注意：考試開始鈴響前，不得翻閱試題，並不得書寫、畫記、作答。

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：外國語文學系
乙組(語言認知與教學組)

科目代碼：3901

考試科目：英文閱讀與寫作

—作答注意事項—

1. 請核對答案卷（卡）上之准考證號、科目名稱是否正確。
2. 作答中如有發現試題印刷不清，得舉手請監試人員處理，但不得要求解釋題意。
3. 考生限在答案卷上標記「▼由此開始作答」區內作答，且不可書寫姓名、准考證號或與作答無關之其他文字或符號。
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國立清華大學 109 學年度碩士班考試入學試題

系所班組別：外國語文學系碩士班 乙組（語言認知與教學組）

考試科目（代碼）：英文閱讀與寫作（3901）

The following passage is taken from a journal article written by Carmen Muñoz. Please (1) read the article, (2) summarize the article in 350 words (40%), and (3) write an essay in response to what you have read. You can for example, criticize the article in part or in general, take some of the author's ideas further, apply the ideas to language teaching and language policies in Taiwan, or possibly combine these approaches (60%).

Starting young – is that all it takes?

The current implementation of an early start of foreign language learning has been considered to be the most efficient way towards multilingualism in Europe. In addition to the intrinsic educational value of foreign language learning, the benefits of an early start have most clearly been seen in the development of positive attitudes towards languages and the additional time for learning it provides (Edelenbos, Johnstone & Kubanek, 2007; Johnstone, 2009). However, foreign language gains at the end of Primary Education reflect a slow rate of learning in many countries, which invites relevant analyses of the internal and external factors that may explain such results. The present paper addresses the question of whether lowering the starting age of foreign language instruction guarantees superior language outcomes by itself. It is suggested that the effects of starting age are mediated by other external factors, mainly exposure to and use of the language.

Quantity and quality of the input in bilingualism

The important role played by amount and quality of input to the target language is a common feature in all processes of language learning: first language, bilingual acquisition, naturalistic second language (L2) acquisition, and foreign language acquisition. To begin with, it is interesting to remember that in spite of the assumption that first language acquisition is fast and easy, 10,000 hours of exposure are estimated to be necessary for children to attain basic levels of proficiency (Clark, 2003). As regards bilingual acquisition, the importance of daily exposure to and use of the languages has been shown to have effects on both cognitive benefits that accrue from early bilingualism and the relative proficiency levels of the two languages. The investigation of the beneficial cognitive effects of early bilingualism has recently provided a number of comparisons between bilinguals and monolinguals that show that the former are superior at controlling attention in certain experimental tasks. The explanation for this advantage is that when bilinguals use one of their languages they have to control attention between the two languages, which gives them continuous experience at attentional control. What is interesting for our discussion here is that functional bilinguals (bilinguals that use the two languages daily) have also been found to have superior attentional control than bilinguals with limited exposure to and use of one of their languages, and to learners in school immersion programmes, which indicates that this cognitive advantage is related to the patterns/amount of exposure to

the languages (e.g., Martin-Rhee & Bialystok, 2008; Poarch & van Hell, 2012). Following from the explanation given above, it may be concluded that non-functional bilinguals and school immersion learners in those studies had had less experience in controlling their two languages, and thus had not (yet) benefited from their incipient bilingualism because the advantage at attentional control emerges only with daily use of the two languages.

As for bilingual development, the evidence that quantity and quality of input influences its progress is robust. To illustrate this, Paradis (2010) studied a group of French-English bilingual children in the first grade in French mother tongue schools in an English majority city in Canada. Children differed in how much French and English they were exposed to and spoke outside of school. The results of a parental questionnaire yielded three subgroups of bilingual children: those who spoke mainly French at home, those who spoke both French and English equally at home, and those who spoke mainly English at home. Children were given a production task and a grammaticality judgment task that targeted English verbal morphology. Results showed that the children who were exposed mainly to French at home had consistently lower scores than the groups with more exposure to English at home. Other research has included differential exposure in the home and at school. In an investigation of the effects of exposure in Spanish-English bilingual children in Miami, Gathercole and colleagues showed that the acquisition of a wide range of linguistic aspects of English and Spanish hinges on the amount of exposure in each language received in the different situations (homes where only Spanish is spoken, homes where both Spanish and English are spoken, homes where only English is spoken, English immersion schools, and Two-way schools). In all cases, the group experiencing the greatest input in the given language showed an early advantage with the structure in question (Gathercole, 2007). Studies in which the majority language is English and the minority language is Welsh have also shown large asymmetries between the developments of the two languages (Gathercole & Thomas, 2009). On the one hand, with respect to English, the findings reveal that its development is linked to input at the beginning stages but, by mid-school, differences between those children who come from homes where only English is spoken, homes where only Welsh is spoken, and homes where both English and Welsh is spoken disappear. At that point, the school language seems to have an influence on children's English abilities, but by the time speakers reach adulthood, no or few long-term measurable differences in abilities in English are observed. On the other hand, the development of Welsh is highly linked to input at all stages and continual exposure is important for long-term maintenance of the language even for adults. In view of this pattern of results, Gathercole & Thomas (2009: 234) argue with reference to the critical period debate that "if all children in Wales learn English equally well, regardless of early exposure, then age of acquisition may be less critical for final attainment in bilingual contexts in which the majority language is highly dominant."

In other words, the respective input levels in Welsh and English have a stronger impact on attainment in each language than age of acquisition.

