucial to the success of those courses. Brecht *et al.* (1998) argues that the guiding principle for

student selection should be to place students in courses where the TL is as closely related to student L2 as possible and to select students with the highest possible L2 proficiency. Other self-reported data suggests that it is beneficial for the teachers to have a background in the students' L2s or at least be familiar with what language backgrounds their students come from.

Because no specific methodologies or materials exist for teaching L3 as an unrelated language, cross-training courses are often taught as regular L2 courses, and they only take advantage of the students' prior knowledge and experience through rigorous student selection into the program, e.g., only experienced learners selected. Anecdotal, self-reported data suggests that even in those cases students perceived their knowledge of another language as beneficial in learning L3.

Method

Using qualitative methodology, this study examines the effects of prior language knowledge and prior language learning experience on the acquisition of unrelated or distantly related languages.

Participants

Participants were 25 students enrolled in U.S. government cross-training courses and 10 instructors either teaching such courses or having backgrounds in teaching experienced language learners. All students were adult native speakers of English who ranged from 20 to 60 years of age, with the majority of students ranging in age from 26 to 30. Twenty female and five male students participated. All students demonstrated at least an ILR level 2 proficiency in a language that was unrelated to the language of their study (also called here a qualifying language). Table 1 below represents the language experiences of each student including the student's target language, qualifying language, and, if applicable, background in any other languages. Out of the 10 instructors, six were teaching in the cross-training program (henceforth called current instructors), and four were instructors with multiple years of experience teaching experienced language learners at various U.S. government training programs (henceforth called expert instructors). All of the current instructors were foreign nationals, with an average of 7 years experience as language instructors. All of the expert instructors were native speakers of English. Seven male and three female instructors participated. All instructors spoke English, although it was the native language for only four of them. Arabic and French were spoken by at least three of the instructors, and German, Italian, Iraqi Arabic, and Levantine Arabic were

spoken by two or more of the instructors. All of the current instructors taught either their native language or a language that is similar to their native language. On the other hand, all of the expert instructors taught a non-native language.

Table 1: Student Language Background

Student	Target Language	Qualifying Language	Background in languages other than TL and qualifying language
5	Arabic	French	Italian, Slovak, Spanish
7	Arabic	Spanish	
8	Arabic	American Sign Language	Japanese, Latin
9	Arabic	French	Spanish, Latin, Dutch
10	Arabic	French	
23	Arabic	Spanish	Hebrew
25	Arabic	French	Latin
6	Korean	French	American Sign Language
13	Korean	Russian	Serbo-Croatian, French, Spanish
14	Korean	Bulgarian	French, Serbo-Croatian, Macedonian, Korean
15	Korean	Spanish	Korean
16	Korean	Spanish	
20	Korean	Spanish	Italian, Japanese, Yoruba
1	Chinese	German	Spanish, Latin
2	Chinese	French	Latin, Spanish, Arabic
11	Chinese	French	Spanish, Hebrew
12	Chinese	French	Italian, Japanese
19	Chinese	French	Japanese, Spanish
17	Farsi	Russian	Spanish
18	Farsi	Spanish	German, Hebrew
21	Farsi	French	Italian, Russian, German, Dari
22	Farsi	Russian	German, Ukrainian, Bulgarian, Japanese, French
24	Farsi	German	Arabic
3	Pashto	Spanish	Basque, Portuguese
4	Pashto	Serbian	Spanish, Greek, Bulgarian, Macedonian, German

Data collection instruments and procedures

Protocols for the Learner Individual Interview and the Instructor Individual Interview (Appendix A) were developed based on insights from relevant literature. The format of the interviews was semi-structured in nature, meaning that the protocols served as a guide for the interviewers, permitting a focused conversation with the flexibility to probe and explore certain areas when relevant. The Instructor Interview Protocol focused on the instructor's background, the current or former cross-training courses, and the cross-training students. The Learner Interview Protocol included questions about the participant's language background, comparisons between the current program and any previous language learning experience, and student self-assessment about individual learning styles, strategies and overall characteristics as language learners.

Each semi-structured interview lasted between 45 and 75 minutes. They were conducted either by one or two interviewers. In the cases where participants consented to audio recording (30 participants), the interviews were digitally recorded and subsequently transcribed. In the cases where the participants did not consent to audio recording (five participants), the researchers took field notes which were later typed up and prepared for analysis.

