Starter					Box 2.1
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The word on the street: Popular beliefs on age and second language learning

According to most people's view of things, the answer to the question posed in the title 'Is There a Best Age for Learning a Second Language?' is 'Of course'; the age factor is crucial to second language learning. The general view is that childhood is obviously the best time to start to learn a second language. This is not a surprising reaction. After all, first language development is something that happens in childhood and so the general assumption is that children are better equipped to acquire languages than adolescents and adults. Moreover, common experience tells us that starting to learn *anything* early in life – the violin, chess, golf – often seems to yield dramatic advantages.

Our observations of differences between children and adults trying to get to grips with a new language often tend to reinforce our notion that when it comes to learning additional languages, younger = better. How often do we see young immigrant children with a perfectly functional command of the language of the host country acting as interpreters for their parents and grandparents? The British psychologist J.S. Tomb commented in 1925 on a similar phenomenon observable in English families in India in the days of the Raj':

It is a common experience in the district of Bengal in which the author resides to hear English children 3 or 4 years old ... conversing freely at different times with their parents in English, with their ayahs (nurses) in Bengali, with the garden coolies in Santali, and with the house-servants in Hindustani, while their parents have learnt with the aid of a munshi (teacher) and much laborious effort just sufficient Hindustani to comprehend what the house-servants are saying ... and to issue simple orders to them ...

Starting ages of some champion golfers	Box 2.2	
Arnold Palmer	4 years	
Jack Nicklaus	10 years	
Seve Ballesteros	7 years	
Tiger Woods	3 years	
Rory McIlroy	18 months	

Interestingly, the children referred to had vastly more contact with the Indian house-staff than their parents. So it is generally with children who come to reside in a country or a region where the dominant language is different from their home language, who tend to become more quickly and more deeply embedded in their host community than their parents. This is not to deny the reality of an age factor; we know that our capacities begin to decline from quite an early age. It is important, however, to recognize that a range of age-related factors as well as purely maturational factors need to be taken into account.

We shall return later to the effects of being instructed in a second language early in life, but it is probably worth briefly noting at this stage that such effects are by no means consistently positive. In some countries commercial companies advertise English language services aimed at very young children (between two and four years), the suggestion being that early learning of this important international language will give the children in question a clear advantage in their later educational and professional careers. The researcher Joanna Rokita decided to investigate the claims of one such company, and was fairly scathing about what she found. Her conclusion, basically, was that the achievements of the young instructed L2 learners she studied were deeply unimpressive, their command of English consisting largely in the parroting of formulas and very rarely having anything resembling a spontaneous, communicative dimension.

Ola's experience of English in her own words

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Box 2.3

My name is Ola. I'm Polish. I was introduced to English for the first time at school at the age of 18. Until that time my only foreign language had been Russian. I made two brief visits to English-speaking countries in my twenties, and then, at the age of 28, I moved to Dublin, where I have now been living for seven years. My English is by no means perfect but quite a lot of English-speakers I talk to think I'm Irish.

(Name changed)

It is also worth saying that attempting to learn a second language in adulthood, even mature adulthood, even old age, is certainly not bound to be a dismal failure. Whenever I hear someone say 'At my time of life I'm too old to be learning other languages', my response is always the same – namely, that in this matter, as in so many others, age is no excuse! People with long experience of teaching additional languages to older adults are very clear that such students positively excel in some domains. For example, many years ago the adult educator Max Brändle said of older adult learners of foreign languages that 'in the case of reading skills they invariably set the highest learning goals' and that they seem to have 'little difficulty with grammatical principles and storing lexical items'.' Brändle conceded that older adults sometimes have problems with 'auditory imitation and memorizing' as well as with 'oral response' but he certainly did not represent these as insuperable obstacles to progress.

As for younger adults, they can reach very high levels indeed of second language **prof**iciency. A dramatic illustration of this is provided by the case of the late Robert **Maxwe**ll, whose life was in many ways remarkable but ended tragically in 1991 amidst

a financial scandal. Maxwell was a member of the UK House of Commons, owner of a number of British newspapers and publishing houses, and Chairman of Oxford United Football Club – making frequent appearances on British radio and television. In my younger years, I assumed, like many other Britons, that he was British born and bred, and certainly a native speaker of the English language. In fact, Robert Maxwell started life as Ján Ludvík Hoch in a Yiddish-speaking Jewish family in pre-Second World War Czechoslovakia. His first significant encounter with English was in 1940, when, at the age of 17, he arrived in Britain escaping from the Nazis. Many of us know people whose L2 learning histories and L2 attainments are similar to Robert Maxwell's. The chances are, though, that unless they actually reveal the facts about their non-English-speaking past to us, we simply assume that English is their first language.

In sum, then, while there are good reasons for supposing that learning an additional language in childhood may tend to yield better results than starting later, and, while there seems to be evidence in favour of this view from our observation of immigrants, the truth of this matter is certainly not simple. Learning additional languages at an early age in a formal instructional setting, for example, does not always bring about the brilliant results people sometimes hope for or expect. On the other hand, learning a second or third language in the adult years – even old age – can sometimes lead to very solid results, and, in the case of younger adults, to nativelike performance.

