# Effect of prosody awareness training on the quality of consecutive interpreting between English and Farsi

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# Chapter eleven

# Conclusion

## 11.1 Introduction

In this thesis, I focused on prosodic feature awareness training and its effect on different aspects of interpreting, the pedagogy and current problems of curriculum building in interpreting studies. I made an attempt to relate the intersubjective expert judgments to objective measures that can be expected to correlate with judgments. The aim of this study was to investigate the effect of prosodic feature awareness training on different aspects of interpreting for interpreter trainees. The study aimed to gain a solid platform for developing theories in training qualified future interpreters. Also, the study aimed to get a result which can increase both the intelligibility and naturalness of our systems within speech production and raise the efficacy of recognition in interpreting. So far, no experimental studies have been done on the effect of prosodic awareness on the quality of interpreting. The result of this study showed that interpreter trainees perform better when they have conscious knowledge of stress at the word level and sentence level. Statistical analysis of the data showed that awareness of word stress would have more contributions on interpreter trainees' performance especially on the variables of accent, pace, voice and accentuation. Now some concluding remarks about these issues will be made and shortcomings of this study and some clues for future research in this area will be pointed out as well.

## 11.2 Summary of main findings

The starting point of the present research project was that adult students of a foreign language will find it difficult, if not impossible, to acquire native competence in the foreign language. A high level of proficiency in the foreign language is required, nevertheless, for anyone who wants to be a successful interpreter. In this dissertation all interpreting was done between Farsi and English, two languages which belong to the same Indo-European language family but which have departed enormously from each other over the centuries, to the extent that no mutual intelligibility remains. Phonologically, Farsi is characterized by a very simple syllable structure, a syllable-timed rhythm, a simple (almost fixed) word-stress system, and a sentence stress system that is not sensitive to pragmatic rules. English, in contrast, allows complex syllable structures, is stress timed, has a complex and highly irregular system for assigning word stress, and assigns focus through sentence stress by an interaction of syntactic and pragmatic rules. The hypothesis that underlies the entire dissertation is that making Iranian (i.e., Farsi-speaking) student interpreters aware of the peculiarities of the prosody of English and how English prosody differs from that of Farsi, would yield better quality interpreting between English and Farsi.

The first experiment that I reported on (Chapter 3) confirms this basic hypothesis unequivocally. The experimental group, which received explicit training in prosody awareness, was rated 14 points better on a scale from 0 to 100 than the control group (71.3 versus 57.5), even though no differences between the two groups were found at the start of the experiment. It was not the case that the control group received less training time; rather, the control group spent more training time on consecutive interpreting according to the traditional training method (i.e., learning by doing) while the experimental group spent less time on the routine curriculum to free up time for the prosody awareness modules. At the same time, however, the results of the experiment showed that a factor of overriding importance was the student's individual proficiency in English at the start of the experiment. The better the student's proficiency (as indexed by his/her TOEFL score), the better the quality of interpreting. Given the massive effect of proficiency (explaining 88 percent of the variance in the quality ratings), it is all the more surprising that the prosody training still accounted for another 5 percent of the variance in the quality assessment.

Importantly, the direction of the interpreting in the first experiment was *recto*, i.e., from foreign English into native Farsi. It came somewhat as a surprise that prosody training should have such strong effects on the quality of *recto* interpreting. Greater awareness of the prosodic characteristics of English, and of the prosodic differences between English and Farsi, apparently prompted the better performance by the experimental group. We reasoned that the prosody awareness training should pay off especially in the phase of the *recto* interpreting process during the perception of the input speech in English. Better knowledge of word and sentence prosody should pay off, first of all, in better word recognition in the foreign language. Secondly, insight in the way English exploits sentence prosody (phrasing, marking communicatively important information through sentence stress), led us to predict that our prosody training would improve overall comprehension of spoken English.