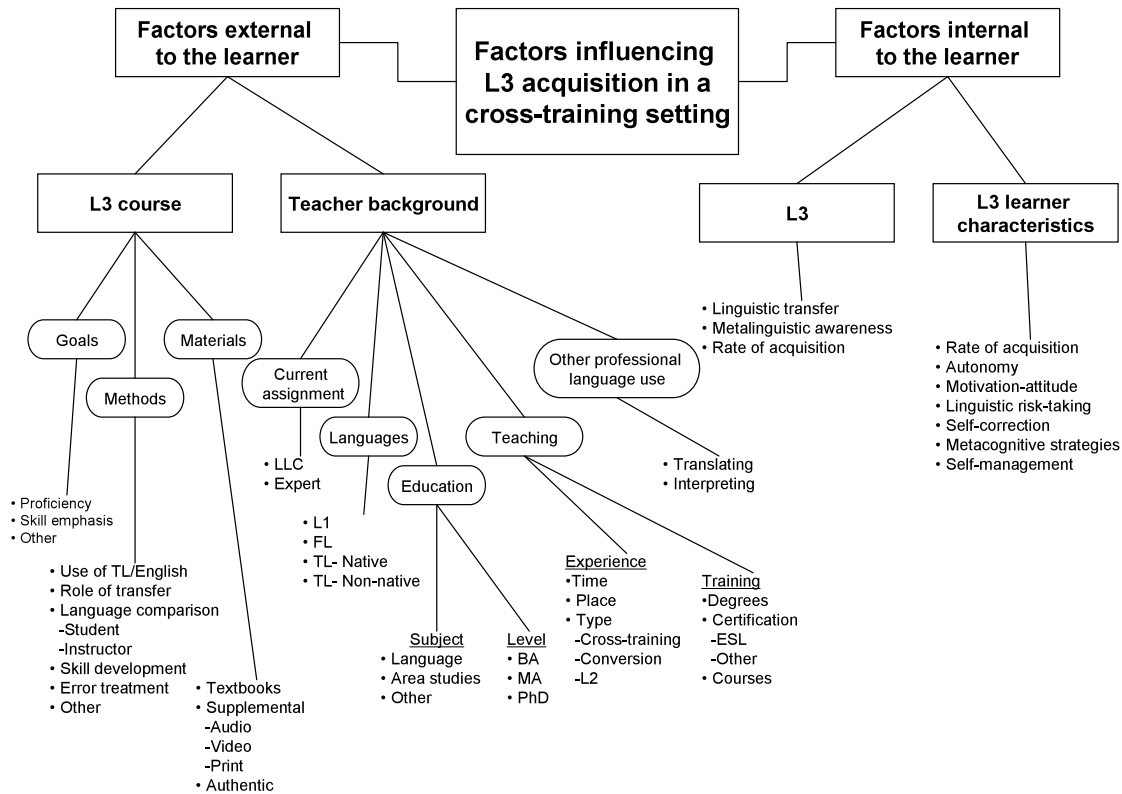
Data analytic procedures

A qualitative analysis software program, ATLAS.ti, was employed to code and analyze data. The starting point for this was the development of concept maps that organize the coding process (Figures 1 & 2, see below).

By reviewing the background literature on L3 acquisition, the interview protocols, and by examining the completed interview transcriptions, the analysts designed two concept maps, one to be used for instructor interviews and the other for student interviews. There is some degree of overlap between these two figures as they attempt to organize data that come from different sources, while focusing on the same phenomenon. This heuristic served as the basis for conceptualizing relationships among known and potentially new factors that are significant in adult language acquisition, such as students' and teachers' language background, education, and L3 learner characteristics. These factors were then further organized into two categories, factual and inferential, from which factual and inferential codes were developed. Factual codes focus primarily on low-inference, factual information of each student or instructor, e.g., level of education, number of languages studied, and length of study. Inferential codes require a high-inference level of judgment from the coder to identify the

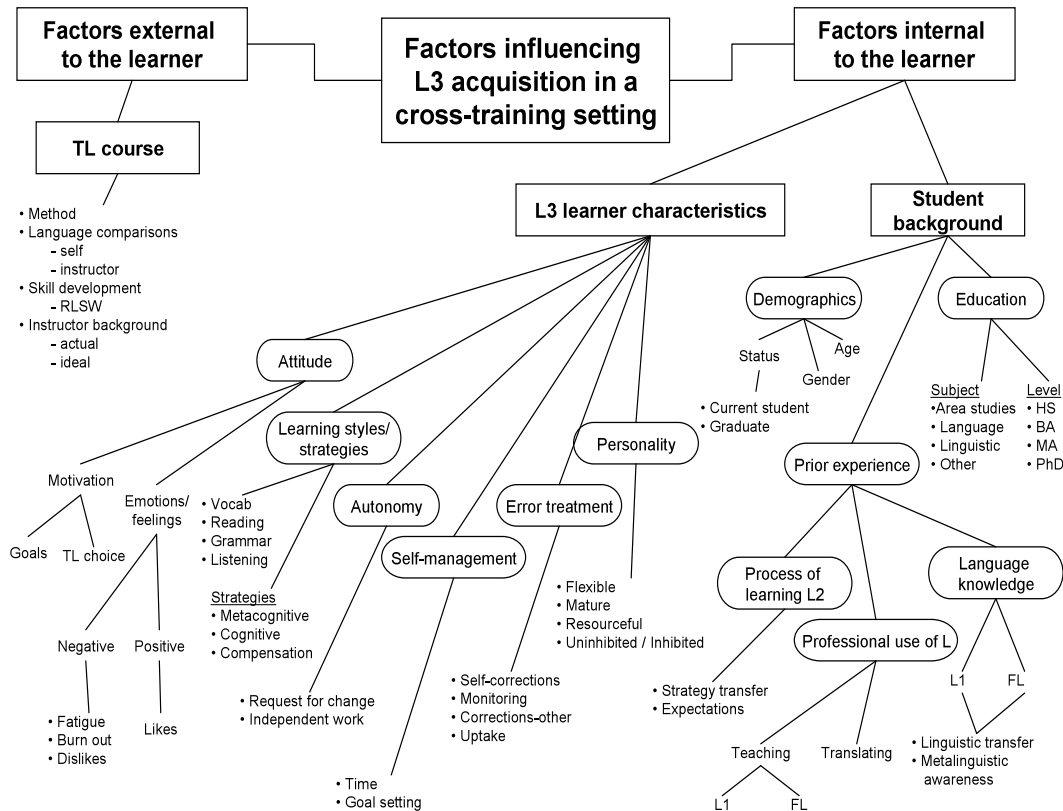
phenomena, e.g., to represent potential variables influencing language learning, such as learning strategies or self-related beliefs.

Figure 1: Instructor Interviews: Possible Factors Influencing L3 Acquisition in a Cross-Training Setting.