Summary

Box 2.4

- The question of age is connected with how much learners talk to people who speak the second language, often easier for children in immigrant/expat situations.
- Many people who start learning as adults in fact acquire a second language to a high level.
- Teaching a second language to young children is often unsuccessful.

Views on age

Box 2.5

- (1) How many people have you actually met who were invisible bilinguals who started the second language after 15, like Robert Maxwell?
 - 0 1-5 6-10 more than 10
- (2) How many people have you actually met who are highly competent, though clearly not native speakers, who started the second language after 15?
 - 0 1-5 6-10 more than 10
- (3) Does your experience then support the popular belief in the advantages of learning other languages in early childhood?

The experience of immigrants: The research background

The case of immigrant users of the languages of their host countries has already featured in the introductory discussion above, and we have noted that the best evidence for age-related advantages in L2 learning appears to come by comparing younger and older immigrants. Let us now take a closer look at the experience and second language attainment of immigrants.

From the middle of the last century down to the present day, there has been a steady stream of research investigating the idea that younger arrivals in a country where the dominant language is different from the immigrants' home language are more likely than older arrivals to end up passing for native speakers of the new language. Some of the studies in question are listed in Box 2.6, and, in all the cases featuring in this particular list, the findings support the notion of younger = better.

Classic research on the age factor

Box 2.6

Asher & Garcia (1969): better pronunciation of English tended to be associated with immigrants who had arrived in the USA between one and five years of age rather than with those who had arrived at later ages.⁴

Seliger *et al.* (1975): most people who had immigrated under the age of nine reported passing for native speakers of the host country language; most who had arrived after the age of 16 felt they had a foreign accent.⁵

Patkowski (1980): the grammatical competence in English of immigrants arriving in the USA before the age of 15 was better on average than that of those who had arrived at later ages.⁶

Hyltenstam (1992): immigrants to Sweden who had arrived after the age of seven produced more lexical and grammatical errors in Swedish than those who had arrived before the age of six.⁷

Piske et al. (2002): Italian immigrants to Canada who had arrived as children tended to have less of a foreign accent in English than those who had arrived as adolescents or adults.⁸

To be noted is that all the studies showing a general second language advantage for immigrants arriving as children over later arrivals involve participants who have been in the new country for a considerable period – five years or more. The advantage in question seems to require a certain period of time to manifest itself. For example, a famous study by Catherine Snow and Marianne Hoefnagel-Höhle of English-speaking migrants to the Netherlands of various ages found that, after the first four or five months of residence in the Netherlands, the proficiency in the newly acquired Dutch of the adolescents and adults was markedly superior to that of the children in all areas except pronunciation, but that the older participants' advantage began to be noticeably eroded in the following months.9

Also worth attending to is the fact that in the immigrant studies the younger = better **tendency** is just that – a tendency. It is not the case that *all* immigrants who arrive in **their** new country in childhood end up with a perfect command of the language of the

host country; nor is it the case that those who arrive later in life systematically fail to attain the levels reached by younger arrivals.

Moreover the emphasis in most of the studies of immigrants coping with a new language has been very firmly on proficiency attainment in the second language in question. Much less investigative energy has been devoted to what happens to the immigrants' first language while they are coming to grips with the language of their host country. In particular this relates to language dominance – which language is the stronger in the user's mind. One claim is that immigrants that arrive before the age of 10 are quite likely to switch their dominant language from their home language to the language of the host community, whereas those arriving after the age of 10 are likely to maintain the dominance of the home language.¹⁰

The nature of the immigrant's relationship with the new language cannot be explained simply in terms of maturation, although it clearly has an age dimension. Box 2.7 sets out some differences in the experience of younger and older immigrants in terms of what they arrive with and in terms of aspects of their life in the new country, which can plausibly be seen as impinging on proficiency attainment in the host country language and on the role of this language among immigrants arriving at different ages.

Typical profiles in to country (drawing or	erms of self-identification on arrival and experiences in the new n Bialystok, 1997" and Jia & Aaronson, 1999") Box	2.7		
Age of immigration	Typical profile			
Age 6	Linguistico-cultural identity not yet fully formed.			
	Frequent contact at school with children from outside their own linguistico-cultural community; possibility of friendships with such children little influenced by linguistico-cultural affiliation.			
	Schooling through host community language, involving specifically linguistic instruction in relation to literacy.			
Age 12	Linguistico-cultural identity well on the way to being fully formed.			
	Frequent contact at school with children from outside their own linguistic community; considerable degree of choice regarding friendships – probably influenced by linguistico-cultural affiliation.			
	Schooling through host community language, usually not involving specifically linguistic instruction unless a language support teacher is may available.	nade		
Age 24	Linguistico-cultural identity fully formed.			
	Contact with people outside own linguistic community dependent on nature of job (in some cases most colleagues may be from their own community); friendships entirely a matter of choice and typically influenced by linguistico-cultural affiliation.			
	No schooling through or in relation to host community language unless evening/weekend classes are opted for.			