Chapter 4 showed that, indeed, our prosody awareness training resulted in better recognition of English words. The experiment was set up in exactly the same way as the interpreting experiment but new participants were enrolled and the post-test was a word recognition test that required the participants to simply listen to English words and write them down in ordinary spelling. The experimental and control groups were matched for proficiency on English, and no difference in word recognition scores were found at the start of the experiment (31% correct recognition for either group). However, at the end of the training program the experimental group outperformed the control group in a comparable word-recognition test by four points, which was a significant difference.

Chapter 5 repeated the experiment with yet another group of students but this time the post-training test was a standard multiple-choice listening comprehension test. Again, participants were matched for English proficiency and proved identical at the start of the experiment with a listening comprehension score of 52% for each group. However, at the end of the prosody awareness training the control group had not improved its listening comprehension whereas the experimental group had gained 3 points, which represented an admittedly small but statistically significant improvement.

In light of the first three experiments, then, it seems reasonable to conclude that prosody awareness training is beneficial to student interpreters in *recto* interpreting and that at least part of the gain can be explained through better word recognition and better text comprehension in the foreign (English) input speech.

In a fourth experiment (in Chapter 6) we wondered whether prosody training would be more effective than making the students more aware of the segmental differences between English and Farsi. This would be a strategic experiment in the sense that it may tell us whether we should invest the limited time available for the phonetic/phonological aspects of the interpreting curriculum in segmental or in suprasegmental properties. This time an experiment was set up with three groups of students, which were matched on TOEFL scores and which obtained identical scores on a listening-comprehension pre-test. One group was trained according to the routine curriculum, the second group spent less time on the routine training and received the prosody awareness modules instead, while the third group spent an equal amount of time and effort on segmental differences between English and Farsi. The control group gained an insignificant .5 of a percent better listening comprehension while the prosody group gained a significant 3.5 points (comparable to the gain found in the earlier experiment on listening comprehension). The segmentally trained group had the strongest gain in listening comprehension, i.e., 7.1 points, which made it significantly better than the two other groups. The conclusion follows that segmental training would be an (even) better investment in the interpreting curriculum than prosody awareness training, and that the combination of both types of training would (hypothetically) yield superior listening comprehension and interpreting quality.

In Chapter 7 we aimed to establish objective correlates of the various rating scales used by the experts to assess the students' interpreting performance. Strong correlations were found between several assessment scales and objective correlates, which could be either counts of errors in written transcripts of the students' oral interpreting performance or acoustic measures that relate to optimal pace (rate of delivery by the interpreter). This can be seen as cross-validation of the intersubjective assessment made by the experts. The results also allowed us to come up with objective criteria in a later stage of the project when we wanted to ascertain whether indeed *recto* interpreting yields better quality than *verso* interpreting.

It was our working hypothesis that prosody awareness training would be more beneficial for interpreting into the foreign language (*verso*) than into the interpreter's native language (*recto*). The effects of the prosody training should be immediately noticeable as a reduction of incorrect word stresses and inappropriate sentence stresses, i.e., speech production errors that might seriously compromise the interpreter's intelligibility in the non-native language. To test this hypothesis, the *recto* interpreting experiment carried out in Chapter 3 was repeated in Chapter 8 but this time all training and testing was done in *verso* interpreting. Again, the experimental and control groups were matched in terms of their English proficiency TOEFL scores, and obtained identical interpreting assessments at the beginning of the training. At the end of the training period, the students who took the prosody awareness modules, obtained better interpreting quality ratings than the control group that followed the routine curriculum. The gain obtained by the experimental group was only a little better (2.2 points) than that obtained by the

control group (a negative gain of .2 points). The effect of the prosody training was significant but small in comparison to the effect found in *recto* interpreting (14 points better for the experimental group. We must conclude, then, that prosody training is more beneficial in *recto* interpreting, in that it crucially facilitates the processing of the non-native input speech.