The codebook for this study contains 318 factual codes (189 for learner interviews and 129 for instructor interviews) and 175 inferential codes (101 for learner and 74 for instructor interviews). The factual coding was completed by two analysts and the inferential coding was completed by four analysts (five at the beginning of the process). In general, relatively high reliability is expected in factual coding, although lower levels of reliability are accepted in inferential coding. After the coding socialization period (when all analysts coded portions of interviews together, then separately, then refined code definitions, and added new codes), the analysts began coding the remaining interviews independently. Each time the coding of an interview was completed, a second analyst reviewed the codes and discussed disagreements with the first analyst, who then finalized the file based on the outcome of the discussion.

Figure 2: Student Interviews: Possible Factors Influencing L3 Acquisition in a Cross-Training Setting.



Inter-coder reliability

Inter-coder reliability was calculated mainly to develop the most adequate code book by refining the codes and code definitions while gaining experience with the interviews. Inter-coder reliability for factual coding was calculated using joint probability of agreement of the factual coding of both student and instructor interviews. There were four categories used in assessing the reliability: total: total number of codes; same: codes that were coded identically; different: codes that were coded differently; missing: codes that were present in one analyst's portion, but were not present in the other's portion (Appendix B). This process of testing reliability was repeated in six out of the 25 student interviews and five out of the ten instructor interviews. The achieved reliability for the former was 77% and for the latter, 83%. This was due to one analyst who added and utilized five new codes during coding procedures, while the other analyst did not, thereby causing the largest level of disparity in reliability.

Inter-rater reliability for inferential coding was calculated using the internal reliability for each rater. The internal reliability of each rater was calculated according to the equation: $R_{(x)} = N_{(x)} / (N_{(tot)} + E_{(x)})$, where

$R_{(x)}$ = a single coder's reliability score for one interview portion

$N_{(x)}$ = total correct codes by rater x

$N_{(tot)}$ = total number of correct codes determined by consensus

$E_{(x)}$ = extra codes by rater x

The results (Appendix B) allowed progress in reliability to be charted across time in two ways. First, each individual coder's performance from week to week could be compared. Second, the product of all the internal reliabilities, i.e., the inter-rater reliability score, could be compared from subject to subject, based on the equation:

$$R_{(tot)} = \sum N_{(xi)} / N_{(xtot)} + E_{(x)}$$

Two aspects of reliability should be noted. First, because each full interview was coded by one person, checked exhaustively by another person, and then corrected by the original coder, the potential for missed codes or otherwise anomalous coding was low. For that reason, the reliability scores do not necessarily reflect the quality of the actual coding that led to analysis. Second, the primary benefit derived from collective coding and discussion of the portions was refinement of the code list and code definitions according to the coders' experiences with the interviews. Consequently, the code list became well-tailored to the interview protocol and the types of answers that subjects gave, while remaining grounded in existing language-acquisition theory and empirical findings.

Results

The interviews revealed that learners from this study attempted to establish links between L3 and previously learned languages specifically related to their linguistic and metalinguistic L2 knowledge, as well as their experience in language learning.

Knowledge of an L2

Although the students' L2 and L3 may have been genetically related only distantly, or even unrelated, and further, even though all students perceived their L3 as unrelated to their L1 and L2, twelve (out of 25) students indicated that

knowledge of an L2 facilitated their acquisition of the L3. While each interview addressed transfer of linguistic knowledge from L2 to L3, only students who were learning Indo-European languages—Pashto and Persian Farsi—were able to identify specific instances of non-native transfer [i.e., transfer from a language other than their native language (L1)]. These students pointed to a number of distant, genetically related languages, such as Spanish or German, as being helpful in learning their target language—especially in learning its lexicon and to some extent its morphology and syntax. The following quotation from a Pashto student illustrates his willingness to look for similarities between Pashto and a number of distant, genetically-related languages in the area of lexicon:

“For example if you count to five in Pashto: ‘Yow, Dwa, Dre, Salor, Pinsa.’ Yow is not too far different from ‘uno’, or ‘one’, or ‘eins’, or whatever you want too... all the other Indo-European languages. Not all of them, but many of them, at least the Romance languages and some Germanic languages. Dwa, two, dos. Dre, tres. And you go to different words, ‘mother’ and ‘father.’ ‘Mother’ is ‘mor’, which is not too different from ‘madre’, from ‘mother’, from ‘mater’ or whatever. Father is ‘plar’, ‘pater’, ‘father’, ‘padre’. Water is ‘uba’, ‘agua’, ‘eau’ in French. When you know what to look for, you don’t always know what to look for, when you sort of have some clues of maybe what to look for, then sometimes you can find some similarities.” (Student 3, Pashto)

Some students also said they learn more quickly when they can identify similarities between languages because then they do not need explanations of certain grammatical concepts. As an example of such a “shortcut,” one student discussed word order learned in German, which was helpful in learning similar concepts in Pashto:

“German is one of the languages where it’s subject, object, verb. So, when it came to Pashto and I saw subject, object, verb, it wasn’t like a great enormous shock for me, because it’s like ‘OK, I’ve seen this before so we move on.’” (Student 4, Pashto)

Conversely, another group of eleven students learning non-Indo-European languages, specifically, Arabic, Chinese, and Korean, did not identify instances of linguistic transfer. They stated that because of huge differences between the TL and any other languages they previously learned, linguistic transfer is impossible. All of the students who believed that their previous knowledge did not affect their learning of a new language cited the distance

between the languages as the main reason for the fact that the previously learned languages had no effect on their L3. The following example shows that a student of Chinese believed that a related language was helpful in learning another foreign language in the past, but the unrelated one did not:

“I don’t know that the language itself did (help), in that Chinese has nothing to do with it. You take everything you think you know about language and throw it out the window and start fresh. French had a big impact on my ability to learn Italian, but I didn’t feel that sense of that degree of transfer in French to Chinese.” (Student 12, Chinese)

While the majority of students claimed that there were advantages of previous language knowledge, seven students indicated that their prior language knowledge interfered with their learning or use of the TL. It should be noted that all of the interference was described by the students as slight or minor. This is how one Chinese student discussed an example where interference occurred, because she already understood a particular grammar concept in Spanish:

“It was one of those things where it took me a while to learn the difference. [...] Because I had this preconceived notion in my head, I was expecting it to be in certain places where it wasn’t, and I was putting it in certain places where it wasn’t, or I was not expecting it to be in certain places where it was.” (Student 11, Chinese)

Metalinguistic knowledge

All expert instructors and the majority of the students pointed to metalinguistic knowledge as the most facilitative factor influencing the learning of a new, unrelated language.

Global awareness about language

The interviews with students and expert instructors revealed that L3 students possess the knowledge of what languages are and how they are constructed. Without being explicitly asked, all of the students demonstrated some aspects of metalinguistic knowledge by reflecting on the nature or functions of the language. While the interview protocol did not explicitly seek information about specific languages, in all of the interviews, students discussed some grammatical peculiarities of the TL. In answering a question whether previous knowledge of or about language helps or hinders the students in their learning, 16 students

expressed the view that the metalinguistic awareness has helped them significantly in L3 learning. As expressed by one Farsi student:

“I think knowing a specific language hasn’t helped as much as kind of (having) a global awareness of how languages work. I think that’s really it.” (Student 18, Farsi)

Several students stated that the previous study of other foreign languages gave them the grammatical basis they needed to study a new language. In fact, all of the students stated that they only started studying grammar while studying their first foreign language. One Chinese student said:

“So when I learned French grammar, that’s my grammar basis. When something comes up in Chinese, that’s when I need to apply it to French because that’s my only place I understand grammar. So, I guess having a base in the grammar helps.” (Student 2, Chinese)

Importance of English grammar

In addition to metalinguistic knowledge of other foreign languages, and of grammar in general, several students listed knowing English grammar as an important factor, claiming that English grammar learned through studying an L2 was beneficial in learning their L3. They indicated that English grammar gave them a needed foundation and stressed its importance and facilitative role in learning a new language. The following citations supporting this finding are from interviews with students of Chinese and Farsi:

“I actually learned the most grammar, the most English grammar in my foreign language classes. So, because of that, you know, when I’m learning Chinese I already have that foundation.” (Student 19, Chinese)

“I think this is one of the things maybe my Russian has helped in my Farsi is that there have been times that I never really understood English grammar. And I think that sometimes, and I have only referenced Russian, not because I understood Russian grammar better, but I knew it better because I was actually taught the grammar formally. So I think that that has helped me. [...] I think it has helped me to learn the grammar concepts, because even now I understand English grammar better.” (Student 17, Farsi)

Refined expectations about language

Students mentioned a number of other advantages of previously acquired language knowledge. For instance, some students listed an advantage of “having an open mind” while learning a new, unrelated language, which can be related to the discussion in Zobl (1992) and Klein (1995) on less conservative learning procedures by experienced learners. One Farsi student expressed:

“I just think that having learned a language made it easier for me to understand how to learn another language. You know, because other people are like ‘well it doesn’t make sense what they are saying in Farsi.’ It doesn’t make sense to us, but it makes sense; otherwise they would not say it. I think I learned that from learning German. [...] And I think from learning other languages I had an open mind about that and some people don’t have an open mind about that.” (Student 24, Farsi)

Another advantage that came out in the interviews was the fact that the L3 learners come to the classroom with set expectations about foreign languages that they had formed based on their knowledge of other languages. One Arabic student explained:

“But the structure is very different, and I think if I had only been exposed to English, I would have to get into my head the idea that the structure of another language is very different before I could actually learn the structure. Here it’s like I already got that the structure is going to be different than English...” (Student 5, Arabic)

Experience with language learning

While the linguistic knowledge that the L3 learners bring to the learning task is language-specific, the experience of learning another language is not. Rather, the experience gives the learners an understanding of the language learning process and builds their awareness of their own learning styles and preferences. Through the experience of learning other languages, the students are exposed to different learning situations and are able to develop strategies that work best for them.

Awareness of learning styles and preferences

All students interviewed in this study expressed the opinion that their prior language learning experience provided them with some learning strategies and study skills that they now use to support their new learning tasks. All of the interviewed students showed an awareness of their learning process, as well as

an understanding of what learning a language means and how it can be achieved. All of the students said that they know what works for them in terms of language learning. In particular, they all believed that they can accurately assess how they learn best. In most cases, they demonstrated knowledge of learning styles in general, and were familiar with relevant terminology.