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Thus we see one crucial factor is language identity, not established before about the age of 12. A second factor is who the learner has contact with, likely to be with any child at six, more limited to certain children at 12, and fairly restricted in adults. A third factor is the school; usually during the school years, children will be taught through the host community language; after that they will not encounter it in education except if they go to special classes, usually voluntarily.

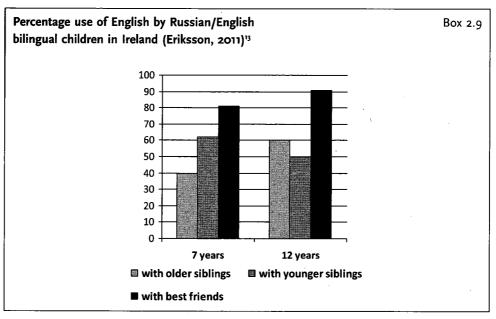
The importance of making friends outside one's own community cannot be overestimated in this connection. A recent study of immigrants conducted in Dublin primary schools by Lorna Carson and Guus Extra shows that this effect goes in fact beyond the impact of making friends with native speakers of the host country language. Carson and Extra discovered that the 'best friend' factor was highly instrumental in promoting the use of English outside the home as a lingua franca with immigrant children from other communities, and that this pattern of behaviour even spilled over into the use of English with friends from the children's own language groups.

Children's best friends and language use

Box 2.8

The reported choice for English with best friends is particularly high ... [C]hildren select to use English as a lingua franca with children from language backgrounds other than their own, or indeed select to use English with children who share the same other language.... It seems that the shift towards English language use here is located within friendships rather than family connections ... (Carson & Extra 2010, p. 49)¹²

Another recent Dublin study by Svetlana Eriksson on the intergenerational transmission of Russian language and culture in Russian-speaking families in Ireland showed friendship with peers outside the Russian-speaking community to be strongly associated with the use of the principal host country language, English, by children and early adolescents as we see in Box 2.9.13 To repeat the point made earlier, although such friendships are found to prevail especially in younger age groups, they can more plausibly be related to the degree to which the linguistico-cultural identities of such groups are still open to change, and to their inevitably frequent contact with members of the host community than to biological maturation as such.



There are also other factors explaining why the immigrant child favours the language of the host country and switches language dominance. For instance, Sandra Kouritzin reports the case of Lara, who had had migrated with her family from Finland to Canada at the age of two, and had subsequently lived for four years in a small town within a tight-knit Finnish community. Lara was thus, until the age of six, a Finnish speaker with very little English. From age six onwards, however, having moved to a large city, and under the influence of her parents' decision that the time had come to integrate with English-speaking Canada, her development in Finnish came to a halt and English progressively took over. Lara reports that the last time she tried (and failed) to converse in Finnish had been when she was 18 years old. Her perception was that she had lost her native language. Here, then, we have an instance of a family taking a decision to opt for one language and effectively to abandon another, with the result that the latter language was lost. The age connection here is again not a matter of maturation as such. In this instance it relates to the fact that parents may make such a choice for a child; older immigrants have the power to make such choices for themselves.

Summary: Immigrant children and second language learning

Box 2.10

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- a tendency for younger = better;
- the importance of having relationships in the second language;
- links between language and growth of language identity.

Box 2.9

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Box 2.10

The idea of a 'critical period'

The term *critical period* is used in biology to refer to a strictly limited phase in the **development** of an organism during which a particular competency or behaviour must be **acquired** if it is to be acquired at all. One often-used example in this connection is **imprinting** in ducklings and goslings, which, for a short time after hatching, become **irreversibly** attached to the first moving object they perceive — usually their mother, **sometimes** a human being — after which they develop a fear of strange objects and retreat **instead** of following. If language acquisition in human beings is constrained by the **limits** of a critical period like this, the implication appears to be that, unless language **acquisition** gets under way before the period ends, it will not happen. There may also be **an implication** that, even if language acquisition begins within the critical period, it does **not** continue beyond the end of that period.

Some of the evidence for a critical period in first language acquisition consists of case studies of children who have been isolated from language and brought into contact with it only around the age of puberty, the point which is claimed by some to mark the end of the critical period for language acquisition. Examples of such children are those of Victor, found running wild in the woods of Aveyron in late 18th century France, and Genie, rescued from the isolation imposed by her parents in late 20th century California.

Children such as these who are taken into care around puberty typically exhibit some progress in language development – but of a limited kind. Interpretations of such observations vary but it is worth noting that Eric Lenneberg, often called the 'father' of the notion of a critical period in language acquisition (the 'Critical Period Hypothesis') was not convinced of the value of such evidence in relation to his hypothesis, seeing such evidence as interpretable in terms simply of the general damage done to an individual by isolation and cruelty.'5

[L]ife in dark closets, wolves' dens, forests or sadistic parents' backyards is not conducive to good health and normal development. (Eric Lenneberg, 1967, p. 142)¹⁵

Another source of first language evidence sometimes seen as favouring the Critical Period Hypothesis is the mixed success characterizing late acquirers of sign languages. This evidence comes from studies of Deaf subjects who have been deprived of language input in their early years and who then acquire a sign language as their first language at a later age. Such studies do not find that language completely fails to develop but that some deficits are observable in the language of the later signers. Deprivation of language input during the phase in a child's life when cognitive development is at its most intense is likely to have general psychological and cognitive effects; it may be these general effects that are reflected in later language development.