In Chapter 9 we tested the hypothesis that *verso* interpreting is more difficult than *recto* interpreting. We took our cue from Gile's (1995) processing model of interpreting, which predicts that *verso* interpreting makes 22% more demands on the interpreter's mental resources than *recto* interpreting. The results of Chapter 3 (*recto* interpreting) and Chapter 8 (*verso* interpreting) were compared to test this hypothesis, both in terms of the intersubjective assessment by expert raters and in terms of objective correlates of interpreting quality as established in Chapter 7. The results of the comparison showed that, indeed, the difference in interpreting quality differed (by 23%) in favour of *recto* interpreting. Moreover, *recto* interpreting showed superior performance in terms of objective correlates of quality: a faster speech rate and articulation rate coupled with longer silent pauses, fewer false starts, repetitions and filled (i.e., hesitation) pauses. Rather unexpectedly, however, *verso* interpreting turned out to be more accurate in terms of preservation of meaning, i.e., fewer concepts in the input speech were incorrectly rendered or omitted in the interpretation. In hindsight, it would appear that the greater passive than active knowledge of the foreign language allows the interpreter to recognize relatively unusual words and phrases, which, once understood, can easily be expressed in the vocabulary of the interpreter's native language. Although the same words and phrases would be recognized effortlessly in the native language, finding adequate equivalents in the foreign language would be more difficult.

In the last experiment we aimed to find an answer to the question which foreign-language teaching instruction would yield better results: the explicit prosody awareness training we have used so far or an implicit teaching method with intensive exposure to differences in word and sentence stress in English (relative to Farsi) but no explicit explanation of the differences in the English and Farsi prosodic rules. Again, three groups of students were selected such that English proficiency was matched across individual participants and no significant differences in interpreting performance were found in a pre-test at the beginning of the training period. After completion of the prosody awareness training, however, the control group had not gained at all by the interpreting training (indicating possibly that the post-test was more difficult than the pre-test). The implicit instruction group gained one percentage point but was not significantly better than the control group. The group that underwent explicit prosody awareness training gained 5 percentage points, which was significantly better than the other two groups. We conclude from this final experiment that an explicit, cognitive and rule-based explanation of prosodic differences between native and foreign language should be the preferred teaching method in the interpreter training curriculum.

## 11.3 General discussion and implications

Studies on the teaching of English prosody as a foreign language during the last decade have made clear the significance of suprasegmental features in the production of

language and perception of spoken messages (Anderson-Hsieh et al. 1992, Anderson 1993, Brazil et al. 1980, Chela-Flores 2003). Moreover, it has also been found (Derwing et al. 1998) that EFL students who had received awareness training emphasizing supra-segmental features would transfer their knowledge to spontaneous language production in the real world. However, prosodic feature awareness training is not a priority in most EFL and interpreting programs or in materials for instruction (Chela-Flores 2003). The lack of teaching supra-segmentals is not based on those extensive gaps in theoretical investigations and pedagogical materials but is due to the fact that practitioners consider it unimportant (Chela-Flores 2003). Teachers and material producers have focused more on stress and intonation than any other aspects of pronunciation because stress and intonation have vital role in communication of meaning (Gilbert 1993, Morley 1987, Chela-Flores 2003). Rather, the lack of attention seems to be due to the intrinsic difficulty found in the teaching of stress and intonation (Roach 1991, Chela-Flores 2003). In teaching of prosody, the important element in an academic setting would be instructors who should be proficient enough in teaching and practicing prosody. The most important reasons would be that more often than not the instructors themselves are not qualified because they are not aware of linguistic issues of message communication, especially the effect of prosodic awareness in message communication (Pearl 1995, Kornakov 2000). It was stated that this issue can be remedied through having in-service training for instructors in different academic settings.