The use of metacognitive and cognitive strategies

The majority of students showed that they understand their language learning needs and that they actively took steps toward fulfilling them. The interview protocol probed whether the students requested or proposed any changes to the course content or structure. Twenty-one of the students indicated that they had wanted, or asked for, changes to the current program. Below are two excerpts from student interviews discussing changes or improvements to the course content and structure:

“Initially, the way the program was presented was that we were supposed to focus on all four skills; it wasn’t supposed to just be reading and listening because it is understood that you just can’t take two skills of a language and just learn it. You learn a language best by doing everything. We started out that way, but the speaking and the writing became less and less emphasized and there were some of us who continually asked for more speaking practice.” (Student 12, Chinese)

“We did ask that things slow down a little bit. We were rushing through the chapters very quickly and we just couldn’t remember it. You learn a new set of vocab every two days, you use it a few times, and you move on. We wanted some review, maybe some practice once and a while to try the grammar patterns out and to make sure we got them.” (Student 6, Korean)

All of these students who had not made requests in previous courses asked for changes in the current cross-training program. Four students indicated that they did not ask for changes in the past because they lacked the confidence to do so. Below is a conversation between a student and an interviewer after the student discussed changes she proposed to the current course:

“Interviewer: Have you suggested or requested any changes in your French class or Italian class?”

Student: No.

Interviewer: Why not? Why now?

Student: Well, I think because I'm older and maybe I'm more confident. In this situation, I felt like I was a professional, and somewhat peers with my teachers." (Student 12, Chinese)

Another metacognitive strategy discussed in interviews was *selective attention*, sometimes called *directed attention*, which relates to focusing on specific parts of the language input that could help learning the important material in a learning task and ignoring irrelevant material (O'Malley, J. & Chamot, A. (1990). Those students who used selective attention as a strategy for learning did so mainly in reading and translation. Their strategy for reading something for the first time was not to look up every single word they did not know, but rather to look at the words they did know and try to get the meaning of what they were reading from context. One Arabic student felt that she had an advantage over L2 learners because she already knew that omitting some irrelevant information might help in performing some language tasks. She attributed this knowledge to her previous experience learning foreign languages:

"I'm not trying to translate every word. A lot of times when I see people who have not learned another language before, or who are for the first time trying to learn another language, they are trying to go 'word, word, word'. I think I already know that it's not going to work out that way. It's just 'how do you express the thought', and that saves some time." (Student 5, Arabic)

The interviewed students discussed the use of at least two cognitive strategies in their language learning: analytical thinking and analyzing contrastively. Some students in the cross-training program noted that they see language as a type of puzzle: "I always look at language as kind of a puzzle, so I actually enjoy figuring things out." (Student 9, Arabic). They usually look at the patterns and systems when learning the TL as a result of their metalinguistic knowledge. Speaking about defining patterns, one Farsi student compared learning a language to learning math:

"It is almost like math: A plus B equals C. You can't ever have A plus B and equal F. You know, like it is very systematic... so I think anyone who can define patterns and identify them and utilize them is the best. Because it is like that in every language." (Student 17, Farsi)

The interview protocol probed the students to find out whether they compare the languages they know without prompting from their teacher. Those who said that they try to compare their L2 and L3 stated that they do it to understand concepts, to have a point of reference, or to help to remember. Of

those who indicated that they compare the L2 and L3, several said that they find those comparisons useful.

Cross-training instruction

The results of this study indicated that cross-training classes, which foster the learning of a new TL after learning one or more unrelated languages, were taught as regular L2 classes. In particular, the instruction did not have specific cross-training goals that would take advantage of prior language training and experience that students bring to the learning situation. The course goals were usually proficiency oriented or specific-skill oriented. In all cases, teaching methods and materials were not adjusted to address the L3 learner. Very often, the instructors did not know the language backgrounds of their students. With the exception of sporadic L2-L3 comparisons, current instructors did not make any changes specific to L3 learning and teaching. The program mainly took advantage of the students' prior knowledge and experience by very rigorous selection to the program.

Discussion and Conclusions

The results of this study show that previous exposure to learning one foreign language can positively influence the learning of a new, unrelated or distantly related language. Based on student and expert instructor interviews, it can be concluded that metalinguistic knowledge about languages, including English, facilitates language learning of a distant language to a larger extent than the knowledge of a particular language. Experience of learning another language also plays an important role in learning a distant language, because the skills acquired during the years of studying foreign languages are not language-specific and can be transferred from one learning experience to another.

In the cognitive theory of learning, prior knowledge is listed as one of the key principles of learning (Ausubel, 1968; Hartley, 1998). In the field of foreign language learning, while the same idea is of interest, the extent to which it may influence learning a new language mainly depends on language proximity.³ If the languages of interest are unrelated or distantly related, not much prior knowledge is relevant (Ringbom, 2007). Because the participants in this study were students enrolled in cross-training courses, the challenge of this study was

³ Ringbom (2007) distinguishes between language proximity, i.e., similarities between the languages and language distance, i.e., differences between the languages.

to establish whether there is any prior knowledge to which learners can refer to in a situation where the languages of interest are unrelated or distantly related.

Not surprisingly, the topic of linguistic transfer was discussed by all of the participants of this study. The interviews with students revealed that their views regarding non-native transfer were consistent with the findings from previous research. These studies demonstrate common agreement among researchers regarding the cross-linguistic influence in closely related languages (Cenoz, 2001; Hammarberg, 2001; Ringbom, 2007). But even when languages are unrelated, or only distantly related, they can still share some characteristics that might be helpful to the students. The only students who discussed linguistic influence from languages like Spanish and German were students of two Indo-European languages: Pashto and Farsi. Conversely, all of the interviewed students stated that for languages that have little or no relationship to the languages the students already knew, it was not the students' knowledge of another language that helped them the most, but rather the students' knowledge *about* language in general, as well as the students' knowledge of grammar, including English grammar.

Ideally, in the L3 classroom, these learner-internal factors such as proficiency in one foreign language and metalinguistic knowledge can be put to use so that the students' prior experience is not only disregarded, but is in fact maximized. This can be achieved in part by the learners themselves and in part enhanced by instruction. The results of this study revealed that the learners believe that they are taking advantage of their prior learning experience, regardless of whether or not the instruction helps them in this process. Learners also revealed characteristics of autonomy, demonstrated in the use of a variety of metacognitive and cognitive strategies. Interviewed students showed the ability to take charge of their own learning by doing independent work, and they felt confident to propose changes to the course content or structure.