Choice of language

Box 2.11

Who should make the choice of which language a child speaks at home?

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Who should make the choice of which language a child speaks at school?

the child the parents the school the state someone else

Who should make the choice of which language a child speaks in the local community?

the child the parents the state someone else

In the second language domain, interpretations of the Critical Period Hypothesis can be summarized as follows: the L2 learner encountering the second language in question after a certain maturational point:

- (1) is no longer capable of attaining native-like levels of proficiency in the second language;
- (2) and/or needs to expend more conscious effort than is typical of earlier second language acquisition;
- (3) and/or makes use of different mechanisms from those deployed in second language acquisition during childhood.

All interpretations converge on the claim that the L2 learner coming to grips with the language beyond a particular maturational stage exhibits a sharp decline in second learning potential as compared with younger learners.

With regard to the first point, the suitability of applying the native-speaker criterion to L2 learners is questioned elsewhere in this book, for example in Topic 8. Nevertheless the criterion has long been used in the Critical Period Hypothesis literature and continues to be used. The idea that late L2 learners cannot achieve native-like levels of second language proficiency has in any case been undermined by a large number of studies, including Ciara Kinsella's work.16 This involved 20 native English speakers who had been raised monolingually, who had not begun learning French before the age of 11 and whose average age of significant exposure to French (namely arrival in France) was 28.6 years. All were resident in France, and all reported at least occasionally passing for native speakers of French. These participants (and a control group of native French speakers) were asked to identify some regional French accents and to complete a test incorporating lexical and grammatical elements. Three of the 20 participants scored within nativespeaker ranges on all tasks (outperforming many of the native speakers on the accent recognition task). In the face of such findings, it is sometimes claimed that there is no recorded case of a post-pubertal second language beginner behaving in every last detail like a native speaker. This is no doubt true, but why should we expect otherwise? The fact is that the more closely we scrutinize the second language performance of individuals whose exposure to the second language began very early, the more we find that they too differ at the level of fine linguistic detail from monoglot native speakers.

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Puberty and language

Box 2.12

Box 2.13

The incidence of 'language learning blocks' rapidly increases after puberty. Also automatic acquisition from mere exposure to a given language seems to disappear after this age, and foreign languages have to be taught and learned through a conscious and labored effort. (Eric Lenneberg, 1967)¹⁵

With reference to the alleged effortfulness of later language learning, this goes back to the very beginnings of the Critical Period Hypothesis and continues to recur in recent discussions of the topic. The suggestion that conscious effort is absolutely indispensable for high levels of attainment in late L2 learning is, however, questionable. Georgette Ioup investigated two extremely successful adult users of Egyptian Arabic, one of whom was untutored.¹⁷ This untutored late learner was found to perform in Arabic in a native-like manner even in areas of which she was unaware – e.g. subtle aspects of syntax and pronunciation. One might add that even if later second language learning is more 'conscious and labored', this may have nothing to do with the ending of a critical period specifically related to language. After all, the conscious, deliberate dimension tends to increase in *all* areas of learning as cognitive development advances.

Different views on access to Universal Grammar (UG) in late learners (based on Mitchell & Myles, 2004¹⁸; Cook, 1985¹⁹)

- (1) No access hypothesis: UG is not involved in late L2 acquisition; late L2 learners have to resort to more general problem-solving skills.
- (2) Full access hypothesis: UG is accessed directly in early and late L2 acquisition; L1 and L2 acquisition are basically similar processes, the differences observed being due to the difference in cognitive maturity and in learner needs.
- (3) Indirect access hypothesis: UG is not directly involved in late L2 acquisition, but it is indirectly accessed via the L1; therefore, there will be just one instantiation (i.e. one working example) of UG available to the L2 learner, with the parameters fixed to the L1 settings.
- (4) Partial access hypothesis: some aspects of UG are still available and others not; this approach takes UG and its various subcomponents as the starting point, hypothesising that some submodules of UG are more or less accessible to the L2 learner.