The general curriculum of interpreting studies was discussed and it was suggested that the curriculum of interpreting studies needs to be modified in order to meet the needs of students in this field so that it can make them qualified interpreters in their future jobs. One of these changes can be in the period of training for interpreters. The training period at present is in most of the cases too long since most of the students do not show any interest to enter into training settings since they think that it would take a long time for them to graduate and find a job in their field. Therefore, they prefer to embark on other, related fields. Another aspect requiring change would be the quality of training which needs to be reconsidered and modified. In some domains of interpreting at this time there is no training of prosodic features and differences therein between the source and target language involved in the interpreting task. A third aspect can be the syllabus instructors use in different classes, which needs to be studied to see which points and domains function better compared to other ones. Therefore, according to the nature of learning, sound and logical decisions should be made in order to get good results. The following points should receive more attention in interpreting studies. Firstly, a comprehensive curriculum should be designed while cooperating with scholars in this field. As Sawyer (2004) pointed out, the most important problem in doing studies in the area of curriculum of interpreting would be unreliable sources (Pym 1998) about the documents. Collecting these documents from different academic settings and schools of interpreting studies would be so difficult because in most of the cases there would not be an exact place in collecting them. Secondly, implementation of the new curriculum should be done with more attention to training settings. In this regard, Sawyer (2004) asserted that the complexity of curriculum design and perceiving this issue by practitioners should be taken into account. Lateral, required expertise in different dimensions should be available when implementing those aspects and there should be reliable assessment to see whether the curriculum would be effective or not. Thirdly,

evaluation of students' performance in different universities according an educational plan should be done with careful attention to all aspects of learning.
Moreover, it was suggested that prosodic feature awareness training should be included in the curriculum of the training of future interpreters. So, this demands that instructors, who are the models in most of the cases for the interpreter trainees, be conscious and proficient enough in the perception and production of prosodic features of the language(s) that they are working with. The materials which are produced for the interpreter training should include prosody teaching and tasks which can make the learners raise their consciousness about this aspect. Omission is viewed negatively by most instructors. Such critics should be aware that in some cases omitting part of the message makes the mediation of meaning comprehensively possible since the interpreters would be under time pressure, cognitively overloaded and tired by concentrating so the omission makes them release from this pressure.

Prosody and its role in interpreting were investigated and it was suggested that prosodic feature awareness training should be an important element on training future interpreters. Prosody plays an important role in the process of word recognition, a role which assumes greater relative importance when the segmental speech quality deteriorates, as in synthetic speech or in speech spoken with a non-native accent (e.g., Van Heuven 2008). In low-quality speech, recognition of words by native listeners will be problematic when an incorrectly placed stress directs the listener to access the wrong part of the mental lexicon.

Since two languages are involved in interpreting (source and target language), when interpreters suffer from memory overload in the highly demanding context of interpreting (in real time and often in front of an audience), conscious awareness of the stress pattern of the source language will help the interpreters to fill the gaps in received distorted messages, which in these circumstances are typically imparted through degraded speech.

The issue of consciousness raising in the area of prosody was elaborated and it was pointed out that interpreter trainees should be trained in this aspect. The important role of 'consciousness raising' in the field of second-language learning has been stated by different researchers. According to Schmidt (1990) there has been a widespread recognition that consciousness has a very important role in learning in general and specially in language learning after the decline of behaviorism. The mainstream perspective in current cognitive psychology would be that awareness is a fundamental aspect of learning and it has even been stated that it is impossible to have learning without conscious awareness (Brewer 1974, Dawson & Schell 1987, Lewis & Anderson 1985). Bialystok (1978) provided a theoretical framework in which consciousness knowledge plays a very important role. Moreover, Rutherford and Sharwood Smith (1985) asserted that drawing the learner's attention to the formal properties of language (i.e., raising the learner's consciousness) can be advantageous in second-language learning. Therefore, considering different points of view, recognition of stress position has an important role for interpreter trainees in message perception. Interpreter trainees should receive awareness training in prosodic features consciously in order to perceive the message appropriately and deliver it to the audience as comprehensively as possible. Instructors should include this insight in their training of future interpreters and in some cases they

could use technology in order to aid them in applying whatever method which suits best for the trainees in different contexts.
It was strongly recommended that curriculum designers of interpreting programs include prosodic feature awareness training in the necessary syllabus for training future interpreters in order enhance the quality of communication of the message. Moreover, material producers for interpreting programs should include the technical aspects and theoretical discussion of phonological awareness in their materials for instructors in academic settings.