Results also demonstrated, however, that in the cross-training courses in which the interviewed students were enrolled, very few techniques specific to cross-training could be discerned. In fact, relatively few comparisons between the TL and another language (other than English) were mentioned. In all of those cases, the students expressed the view that those language comparisons facilitated their L3 learning. No other methods related to cross-training were used; the courses did not have specific cross-training goals, and in general, these courses were not taught differently than regular L2 courses. Thus, the interviews revealed that the program largely took advantage of the students' prior knowledge and experience through rigorous student selection into the program.

This way, all of the students in a classroom were experienced learners who had previously demonstrated that they were able to learn a foreign language. In addition, these students also possessed metalinguistic knowledge and knowledge of learning styles, strategies, and study skills beneficial to their learning of a new language.

As the review of relevant literature demonstrates, the field of L3 acquisition has not yet undertaken the systematic investigation of L3 instruction, especially in those cases where the relationship among languages known by an individual are typologically and genetically unrelated. Because no specific methodologies exist for teaching L3 as an unrelated language, it remains a challenge to determine how to best design the instruction in cross-training courses so that it can take full advantage of students' prior language knowledge and experience.

Appendix A: Interview Protocols

Learner Individual Interview Protocol

(Semi-Structured Interview)

Interview Questions: (1 hour)

Prioritized Questions:

- A. We would like to get a sense of your background and experiences learning and using foreign languages. Could you talk a bit about:
 - a. The foreign languages you've learned? Which is strongest?
 - b. Any proficiency tests/OPIs you've had in your FLs?
 - c. How long have you studied your strongest FL?
 - d. Where did you study your strongest FL?
 - e. In what context did you study it: classroom, immersion, study abroad?
 - f. Have you lived abroad?
 - g. Are you a native speaker of English? Did you learn other languages at home as a child?
 - h. Have you ever used your foreign language professionally? That is, has anyone paid you to use it?
 - i. Have you ever taught language: TL, English, other?
 - j. What language do you study here? When did you start this program?
 - k. Was the TL your choice?

- B. Now, we'd like you to think about your experiences learning other languages and compare them to your current experience. In particular:
- a. Is your learning experience in this program different compared to foreign language courses/programs you took in the past? If yes, in what ways?
 - b. Does the fact that you've studied other languages in the past and that you know them now influence you in any way in this program?
 - i. Is it advantageous?
 - ii. Is it a hindrance?
 - c. Is your learning experience different now compared with when you first started this program?
- C. Next, we'd like to talk about you as a language learner:
- a. I know this program is very intensive. What motivates you to keep going?
 - b. You are spending several hours in class every day, and then you need to do your homework, study for tests, etc. How do you manage your learning on a day-to-day basis? How do you plan your day?
 - c. Do you set (immediate and long-term) goals for yourself?
 - d. Can you accurately assess how, where, and when you learn best? In other words, do you know what works for you?
 - e. Do you know more about your learning styles/preferences and needs now than when you were learning L2?
 - f. Have you requested changes to this course content or structure? Either individually or collectively?
 - i. What changes? Can you give examples?
 - ii. Why? What goals did you have in mind?
 - g. Have you requested/suggested changes to any other course you took prior to this program?
 - h. Given a reading task, how do you approach new words? Why? How do you know to apply such a strategy?
 - i. How do you prefer to learn new vocabulary?
 - j. Do you find it easier or harder to learn TL vocabulary now than when you first learned L2?
 - k. Do you find it easier or harder to learn TL grammar now than when you first learned L2?

- l. Do you sometimes look through material ahead of time to see how it is organized in order to prepare for an upcoming task? If yes, do you study new material ahead of time?
 - m. Are you concerned about making mistakes while speaking in TL? In another language?
 - i. Do you find it useful to be corrected by your teachers? Colleagues?
 - ii. How do you prefer to be corrected?
 - iii. Do teachers tend to correct all/most of the errors?
 - iv. Does this sound like a good practice?
 - v. What do you then do following their corrections?
 - n. Do you monitor your own speech: look for mistakes and correct them after they occur, or even before they occur?
- D. Now we'd like to talk about this program.
- a. Does this program take advantage of your background knowledge of another foreign language?
 - b. Do teachers compare your L2 and TL in class? English and TL?
 - i. What areas: (syntax, morphology, phonology, lexis, culture, etc.)?
 - ii. Do you find such comparisons useful?
 - c. Do you look for differences/similarities between L2 and TL with no prompt from your teacher?
 - d. Are there more/fewer grammar explanations in this course than in your previous language courses?
- E. Now we'd like to talk a bit about this program in particular, without referring to your past language learning experiences.
- a. Which skills are you learning faster/slower: reading, listening, speaking, or writing?
 - b. How do you think you are progressing compared with other learners in class? Why do you think so?
 - c. If you are doing better/worse than others, what accounts for it?
 - d. As you know, you had to demonstrate proficiency in a second language in order to enroll in this program. Is this a valid criterion for screening applicants? Does this make sense to you?
 - e. If it were up to you, what might be the background of an ideal student for this program?
 - f. If it were up to you, what might be the background of an ideal teacher for a course in this particular program?

- g. If it were up to you, how would you structure the program? What might be done a little bit differently? Any ideas for improvement?
- F. Wrap Up:
 - a. Has anything occurred to you that we haven't asked about that you feel is relevant?
 - b. Do you have any questions for us?