The idea that children and adults may have qualitatively different language-learning mechanisms at their disposal has been interpreted in a particular way by some researchers working within a Chomskyan framework, who have taken the view that post-pubertal second language learning is not underpinned by the innate bioprogamming provided by 'Universal Grammar' (UG). The UG model claims that essential parts of language are not acquired but built-in to the human mind and has led to lively arguments for and against the innateness of language in the mind. It has been widely suggested that late L2 learners do not seem to exhibit grammars that are not sanctioned by UG, and that post-pubertal L2 learners appear to deal in the same manner as L1 acquirers with linguistic features supposedly having a UG basis. For example L2 users show they know the principle of structure-dependency which rules out sentences like Is Sam is the cat that black? (only the is in the main clause can be moved) just as much as L1 children, even though they are unlikely to have been taught the principle or to have encountered any examples of it.²⁰

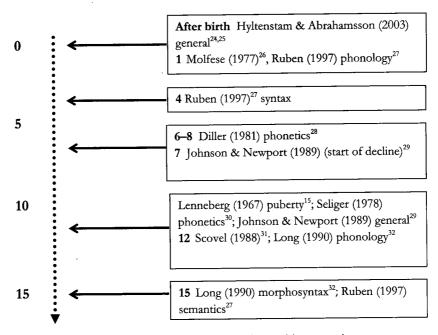


Figure 2.1 Different endpoints assigned to the critical period by researchers

Another approach to the question of maturationally induced changes in underlying language learning mechanisms is that of Robert DeKeyser.²¹ Implicit learning where people learn unconsciously and automatically is often contrasted with explicit learning in which people learn consciously with deliberate attention. DeKeyser looked at L2 learners whose second language experience had begun in their childhood and adult years respectively. DeKeyser claimed that the adult beginners who scored within the range of the child beginners had high levels of verbal analytical ability, an ability which seemed to play no role in the performance of the child beginners. His interpretation was that maturational constraints apply only to implicit language learning mechanisms; adults can employ explicit learning where children rely on implicit learning. Other researchers commenting on similar findings point to the possible influence of primary versus secondary-level instructional styles and to the possibility that such results reflect general cognitive changes, which impact on language learning, but on other areas of development too.

Turning now to the question of whether there is a sharp decline in second language-acquiring capacity at some stage in maturation, findings from studies investigating 'naturalistic' L2 acquisition, as we have seen, favour the notion that, while adolescent and adult subjects may have an initial advantage, in the long run younger beginners are more likely to attain very high levels of proficiency. On the other hand, research into primary-level second language programmes in schools yields a rather different picture, which we shall explore further in the next section. The evidence does not, in any case, support the simplistic 'younger = better in all circumstances over any timescale' perspective which underlay some early treatments. Even in the 'naturalistic' context, the

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of first encounter seems to be only one of the determinants of the ultimate level of proficiency attained. There is also a question mark over the notion that any such age-related decline has a so-called 'elbow' or '7' shape of the kind that one would expect if a critical period were its cause. In recent years new research and also some re-analysis of earlier research suggest a gradual decline similar to that which characterises learning capacity in general. According to Ellen Bialystok's reading of recent findings, 'the tendency for proficiency to decline with age projects well into adulthood and does not mark some defined change in learning potential at around puberty'22 and, according to David Birdsong's interpretation, age-related decline in this context is captured by 'a linear function'.23

In sum, it appears that any age-related decline in second language-learning capacity varies **from** person to person and from one aspect of language to another, which is not what **one** would expect if its underlying cause were an inevitable critical period in human **development**.

[T]he end of the critical period for language in humans has proven ... difficult to find, with estimates ranging from 1 year of age to adolescence. (p. 285)³³

It also appears that any decline in second language-learning capacity with age is continuous and linear, which, again, is not in keeping with the usual understanding of the notion of critical period.

Finally, so far we have been talking about the Critical Period Hypothesis as if it were a **single** proposal. This is actually far from the case. There is such a variety of proposals **that** we should really be talking about the Critical Period Hypotheses. For example, with **regard** to the offset point or endpoint of the critical period, although puberty is (following **Lenne**berg) often mentioned in this regard, other suggestions for the age effect abound, **as** seen in Figure 2.1. The impact of such uncertainty is twofold.

First, it undermines the plausibility of the whole notion of a critical period for language **acq**uisition; and second, it deprives the concepts of 'early' and 'late' L2 learning of any **kind** of stable reference point and therefore meaning.

With regard to the first remark above, if there were clear evidence of an offset point for a window of opportunity for language aquisition, surely it ought to be possible for researchers to agree where it is situated.

Two views of age and classroom language learning

Box 2.14

If the goal for learning/teaching a foreign language is to obtain the highest level of second language skills ... there is support for the argument that 'earlier is better'. This support, found in the critical period hypothesis literature, is based on the claim that biological and maturational factors constrain language learning beyond a certain age.³⁴

[The learning which occurs in the formal language classroom may be unlike the learning which occurs during immersion, such that early instruction does not necessarily have the advantage for ultimate performance that is held by early immersion. (p. 81)²⁹

The fact of such wide disagreement about this matter can be taken to cast severe doubt on the whole notion of a critical period for language. Concerning the stability of reference points, if 12 years is taken to be the critical age, L2 learning at age four is presumably 'early' learning; if 12 months is taken to be the critical age, on the other hand, then L2 learning at the age of four is already 'late' learning. Nor does variability in views on the critical period concern only the timing of its ending; it also relates to the scope of critical period effects. Whereas, for example, Eric Lenneberg saw maturational constraints as affecting language in general, for Tom Scovel they are relevant only to the phonetic/phonological sphere.