I have investigated the relationships between the expert judgments of the quality of the participants' interpreting performance on the one hand and objective correlates of their performance on the other. In the quality judgments a rating instrument was used that was comprised of ten scales. Seven of these pertain to aspects of quality that can be (and actually were) established by examining written transcripts of the interpreting tasks. These aspects relate to abstract linguistic properties of the interpretations, such as the accuracy with which the ideas in the source text were expressed, number of words omitted, appropriateness of choice of words and terminology, number of grammatical errors, and overall coherence of the interpretation. The remaining three scales were meant to capture the phonetic aspects of the delivery of the interpretation, i.e., the degree of accentedness, the pace (or fluency) of the delivery and the pleasantness of the voice. These three phonetic aspects all relate to relatively long-term aspects of speech, i.e., are not properties of specific vowels or consonants. It turned out, then, that the total number of errors in the interpreted passages (i.e., wrong words and number of omitted words added together) afford excellent prediction of the accuracy (and omissions) rating, with correlation coefficients in excess of .900. The actual numbers of wrong words and omissions were quite disparate, however. The conclusion follows, therefore, that the expert judges were not able to differentiate between these two aspects of accuracy, even though they were clearly different in the interpreters' productions.

These lexical accuracy parameters (words incorrectly translated or omitted altogether) are the two most important aspects of the overall rating of the students' interpreting performance. Incorrect words were weighted by 20, omissions by 15, so that together they represent 35 percent of the overall score. The other eight aspects together, with weights of either 7 or 10, represent the remaining 65 percent. The three phonetic-prosodic evaluation scales are very highly intercorrelated, even if the correlation coefficients are computed for the experimental and control groups combined ($.888 < r < .976$). I decided to concentrate on the prediction of pace (fluency) as this parameter has rather straightforward acoustical correlates. The results showed that the pace rating for the control group can be predicted most successfully by a single parameter, i.e., percent pause duration, which by itself explains 72 percent of the variance in the pace rating. Curiously enough, no predictive model was possible for the experimental group and only two single predictors yield marginally significant correlations with pace, i.e., the variability in the duration of the interpausal units and the relative number of disfluencies.

The effect of explicit teaching of prosody on developing word recognition was investigated systematically as well. The results of the study showed that the explicit teaching

of prosodic features contributes significantly to the interpreter trainees' developing word recognition skills. Statistical analysis of the data showed that conscious knowledge of prosodic features of stress at the word level had a positive effect on the participant's word recognition skills. This result of the study was in line with previous studies (e.g., Segalowitz & Segalowitz 1993, Cutler 2001), which also stated that conscious knowledge of prosodic features may help second-language learners retrieve words from their mental lexicon. Since in interpretation message perception plays an important role in the communication of message, explicit teaching of prosodic features for interpreter trainees would help them doing a better job. If in training programs the issue of explicit teaching of prosody of the target language (and the prosodic differences between the source and the target languages) is practiced in class, then not only will the future interpreters acquire better word recognition skills in the target language but also develop better general listening comprehension skills. Moreover, the effect of prosodic feature awareness training at word and at sentence level on developing global listening comprehension was investigated. The result of the study showed that awareness training of prosodic features would contribute to interpreter trainees significantly in developing listening comprehension skill if they have conscious knowledge of stress at word and at sentence level. Statistical analysis of the data showed that prosodic feature awareness of stress at the word and at sentence levels enhances the participant's listening comprehension skill. This perspective was supported by Khaghaninejad and Maleki (2015), who stated that explicit teaching of phonetic rules for English-as-a-foreign- language students results in developing listening comprehension skills. The finding also showed that explicit teaching of prosodic features at word and at sentence level would be pedagogically important for training future interpreters. The result of the study converged with Xiaoyu's (2009) claim that the explicit teaching of suprasegmentals for English-as-foreign-language students would contribute a lot in overcoming phonological obstacles in their listening comprehension.

