Language Learner Differences in L2 Learning

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Today, we are going to discuss the most important aspects of the individual differences between learners to arrive at a better understanding of variation in second-language learning.

- 1.Age

2.Motivation3.AttitudeSocial-psychological factors

4.aptitute → Cognitive factor

Although we will discuss the factors separately, it is important to realize that each of them affects the other in a dynamic process of second language acquisition, and it is impossible to come to exact conclusions about the effect of any of the factors in isolation.

AGE

A position that is strongly associated with the age issue is the Critical period hypothesis.



Critical period hypothesis

This hypothesis claims that it is not possible to acquire a native-like level proficiency when learning the second language starts after a critical period, normally associated with puberty.

This position is most strongly associated with acquiring the phonological system of a second language. Scovel (1988) in de Bot et all (2005,p.65), for instance, argues that late starters may be able to learn syntax and the vocabulary of a second language, but that attaining a native -like pronunciation is impossible for them.

Three relevant questions have to be answered:

- 1.ls there a critical period for language acquisition?
- 2.If it so, what causes does it have?
- 3. And when does it start and end?

Task 1. Discuss the following questions in groups of four or five and give rational s to your answers.

- ➤ Imagine there are three groups of immigrants to the US. Group 1 is between the ages of 6 and 17, group 2 is between the ages of 17 and 30 and group 3 is over 31. They all come from the same country, have the same L1 and none of them speaks any English at the time of arrival. After five years they are tested on their English.
 - What predictions would you make? Which age groups would have learned English best and why?
 - Do you believe it is possible for the oldest group to become fluent in English and why (not)?
 - In what aspects of language (fluency, grammar, pronunciation) would you expect the biggest differences between the groups and why?

Whether there is a critical period or not has been a much-debated issue.

Proponents of the CPH have demonstrated in several empirical studies that it is difficult, if not possible, to acquire a native command of a second language when learning started after childhood.

For examples:

■ Johnson & Newport (1989)Chinese and Korean live in US for 5 years.

Criticism: Kellerman (1995)contrastive study on Chinese and English)

Different outcomes may be due to the different nature of the language

Questions arise as how if the related languages are used.

- Coppetiers (1987)
- Sorace (1993)

These studies convincingly show that young starters do better than late starter.

The question is, however, whether this difference between young learners and adults MUST be due to a critical period.

There are three arguments against this idea:

- 1. The difference might simply be caused by the fact that young learners have more time and more exposure to attain L2 proficiency.
- 2. It is very difficult if not impossible to determine the boundaries of a critical period.
- 3. In spite of the difficulty for most adults to achieve a native-like command of L2, some learners (Selinker's famous 5%) do manage.

This means that it is not possible for late starters to reach full proficiency, which considerably weakens the position of the CPH: if some individual learners can do it, it will of course be very interesting to try and find out in what way these learners are different.

The effect of what seems to be critical period will then be a matter of *individual* differences other than age.

Several studies have therefore concentrated on learners who are late starters and who have nevertheless attained a native-like command of their L2. In a specific grammaticality judgement task, White and Genesee (1996) found that the 44 near-native late starters in their experiment could not be distinguished from the native speakers. A similar effect was reported by Birdsong (1992) in a test containing a wide range of morphosyntactic elements. Also in the domain of the acquisition of phonology a number of investigations have been carried out with learners who appear to be very good at L2 pronunciation. In a series of experiments, Bongaerts and his colleagues (Bongaerts *et al.*, 1997; Bongaerts, 1999; Bongaerts *et al.*, 2000) demonstrated that the pronunciation of the late starters in their experiments could *not* be distinguished from that of the native speakers in their test.

Concluding, we can say that the **evidence** for the CPH is **mixed**. There is ample evidence for the general observation that most learners who start late at acquiring their L2 never reach native-like proficiency. Whether this is due to a critical period or not is an unanswered question.

On the other hand, we have seen that (a limited number of) very good learners do reach that level. This brings us to the question of what causes a critical period may have.

An influential explanation on the CPH has been the one initiated by Lenneberg (1967). Lenneberg's account was based on neurological development. He claimed that as the brain gradually matures, it loses its plasticity. The maturation process, called *cerebral lateralisation*, is a process of specialisation of the hemispheres. Once this process is completed, Lenneberg argued, the brain would no longer be able to take up a new language system. The completion of lateralisation was assumed to coincide with the start of puberty. However, later studies (such as Krashen, 1973) 5) have argued that lateralisation is completed much earlier than that (around age

Moreover, it is unclear how this explanation can account for the fact that some learners do reach native competence.

We will elaborate on two accounts that are most pertinent to current discussions in the filed:

- ➤ a general linguistic explanation that claims to account for the critical period in the domain of grammar, and
- > an explanation that is specific to the domain of phonology.

The first explanation ---Bley-Vroman (1998) among others, asserts that

- L1 learning is based on innate mechanisms, which are no longer available to L2 learners.
- ❖ in this view, L2 learning is seen as a process that is fundamentally different from L1 acquisition because children still have access to innate processes (UG), but that adult L2 learners will have to resort to a more explicit type of learning, which can never lead to the same kind of attainment as natural, implicit learning.

A counter argument for this position is that most L2 learning will also involve implicit learning. Also the claim that L1 learning is predominantly based on innate mechanism is regularly challenged. To date, the question whether L1 and L2 acquisition are fundamentally different learning processes cannot be answered satisfactorily.

In the domain of phonology a similar assumption has been advanced.