The effects of early instruction in a second language

There seems to be quite a widespread assumption that the kinds of younger = better tendencies that we observe among 'naturalistic' L2 learners operate also in formal instructional settings, that is to say the teaching of second languages in schools. There also seems to be a widely held view that the degree of success of L2 learning in formal instructional settings is so much bound up with the maturational factor that almost no other factors are relevant.

Concerning the first point above, the studies involving subjects who have been learning second languages in formal instructional settings yield a different pattern to that obtained in naturalistic settings. That is to say, such research has confirmed the finding related to the faster rate of older starters but has not confirmed the long-term benefits of an early start when younger and older starters have had the same number of hours of instruction.^{35,36}

Carmen Muñoz argues that in a typical instructed setting, where the second language is treated as one subject among many, the expectation that younger starters will in the long term outperform older starters after the same amount of hours or courses of instruction is not warranted.^{37:39} Her reasoning is that while young children may be superior to older learners at implicit learning, implicit learning requires massive amounts of input that a typical foreign language setting does not provide; and that in regard to older learners, these seem to be superior to young children at explicit learning for which the classroom setting provides many opportunities.

It is true that some SLA researchers who subscribe to the Critical Period Hypothesis have no hesitation in claiming that it constitutes an argument for early second language instruction. Other Critical Period Hypothesis advocates, however, take a different line. Jacqueline Johnson and Elissa Newport note that the crucial measure in their research was age of arrival in the second language environment rather than age of onset of formal second language instruction.²⁹ Robert DeKeyser (see above) agrees.²¹ For him,

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Interestingly, just as there are supporters of the Critical Period Hypothesis who do not necessarily argue for early second language instruction, there are Critical Period Hypothesis sceptics who are all in favour of the introduction of second languages into the primary school curriculum. Researchers such as Evelyn Hatch⁴⁰ and Fred Genesee⁴¹ have argued for early second language instruction on grounds not of maturational constraints but of factors such as the general desirability of as long an exposure to the second language as possible and the importance of laying an early foundation to L2 learning so that ground can covered later that might otherwise be neglected.

In any case, since the 1990s throughout Europe and indeed across the world, there has been a clear and accelerating trend towards the introduction of additional languages into primary-level curricula, as seen in Figure 2.2. This trend appears often to have been underlain by the widespread belief on the part of parents – whose views feed into the

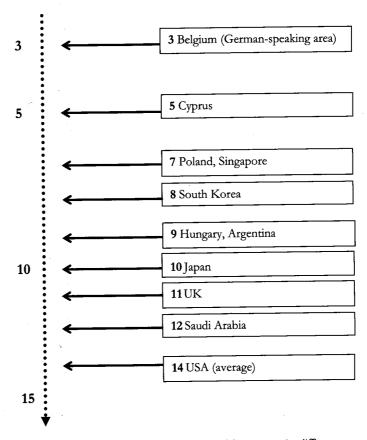


Figure 2.2 Ages at which children start learning second languages in different countries (as compiled in 2013)

decisions of governments – that an early start in second language instruction is a panacea overriding and neutralising all other factors.

We might do well in this connection to recall John T. Bruer's wise comment that one of the dangers of focusing on maturational issues in discussing learning is that it prompts us to pay too much attention to *when* learning occurs and too little attention to the *conditions* of learning.⁴²

If we have need of sobering exemplification and illustration in this connection, we could do worse than look closely at the teaching of the Irish language in the Republic of Ireland. In the Republic of Ireland, Irish is taught as part of the core primary curriculum from the infant grades onwards. This has been the situation virtually since the foundation of the Irish state. The inclusion of Irish in the primary school curriculum was based on notions of recovering and revitalising it as a marker of Irish national identity. Only a tiny proportion of the population of the country are native speakers of Irish (although the exact figure is controversial), and so for the vast majority of pupils in Irish schools Irish constitutes an additional language. What is the outcome of this almost century-long experiment in early second language instruction? In a word, disappointing. Kevin Myers declared in *The Irish Independent* on October 3, 2011:

The 'restoration' of spoken Irish is the greatest single economic and cultural project in the history of the State. Not merely has it been the greatest national failure, but it has also revealed a national disorder; the acceptance of a consensual falsehood across society, from the intimate disclosures of a census form to the public formulation of national policy.

This is the view not only of controversialist journalists like Kevin Myers but also of successive Irish Language Commissioners and the present Irish Minister for Education.

It has to be acknowledged that the conditions under which Irish has been taught have not been ideal – in terms of the teaching materials and teaching methodologies deployed, in terms of teacher motivation and proficiency, and in terms of societal attitudes; but this is precisely the point – an early start to instruction in the language has failed to trump such unpromising conditions. The lesson to be learned from the case of Irish is this: starting second language instruction early does not absolve us from paying very close attention indeed to optimising the circumstances under which teaching and learning proceed. If such circumstances are unfavourable, the age factor will not rescue the situation, whose outcome may be indifferent or even disastrous.