Instructor Individual Interview Protocol

(Semi-Structured Interview)

Prioritized Questions: (1 hour)

1. Can you tell me a little bit about how you learned the language that you're teaching now, and any other languages that you know? (Follow up and see how much of it is formal coursework and at what level, how much is native exposure, and how much is immersion experience.)

Also, what kind of teacher training have you had that you can call upon to help you with this current position?

2. Have you taught any cross-training courses in the past, or is this your first time? If you have taught courses like this before, what were they and how many times have you taught them?
3. Now I'd like to talk about the different ways that courses like the one you're currently teaching are developed and implemented. I have four different aspects of development and teaching that I want to talk about one by one: the goals of the course, the methods use, the role of linguistic similarities and differences, and the materials that you use.
 - a. Course goals
 - i. What are the goals of the class you're teaching now? Are any of them specifically cross-training in nature? (In other words, are there goals that are taking into account the fact that the students know at least one other language?)
 - ii. What course goals are explicitly communicated to the students?
 - iii. What are the proficiency goals of the course? In what skills?
 - iv. Which skills are emphasized in this course?
 - b. Methods

- i. It's probably a little different to teach students who already have studied a foreign language than it is to teach students who are learning a foreign language for the first time. Have you changed the way you teach at all for students in this kind of cross-training class? If so, how?
 - ii. What are the kinds of instructional methods that you're using in this class?
 - iii. Can you talk about the proportion of language use in the class? How much of the time are you and the students using English, and how much of the time are you using the target language (the language that you're teaching them in the class).
- c. There are always similarities and differences between languages, and the fact that students are familiar with other languages besides English may both help them and cause problems with their learning. Do linguistic similarities and differences between languages play a role in this class? Do you know what other languages the students you're teaching already know? And do any of the following play a role in your teaching?
 - i. Linguistic transfer (syntax, morphology, phonology)
 - ii. Lexical transfer
 - iii. Cultural transfer
 - iv. Are these kinds of transfer helpful for teaching or learning in this class? Or do they cause problems? Can you give some examples?
 - v. Do you think students are transferring more from English (or their native language if it's not English)? Or do you think they're transferring more from their second language? Can you give some examples?
- d. Materials
 - i. Do you have materials that have been adapted to take into account that your students aren't learning a foreign language for the first time? If so, what are they? And if it comes through in your teaching but not written materials, in what ways?
 - ii. Do you use any materials that were written for native speakers by native speakers? Like newspaper articles or

- texts from the Internet? If so, what do you use, and how do students seem to respond to these materials?
4. What does the learning curve look like for students who are learning a third language as compared to students who are learning a second language?
 - a. High, fast, initial gain and then leveling off?
 - b. What does the learning curve look like for different skills?
 - c. Is there a relationship between how well students speak, write and listen in their second language and how well they speak, write, and listen in the target language that you're teaching in this class? Do you think that if they are more proficient at their second language they'll acquire the target language faster?
 5. Could you compare the way students behave in this class as compared to students in classes where they're learning a second language for the first time? [Of course, this should be skipped if the interviewee has no basis for comparison.] Can you please talk about these areas?
 - a. Rate of acquisition
 - b. Autonomous learning
 - c. Motivation and attitude toward the learning process
 - d. Linguistic risk-taking
 - e. Error self-corrections
 - f. Metacognitive learning strategies (e.g., planning, setting goals, self-evaluation, monitoring)
 6. If you have enough experience to make an assessment, can you talk about how the outcomes of classes like these compare with the outcomes of basic L2 courses for this language?
 7. Whenever I teach, I'm always thinking about ways that the course could be done a bit better the next time. Do you have any ideas of what you might do a little bit differently the next time you teach this class or a class like it? Any ideas for improvement?

Appendix B: Reliability Measures

Table 2: Factual Reliability for Coded Student Interviews

Interview Number	Number of Lines	Total	Same	Different	Missing Codes	Reliability
22	30	22	20	2	0	91%
23	30	10	10	0	0	100%

24	30	12	7	0	5	58%
8	30	20	14	5	0	70%
15	30	17	13	4	0	76%
18	30	30	22	4	4	73%
Mean Overall						77%

Table 3: Factual Reliability for Coded Instructor Interviews

Interview Number	Number of Lines	Total	Same	Different	Reliability
4	30	22	16	3	73%
7	30	3	3	0	100%
8	30	8	6	2	75%
9	30	26	21	5	81%
10	30	17	17	0	100%
Mean Overall					83%

Table 4: Inferential Reliability for Coded Student and Instructor Interviews

Coder	STU 18	STU 23	INS 2	INS 5	INS 9
1	69%	57%	56%	67%	74%
2	62%	56%	70%	72%	52%
3	54%	51%	54%	67%	44%
4	62%	50%	71%	72%	59%
5	62%	N/A	N/A	N/A	N/A
Reliability	62%	54%	63%	69%	57%

Works Cited

- Brecht, R., Frank, V., Rivers, W., & Walton, A. (1998). *A guide for foreign language cross-training*. Research Report No. 98-01. Monterey, CA: Defense Language Institute Foreign Language Center.
- Cenoz, J. (2001). The effect of linguistic distance, L2 status and age on cross-linguistic influence in third language acquisition. In J. Cenoz, B. Hufeisen & U. Jessner (Eds.), *Cross-linguistic influence in third language acquisition: Psycholinguistic perspective* (pp. 8-20). Clevedon, Buffalo, Toronto, Sydney: Multilingual Matters.