An additional experiment on the effect of explicit teaching of prosody on the quality of consecutive interpretation from Farsi into English interpreter trainees was performed. The results showed that explicit teaching of prosody did have a significant effect on the overall quality of interpretation for Farsi-English interpreter trainees. Moreover, the results showed that the effect of the prosody awareness training was very strong as far as the interpreter's use of accentuation is concerned, i.e., on the scale that should be most sensitive to the intervention. The important issue is that different studies have shown that instructors do not teach pronunciation explicitly, maybe because they are not proficient enough in teaching it (e.g., Burgess & Spencer 2000, MacDonald 2003, Murphy 1997). This problem exists in interpreter training programs as well. These programs do not explicitly teach pronunciation rules and prosody of target language to interpreter trainees. This demands that policy makers reconsider the curriculum of interpreter training.

Moreover, we tried to systematically determine which direction of interpreting (straight or inverse) would result in better interpreting performance, and how direction might interact with prosodic feature awareness training. Overall, the data showed better performance when speech fragments were interpreted into the interpreter's mother tongue. This result is line with Gouadec (2007), who observed that translations into the mother tongue contain clear, effective and natural language, indistinguishable from

non-translated texts that are originally produced in that language. The results of the study also agree with Pokorn's (2005) assertion that translators should only work into their mother tongue since translation into the mother tongue guarantees good quality. Moreover, the results converge with Gile's (2005) claim that interpreters working from a foreign language into their mother tongue will have the advantage of a lower cognitive load than in the case of inverse translation. The smaller cognitive load, in turn, should lead to better quality of the interpretation. The overall conclusion, then, appeared to be that, irrespective of the modality, whether translating written text or interpreting spoken fragments, the quality of the product is better when working from a foreign language into one's native language than when working into a non-native language (also called inverse translation or inverse interpreting).

And at last, we investigated the effect of explicit vs. implicit prosody teaching on the quality of consecutive interpreting by Farsi-English interpreter trainees. The results showed that the teaching of prosody had a significantly positive effect on the overall quality of interpreting even when the time spent on prosody training was could not be devoted to the traditional interpreting practice. The results also revealed that explicit instruction in the use of prosody led to a greater improvement of interpreting quality than implicit instruction, and that the gain yielded by explicit instruction was especially beneficial as the trainee was less proficient in English at the start of the training program. Moreover, the results showed that the effect of explicit prosody teaching was especially strong as far as the interpreter's use of accentuation is concerned, i.e., on the scale that should be most sensitive to the intervention.

## 11.4 Prosodic feature awareness training

The teaching of prosody should be of the utmost importance in the interpreter training curriculum. Also, in this respect, appropriate materials and data should be chosen carefully according the mother tongue of the learners and the analysis of the data should be done by professionals to see the gaps in the teaching and students' learning processes. The choice of methodology in the teaching of prosody can be another topic. It should target individual differences between learners in different contexts. Prosodic features do not just transmit the content of an utterance, but also other communicatively important information (Hirschfeld & Trouvain 2007). Generally the native speakers can understand a lot of points from the accent and other features, e.g., the social status, the educational status and the degree of intelligence (Hirschfeld & Trouvain 2007).

Theoretical explanation of what prosody is and how it can be described are not as simple as an instructor might wish, because the rules governing realizing prosody are not as clear-cut as the rules of realizing the sounds of a word (Hirschfeld & Trouvain 2007). Lots of points determine the correctness and the acceptability of the prosody of an utterance, such as the communicative situation and the text type (Hirschfeld & Trouvain 2007, He et al. 2012). Looking at the issue from a practical perspective, it can be pointed out that practitioner needs are not always clear for the researchers in this area. In order to teach prosody effectively, there should be mutual communication between researchers and practitioners (Hirschfeld & Trouvain 2007). Since in foreign

language teaching the learners try to imitate their instructor's accent and consider it as the model for them, the instructor's pronunciation plays a crucial role in practice (Dieling & Hirschfeld 2000, Hirschfeld & Trouvain 2007).