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Summary: The Critical Period Hypothesis

Box 2.15

- Associated originally with Eric Lenneberg's suggestion that normal L1 acquisition ceases in the early teens.
- Supported by evidence that language-deprived children do not acquire normal language if rescued in their teens, whether 'wolf' children or deaf children not exposed to a sign language.
- In the second language, the Critical Period Hypothesis claims L2 learners past a certain age do
 not achieve 'native-like' competence, need to work harder and use different types of learning.
- These claims may well be true but there is no reason why the achievements of L2 learning should be the same as L1 acquisition, given the presence of a second language in the mind.
- Multiple ages have been postulated for the end of the Critical Period in L2 acquisition and for different aspects of language.
- In general, educational systems in many countries increasingly tend to teach a second language earlier rather than later.

Some concluding remarks

Age is clearly a factor in second language learning, as it is in all other learning. There are in addition some not strictly maturational age-related factors that play a role in second language learning – factors such as what kind of language education (if any) is readily available when one enters the second language environment. These considerations argue in favour of childhood being the most favourable time to begin to be exposed to a second language, at least in 'naturalistic' circumstances.

As far as instruction in a second language is concerned, the situation is distinctly complex. An early start in this context does not seem necessarily to advantage the recipients. It would seem wise, when the introduction of early second language instruction is being contemplated, for a very wide spectrum of considerations to be taken account of – much wider than the question of age. An unfortunate outcome of a bad set of educational decisions in this matter will certainly not be salvaged by the age factor.

The general point to be emphasised is that, given motivation and perseverance, good results in second language learning can in fact be achieved at any age.

Postscript

Box 2.16

Having read the chapter would you now recommend people should start learning another language before 10/between 10 and 15/after 15/at any age?

Or would you say the answer is meaningless if it does not take into account the circumstances of the learner and the aspect of language involved?

Further reading

Very different perspectives on the age factor in second language learning are taken in the following two books:

Herschensohn, J. (2007) Language Development and Age. Cambridge University Press.

Singleton, D. and Ryan, L. (2004) Language Acquisition: The Age Factor, 2nd edition. Clevedon: Multilingual Matters.

A fascinating collection of material on various aspects of the immigrant experience in relation to language learning is to be found in:

Kondo-Brown, K. (2006) Heritage Language Development: Focus on East Asian Immigrants. Amsterdam: John Benjamins.

A wide-ranging treatment of factors in the development of bilingualism and multilingualism – including some sidelights on age-related issues – is offered by:

Auer, P. and Li Wei (eds) (2007) Handbook of Multilingualism and Multilingual Communication. Berlin: Mouton de Gruyter.

The educational dimension of early second language learning is comprehensively addressed in:

Nikolov, M. (2009) The Age Factor and Early Language Learning. Berlin: Walter de Gruyter.

References

- Tomb, J.W. (1925) On the intuitive capacity of children to understand spoken languages. British Journal of Psychology 16, 53-54.
- 2. Rokita, J. (2006) Comparing early L2 lexical development in naturalistic and instructional settings. In J. Leśniewska and E. Witalisz (eds) (2006) Language and Identity: English and American Studies in the Age of Globalization. Krakow: Jagiellonian University Press, 70–82.
- 3. Brändle, M. (1986) Language teaching for the 'young-old'. Babel 21 (1), 17-21.
- Asher, J. and Garcia, R. (1969) The optimal age to learn a foreign language. Modern Language Journal 53 (5), 334–341.
- 5. Seliger, H., Krashen, S. and Ladefoged P. (1975) Maturational constraints in the acquisition of second language accent. *Language Sciences* 36, 20–22.
- 6. Patkowski, M.S. (1980) The sensitive period for the acquisition of syntax in a second language. Language Learning 30 (2), 449–472.