Fledge et.al. (1999) attributes the general inadequacy of late starters' L2 pronunciation to their perceptual capabilities. When children learn the sounds of their first language, they perceive the sounds in what Wode (1994) labels the 'continuous mode': all sounds are perceived and qualified equally. However, once children have established a linguistic sound system, they start categorising the speech sounds they hear in terms of the sounds they already know ('categorical perception'). From that moment (around age 7), all L2 sounds that are similar to L1 sounds will be categorised as L1 sounds, so no new categories are created for 'similar' sounds. Only for sounds that cannot be classified in terms of L1 sounds, a new phonological category will be created. This would account for the observation that L2 sounds that are phonetically similar to L1 sounds are the most difficult ones to attain.

Conclusion

- 1. Younger learners have greater chance of attaining native-like proficiency in the L2
- 2. Older learners may show faster progress at the beginning, but are probably surpassed by the young ones at the end.
- 3. Phonology of a second language is beyond doubt the most difficult area to master for late starters.
- 4. It has proven to be very difficult to point to the exact age at which the critical period ends and to explain what causes a possible critical period for language acquisition, so overall, the evidence for the existence of a critical period is not convincing.

Aptitude and intelligence

A person's inherent capability of second language learning is labeled <u>Language Learning Aptitude</u>.

Aptitude can be seen as a characteristic that is similar to intelligence, which cannot be altered through training. As different skills are involved in language learning, aptitude needs to include several factors.

In the literature, starting from Carroll (1958), aptitude is usually described as a combination of four factors:

- 1. The ability to identify and remember sounds of the foreign language;
- 2. The ability to recognize how words function grammatically in sentences;
- 3. The ability to induce grammatical rules from language examples; and
- 4. The ability to recognize and remember words and phrases.

Not until the early 1990s, did research on language aptitude come into vogue again. Recent approaches take into account that aptitude has shown to be a good predictor of achievement in classroom L2 learning, but also emphasize its information-processing side and consider the different components separately rather than as a fixed combination of factors.

An aspect that is now generally considered as one of the components of aptitude is Working Memory (WM). WM must be seen as an active system in which information is stored and manipulated and which is required for complex tasks like language comprehension. Both the control centre that is at the heart of WM, the 'Central Executive' and the specific phonological component have been tested in a rapidly increasing number of studies. Both components generally show moderately strong correlations (around 0.50) with language proficiency scores like TOEFL. However, the studies investigating this are usually taken under strongly controlled laboratory conditions and it is unclear to what extent these findings can be generalised to real-life situations.

The question whether aptitude should include intelligence cannot be answered straightforwardly. After all, this depends on the definition of intelligence.

Conventional intelligence tests have recently been under attack. Sternberg (2002), for instance, claims that intelligence as measured by conventional American IQ tests does not account for more than half of people's intelligence. He proposes an alternative in which he distinguishes between analytical, creative and practical intelligence and argues that also language-learning aptitude needs to be redefined to include creative and practical language-acquisition abilities besides memory and analytical skills.

Task

Gardner (1983; 1999) redefines intelligent in terms of 'multiple intelligences' of which seven are listed below:

- 1. Linguistic
- 2. Logical-mathematical
- 3. Spatial
- 4. Musical
- 5. Bodily-kinaesthetic
- 6. Interpersonal
- 7. intrapersonal

Language use also consists of various components:

- 1. Articulation of sounds and intonation
- 2. Use of gestures in speaking
- 3. Construction of complex sentences
- 4. Analyzing the content of interactants' speech
- 5. Monitoring one's own speech
- 6. Assessing the specifics of a given speech situation.

Which of Gardner's components of intelligence could be related to (which) aspects of language use?

Attitude and motivation

Everyone will agree that motivation is related to someone's 'drive' to achieve something, but what is the exact nature of motivation and how can we measure it?

A very influential definition is given by Gardner and Lambert (1972), who distinguish integrative motivation and instrumental motivation.

Integrative motivation



Instrumental motivation



Although researchers claim to investigate different types of motivation, it is difficult if not impossible to strictly separate the types. Apart from very specific studies, like the one by Gardner and MacIntyre (1991) mentioned in the previous paragraph, it is hard to make separate claims about these types. Gardner's original definition was based on naturalistic language learning in Canada and cannot be simply generalised to other learning situations. For instance, a learner who learns a second language in a classroom situation may have an integrative motivation to learn the language, but at the same time an instrumental motivation to get high grades. Moreover, apart from these external types of motivation, a learner may also be intrinsically motivated. But whatever the exact nature of motivation may be, significant correlations (around 0.40) have been found between self-reported motivation (usually focussed on the integrative type) and success in L2 learning, which could suggest that motivation is one of the predictors of success in L2 learning.

A relevant question, however, is whether success should be seen as the result or as the cause of motivation. In Gardner and Lambert's definition, success is an integral part of motivation, but others argue that success arouses motivation: learners may like what they are good at. After all, a correlation does not say anything about cause and effect. Probably, motivation and success affect each other interactively, which points to a possible interaction between motivation and aptitude.

Recent developments in motivation are outlined by Dörnyei (2001), who mentions several new areas of motivation: social motivation, motivation from a process-oriented perspective, a neurobiological explanation of motivation and task motivation. From this, it becomes clear that there is a need to move away from the limited traditional division into instrumental and integrative motivation. The new conceptualisation of motivation from a dynamic point of view seems particularly promising, as in the course of the acquisition process, the level of motivation will constantly change due to a wide range of interrelated factors. Also the research methodology has lately seen major improvements. Besides improved methods of analysis used in quantitative studies, more qualitative approaches involving thinking out loud protocols may help unravel the true nature of motivation.

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