The other aspect is the type of exercises in prosodic feature awareness training. These should be chosen carefully. Instructors suppose that prosodic feature is learned through listening and imitation. Therefore, most materials focus on imitation exercises. Pronunciation problems on the part of foreign-language learners can stem from many different reasons. Therefore, different types of exercises for the development of speaking and listening skill should be chosen with attention to all aspects and their application schedule should be done with great care as well (Trouvain & Gut 2007).

The last point in prosodic feature awareness training is the methodological aspect for instructors. The most important features of prosody must be clarified in a precise way to both learners and instructors. In this regard, Hirschfeld & Trouvain (2007) pointed out that, first of all, instructors should develop a clear view of the importance of prosodic feature awareness in the production and reception of a second language. Secondly, instructors should understand what role they have in the actualization of prosodic feature awareness with their students. Finally, instructors themselves should be taught (and made aware of) the workings of prosody in case they are not proficient enough in teaching prosody. It is recommended that instructors must like and able to understand, explain, and modify the most important problems in the area of prosodic features generally, and also to provide the necessary feedback to their students. Instructors should have complete knowledge of the rules, features and structure of the native languages of their learners since an eclectic method of teaching needs to be applied: simply practicing the parrot method of teaching cannot work in prosodic feature training awareness (Hirschfeld & Trouvain 2007).

Therefore, methodology, types of the exercises, the instructor's pronunciation and the type of the materials all together play a very important role in order to train learners efficiently to be qualified interpreters. In this regard the policy makers in different societies have a decisice role in modifying the curriculum and implementing it in different academic settings in different countries.

## 11.5 Shortcomings and suggestions for further research

In the first part of this thesis I introduced the interpreting process, pedagogy and current practice of interpreting in the Iranian educational system and tried to elaborate current problematic areas in ithe nterpreter training program. These issues can be studied in another country so that some points can be enlightened from a comparative perspective.

In chapter 2, my purpose was to disentangle some of the prominent issues in the pedagogy of interpreting studies. Since this chapter is basically a theoretical exercise based on literature, it would be worthwhile studying the effect of affective factors like anxiety; self-esteem, etc. experimentally on interpreting so that in training future interpreters such person-individual variables can be taken into account as well. Moreover, in this

chapter, I pointed out several unresolved issues in the pedagogy of interpreting. Again, it would be very interesting, and in fact necessary, to run experimental studies on any of these aspects in order to investigate these areas and apply the results to the training of future interpreters.

In chapter three the effect of prosodic feature awareness training on the performance of consecutive interpreting for English-Farsi interpreter trainees was systematically studied. This issue can be investigated in another country with other participants to enlighten this aspect deeply.

In chapters four and five I addressed questions concerning the prosodic feature awareness training and its effect of developing word recognition skills and global listening comprehension for interpreter trainees. However, answering questions raises questions, so that the present research opens the way to further research on this issue.

In chapter eight the effect of explicit teaching of prosody and its effects on the performance of Farsi-English interpreter trainees were investigated. This perspective can be investigated in another country with other participants as well.

In the final test of the students' consecutive interpreting performance in Chapters three and seven, I allowed the interpreter trainees a time lapse of two minutes to take notes and prepare the interpretation. This follows normal practice in conference settings but it obscures the direct view on what the interpreter does during the immediate, on-line processing of the input speech, and how processing the input might interact with the preparation of the summary and formulation processes that are executed once the input it processed. It would be instructive in this respect if we could compare the interpreter's immediate response to the input with the final product that s/he would produce after two minutes of preparation time. For one thing, one would expect many more hesitation phenomena to occur in the immediate interpreting mode than in the delayed mode. This could be achieved in a follow-up study by instructing the participants to start interpreting immediately after the stimulus passage is finished. Or it is possible for the participants to interpret some of the passages immediately and for some the others start after one or two minutes of notes-taking and reflection to see if that makes a measureable difference in performance.

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