Effects of language experience on naturalistic L2 acquisition

In immigration studies, as different from the situations of child bilingualism portrayed in the preceding section, L2 learners do not have significant contact with the L2 until they arrive in the L2 community. In these studies, age of arrival or age of onset has been seen to determine ultimate attainment to a very high degree, but length of exposure and quality of input are also crucial factors in both rate and outcomes of L2 learning. Certainly, learners who start learning the language at a young age in a naturalistic setting usually reach higher levels of proficiency than learners who start at an older age. However, this ultimate attainment superiority can only be observed in the long term because older starters progress faster in the initial stages (Snow & Hoefnagel-Höhle, 1978). That is, whereas older starters are faster at the beginning, younger starters eventually catch up and outperform them. This explains that studies that have looked at learners after short periods of residence or immersion have not been able to observe an early start advantage, in contrast to studies that have looked at learners after many years of residence in the L2 community. Of great interest are studies that have aimed at exploring the length of time needed for learners to show the advantage of an early start in a naturalistic setting. For example, Jia et al. (2006) studied the effects of time on a large sample of Mandarin speakers with a wide range of starting ages, and found that an early arrival advantage gradually emerged in the L2 (English) vowel perception and production after 3–5 years of English immersion. Jia and Fuse (2007) followed the acquisition of grammatical morphology of a group of Mandarin-speaking children and adolescents in a longitudinal study that extended for 5 years after arrival in the US. In this study it was found that only by the end of the 5-year period younger starting age significantly predicted the average performance on the grammatical morphemes studied, though some were not yet fully mastered.

Moreover, research has shown that the quality of the input, i.e. native speaker input and diversity of contexts of L2 interaction may be more meaningful than length of residence per se. For example, in immigrant studies children have been observed to benefit from more contexts of L2 interaction, having more L2-speaking friends than adolescents (e.g., Jia & Aaronson, 2003), which clearly contributes to their L2 learning.

Effects of language experience on foreign language learning

Age-related studies in foreign language contexts have consistently shown a rate advantage of older starters, that is, after the same number of instruction hours older pupils show higher levels of attainment than younger pupils. In the discussion of the results from the Barcelona Age Factor (BAF) project, two complementary reasons for

this finding were suggested (Muñoz, 2006). First, in an input-limited setting, such as the typical classroom, younger learners are deprived of their advantage at implicit learning because implicit learning mechanisms need massive exposure to the language. Second, older learners' superior cognitive maturity helps them to learn explicitly in the typical classroom, which explains their faster rate.

However, because naturalistic younger starters have been observed to surpass older starters in the long term, as noted above, it has been predicted that also instructed learners would eventually show a long-term advantage. This prediction has not been confirmed though, and the scant existing research that has investigated longterm effects of starting age has provided mixed results. In contrast, a follow-up study of the BAF project found no effects for starting age on longterm achievement but significant effects of accumulated input on learners with long foreign language learning experience (a minimum of 10 years). Specifically, positive correlations were found between language tests scores (a general proficiency test, a lexical reception test, and a phonetic identification test) and input measures, such as total number of hours of instruction or frequency of extracurricular contact with the target language (Muñoz, 2011). The latter included native-speaker contact, which has been regarded as a crucial indicator of more qualitative measures of input, such as the linguistic richness of the environment (e.g. Jia and Fuse, 2007). Moreover, a qualitative analysis of learners' answers to an interview showed that learners identified intensive input experiences with the target language as turning points in which they fully engaged with the language (Muñoz, 2012).

That study provides evidence of the impact of out-of-school exposure in foreign language learning as well, since such intensive exposure experiences often took place during study abroad periods, through exposure to the media (for example, being hooked on a film series) or through internet (for example, an interactive web page where they used English). A positive association between foreign language outcomes and out-of-school exposure was also found in a study that compared data from 7 European countries (the Early Language Learning in Europe [ELLiE] project). One of the studies in this project examined the out-of-school exposure that 865 grade 4 pupils from the different countries had, according to a questionnaire filled up by their parents. English was the foreign language for learners in 6 of the countries (Croatia, Italy, Poland, Spain, Sweden, The Netherlands) and Spanish or French was the foreign language for learners in England. The study investigated the effect of out-of-school exposure after controlling for the impact on these learners' achievement of the respective cognate language distance to the foreign language, since the learners' first languages differed greatly in terms of distance to the target language1. As reported in Lindgren and Muñoz (2013), these two factors explained a relatively large proportion of the variance in the listening and reading comprehension tests of the pupils. Out-of-school exposure greatly contributed to explain findings such as the Croatian

pupils' high scores in the two tests in spite of the large cognate distance between the learners' first language and English. Furthermore, in order to better understand this factor, the impact of the three sub-categories of exposure that, according to the questionnaire, were the most frequent among the children, were explored: watching movies, playing computer/ TV games, and listening to music. The results showed that the most important exposure factor for both listening and reading was watching movies and films in the foreign language; far behind came listening to music and playing games. A third important predictor in the analysis was the use of the foreign language by parents in their workplace, which may be interpreted as an indicator of active use of the language in the family. Another interesting finding of the ELLiE project was that for the six contexts in which English was the foreign language, there was no correlation between attainment in English and starting age of instruction. Both language proximity and out-of-school exposure had stronger effects than age.

Conclusion

This article has aimed to show the crucial role played by input in learning a foreign language as in all other types of language acquisition. The ultimate goal has been to argue that pupils' young age does not automatically confer them all the cognitive benefits that arise in bilinguals that have daily experience with the language, nor does it grant them high levels of proficiency in a language to which they are not sufficiently exposed. As we have seen, these benefits arise in situations of abundant exposure and use of the language. Therefore, the lesson to draw from these research findings in bilingualism and L2 acquisition is that learners' intensive contact with the foreign language both inside and outside the classroom will positively benefit their learning rate and enhance their engagement with the language. In other words, maximizing input may be a more efficient way to improve foreign language learning than forever lowering the starting age of learning.