- Cenoz, J., & Valencia, J. F. (1994). Additive trilingualism: Evidence from the Basque Country. *Applied Psycholinguistics*, 15, 195-207.
- Corin, A. (1994). Teaching for proficiency: The conversion principle. A Czech to Serbo-Croatian conversion course at the Defense Language Institute. *ACTR Letter: Newsletter of the American Council of Teachers of Russian*, 20 (1), 1-5.
- Eisenstein, M. (1980). Childhood bilingualism and adult language learning aptitude. *International Review of Applied Psychology*, 29, 159-175.
- Gribble, C. (1987). *Reading Bulgarian through Russian*. Columbus, OH: Slavica.
- Hammarberg, B. (2001). Roles in L1 and L2 in L3 production and acquisition. In J. Cenoz, B. Hufeisen & U. Jessner (Eds.), *Cross-linguistic influence in third language acquisition: Psycholinguistic perspective* (pp. 21-41). Clevedon, Buffalo, Toronto, Sydney: Multilingual Matters.
- Jarvis, S. (2000). Methodological rigor in the study of transfer: Identifying L1 influence in the interlanguage lexicon. *Language Learning*, 50, 245-309.
- Jensen, J. (1989). On the mutual intelligibility of Spanish and Portuguese. *Hispania*, 72, 848-852.
- Jessner, U. (1999). Metalinguistic awareness in multilinguals: Cognitive aspects of third language learning. *Language Awareness*, 8, 201-209.
- Jordan, I. (1991). Portuguese for Spanish speakers: A case for contrastive analysis. *Hispania*, 74, 788-792.
- Kellerman, E. (1995). Crosslinguistic influence: Transfer to nowhere? *Annual Review of Applied Linguistics*, 15, 125-50.
- Klein, E. (1995). Second versus third language acquisition: Is there a difference? *Language Learning*, 45, 419-465.
- Keshavarz, M., & Astaneh, H. (2004). The impact of bilinguality on the learning of English vocabulary as a foreign language (L3). *Bilingual Education and Bilingualism*, 7(4), 295-302.
- Lasagabaster, D. (2000). The effects of three bilingual education models on linguistic creativity. *International Review of Applied Linguistics*, 38, 213-28.
- Muñoz, C. (2000). Bilingualism and trilingualism in school students in Catalonia. In J. Cenoz and U. Jessner (eds.), *English in Europe. The acquisition of a third language*. Clevedon: Multilingual Matters.
- Odlin, T. (2003). Cross-linguistic influence. In C. Doughty & M. Long (eds.), *The handbook of second language acquisition* (pp. 436-86). Oxford: Blackwell.
- O'Malley, J. & Chamot, A. (1990). *Learning strategies in Second Language Acquisition*. Cambridge: Cambridge University Press.
- Ramsay, R. (1980). Language-learning approach styles of adult multilinguals and successful language learners. In V. Teller & S. White (Eds.), *Studies in child*

- language and multilingualism* (pp. 73-96). New York: New York Academy of Sciences.
- Ringbom, H. (2001). Lexical transfer in L3 production. In J. Cenoz, B. Hufeisen & U. Jessner (Eds.), *Cross-linguistic influence in third language acquisition: Psycholinguistic perspective* (pp. 59-68). Clevedon, Buffalo, Toronto, Sydney: Multilingual Matters.
- Ringbom, H. (2007). *Cross-linguistic similarity in foreign language learning*. Clevedon, UK: Multilingual Matters.
- Ringbom, H. & Jarvis, S. (2009). The importance of cross-linguistic similarity on foreign language learning. In M. Long & C. Doughty (eds.), *The handbook of language teaching* (pp. 106-118). Wiley-Blackwell.
- Rivers, W. (1996). *Self-directed language learning and third language learner*. ERIC Document ED411679.
- Rivers, W. (2001). Autonomy at all costs: An ethnography of metacognitive self-assessment and self-management among experienced language learners. *Modern Language Journal*, 85, 279-290.
- Rivers, W. & Golonka, E. (2009a). Third language acquisition theory and practice. In: M. Long & C. Doughty (Eds.), *The handbook of language teaching*. Blackwell Publishing.
- Rivers, W. & Golonka, E. (2009b). Third language acquisition: A cases study. In: R. Brecht, L. Verbitskaja, M. Lekic, & W. Rivers (Eds.), *Mnemosynon: Studies on language and culture in the Russophone world*. Azbukovnik, Moscow.
- Sanz, C. (2000). Bilingual education enhances third language acquisition: Evidence from Catalonia. *Applied Psycholinguistics*, 21, 23-44.
- Safont Jorda, M. P. (2005). *Third language learners: Pragmatic production and awareness*. Clevedon, UK: Multilingual Matters.
- Sagasta Errasti, M. P. (2003). Acquiring writing skills in a third language: The positive effects of bilingualism. *International Journal of Bilingualism*, 7(1), 27-42.
- Thomas, J. (1988). The role played by metalinguistic awareness in second and third language learning. *Journal of Multilingual and Multicultural Development*, 9, 235-246.
- Townsend, C. (1995). *Teaching the Czech language through Russian: Преподавание чешского языка посредством русского (Prepodavanije češského jazyka posredstvom russkogo)*. Columbus, OH: Slavica.
- Wenden, A. (1999). Metacognitive knowledge and language learning. *Applied Linguistics*, 19, 515-537.
- Zobl, H. (1992). Prior linguistic knowledge and the conservatism of the learning procedure: Grammaticality judgments of unilingual and multilingual learners.

In S. Gass & L. Selinker (Eds.), *Language transfer in language learning* (pp. 176-196). Amsterdam, Philadelphia: J. Benjamins.