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- Hyltenstam, K. (1992) Non-native features of non-native speakers: On the ultimate attainment of childhood L2 learners. In R.J. Harris (ed.) (1992) Cognitive Processing in Bilinguals. New York: Elsevier, 351–368.
- Piske, T., Flege, J.E., MacKay, I.R.A. and Meador, D. (2002) The production of English vowels by fluent early and late Italian-English bilinguals. *Phonetica* 59 (1), 49–71.
- Snow, C. and Hoefnagel-Höhle, M. (1978) The critical period for language acquisition: Evidence from second language learning. Child Development 49 (4), 1114–1128.
- 10. Jia, G. and Aaronson, D. (1999) Age differences in second language acquisition. The dominant language switch and maintenance hypothesis. *Proceedings of the 23rd Annual Boston University Conference on Language Development*, 301–312. Sommerville MA: Cascadilla.
- 11. Bialystok, E. (1997) The structure of age: In search of barriers to second language acquisition. Second Language Research 13 (2), 116–137.
- Carson, L. and Extra, G. (2010) Multilingualism in Dublin: Home Language Use Among Primary School Children. Report on a Pilot Survey. Dublin: Trinity College, Centre for Language and Communication Studies.
- 13. Eriksson, S. (2011) Family and Migration: The Intergenerational Transmission of Culture, Language and Ethnic Identification in Russian-Speaking Families in the Republic of Ireland. PhD thesis. Trinity College Dublin.
- 14. Kouritzin, S.G. (1999) Face(t)s of First Language Loss. Mahwah, NJ: Lawrence Erlbaum.
- 15. Lenneberg, E.H. (1967) Biological Foundations of Language. New York: Wiley.
- **16.** Kinsella, C. (2009) An Investigation into the Proficiency of Successful Late Learners of French. PhD thesis. Trinity College Dublin.
- 17. Ioup, G. (1995) Evaluating the need for input enhancement in post-critical period language acquisition. In D. Singleton and Z. Lengyel (eds) (1995) The Age Factor in Second Language Acquisition. Clevedon: Multilingual Matters, 95-123.
- 18. Mitchell, R. and Myles. F. (2004) Second Language Learning Theories, 2nd edition. London: Arnold.
- Cook, V.J. (1985) Chomsky's Universal Grammar and second language learning. Applied Linguistics 6, 1–8.
- 20. Cook, V.J. (2003) The poverty-of-the-stimulus argument and structure-dependency in L2 users of English. *International Review of Applied Linguistics* 41, 201–221.
- 21. DeKeyser, R. (2000) The robustness of critical period effects in second language acquisition. Studies in Second Language Acquisition 22 (4), 499–533.
- 22. Bialystok, E. and Hakuta, K. (1999) Confounded age: Linguistic and cognitive factors in age. In D. Birdsong (ed.) (1999) Second Language Acquisition and the Critical Period Hypothesis. Mahwah, NJ: Erlbaum, 161–181.
- 23. Birdsong, D. (2006) Age and second language acquisition and processing: A selective overview. Language Learning 56 (1), 9–49.
- **24.** Hyltenstam, K. and Abrahamsson, N. (2003) Maturational constraints in SLA. In C. Doughty and M.H. Long (eds) (2003) *The Handbook of Second Language Acquisition*. Malden, MA: Blackwell, 539–588.

- 25. Hyltenstam, K. and Abrahamsson, N. (2003) Age de l'exposition initiale et niveau terminal chez les locuteurs du suédois L2. Acquisition et Interaction en Langue Étrangère 18, 99–127.
- 26. Molfese, D. (1977) Infant cerebral asymmetry. In S.J. Segalowitz and F.A. Gruber (eds) (1977) Language Development and Neurological Theory. New York: Academic Press, 22–37.
- 27. Ruben, R.J. (1997) A time frame of critical/sensitive periods of language development. *Acta Otolaryngologica* 117 (2), 202–205.
- 28. Diller, K.C. (ed.) (1981) Individual Differences and Universals in Language Learning. Rowley, MA: Newbury House.
- 29. Johnson, J.S. and Newport, E.L. (1989) Critical period effects in second language learning: The influence of maturational state on the acquisition of ESL. Cognitive Psychology 21 (1), 60-99.
- Seliger, H.W. (1978) Implications of a multiple critical periods hypothesis for second language learning. In W.C. Ritchie (ed.) (1978) SLA Research: Issues and Implications. New York: Academic Press, 11–19.
- 31. Scovel, T. (1988) A Time to Speak: A Psycholinguistic Inquiry into the Critical Period for Human Language. Rowley, MA: Newbury House.
- 32. Long, M.H. (1990) Maturational constraints on language development. Studies in Second Language Acquisition 12 (3), 251-285.
- 33. Aram, D., Bates, E., Eisele, J., Fenson, J., Nass, R., Thal, D. and Trauner, D. (1997) From first words to grammar in children with focal brain injury. *Developmental Neuropsychology* 13 (3), 275-343.
- 34. Spada, N. (2004) Interview. ReVEL Revista Virtual de Estudos de Linguagem 2 (2). http://planeta.terra.com.br/educacao/revel/edicoes/num_2/interview_l2.htm.
- 35. Singleton, D. and Muñoz, C. (2011) Around and beyond the Critical Period Hypothesis. In E. Hinkel (ed.) (2011) Handbook of Research in Second Language Teaching and Learning: Volume II, 407–425. London: Routledge.
- 36. Muñoz, C. and Singleton, D. (2011) A critical review of age-related research on L2 ultimate attainment: State of the Art article. Language Teaching 44 (1), 1-35.
- 37. Muñoz, C. (2006) The effects of age on foreign language learning: The BAF Project. In C. Muñoz (ed.) (2006) Age and the Rate of Foreign Language Learning. Clevedon: Multilingual Matters, 1–40.
- 38. Muñoz, C. (2008a) Symmetries and asymmetries of age effects in naturalistic and instructed L2. Applied Linguistics 24 (4), 578–596.
- 39. Muñoz, C. (2008b) Age-related differences in foreign language learning. Revisiting the empirical evidence. *International Review of Applied Linguistics in Language Teaching* 46 (3), 197–220.
- 40. Hatch, E. (1983) Psycholinguistics: A Second Language Perspective. Rowley, MA: Newbury House.
- 41. Genesee, F. (1978) Is there an optimal age for starting second language instruction? *McGill Journal of Education* 13, 145–154.
- 42. Bruer, J.T. (1999) The Myth of The First Three Years: A New Understanding of Early Brain Development and Lifelong Learning. New York: Free Press.

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