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The effect of the second language on the first language

The dual language approach

L'article présente les aspects théoriques de l'effet d'une deuxième langue sur la L1, décrit la nature de l'influence réciproque entre ces deux langues et propose des exemples. On y constate que l'effet L2→L1 est sensiblement différent de celui L1→L2. L'influence de L2 est plus cognitive et pragmatique que syntaxique ou lexicale. L'effet bénéfique de l'apprentissage de la L2 sur le développement de compétences en L1 est une opportunité, pas une nécessité, cependant pas tout les types d'apprentissage débouchent sur le développement de multi-compétences. L'étude de la L2 apporte des changement dans le système monolingue seulement si le processus d'acquisition est suffisamment intensif, riche en contenus et lié à la motivation de l'apprenant.

1. Multi-competence

This paper attempts to answer the question of how an emerging new language with its own socio-cultural foundation will affect the existing L1-governed knowledge and conceptual base of the language learner, and how this effect is reflected in the use of both languages. The focus is on one form of L2→L1-influence, namely when L2 is studied as a foreign language in instructional environments.

Language from a multilingual perspective can be defined as a system of signs resting upon an underlying conceptual system that is unique to each culture. This definition implies that there is a linguistic and a conceptual level, which operate together in language processing and that the conceptual level is culture-specific. The conceptual system pulls together cognitive constructs and knowledge; language reflects this system. How does this definition relate to bi- and multilingualism? Grosjean (1989) referred to the fact that a bilingual is not two monolinguals in one body. Cook (1991) claimed that multi-competence is the compound state of a mind with two grammars. Kecskes (1998) argued that people with more than one language have different knowledge of their L1 than do monolingual people, and this difference can mainly be explained by the effect of subsequent languages on the development and use of L1 skills. Basically all these approaches accept that in the bilingual mind one conceptual system is responsible for two language channels that are not blended.

2. An alternative approach to bilingual development

The concept of "dual language" was put forward as an alternative to "interlanguage" (Kecskes & Papp 2003; Kecskes and Cuenca 2005). "Inter" means "in between"; however, the language learner is not necessarily "in between" something; rather, s/he is in the process of adding new information to her/his existing conceptual and linguistic systems. The results are qualitative changes in the original conceptual system and the eventual emergence of a new linguistic system rooted in the same conceptual system. The two language channels are in constant interaction, and mutually affect each other through their common underlying conceptual system. Therefore research has to focus not only on the L1→L2 but also on the L2→L1 effect. This aspect of L2 development has been overlooked in interlanguage theory.

Unlike the interlanguage theory, the dual language approach is an "intake" rather than an "input" theory investigating what happens to the knowledge that enters the common underlying conceptual base (CUCB) through the two or more language channels, and how this knowledge is put to work in the respective languages. This approach underlines that the language system construction is a dynamic process that is a combination of conceptual changes, bidirectional influence between languages, and movements not only up, but also down the developmental continuum. While the languages are kept separate, thoughts originating in one and the same conceptual system are fed

into two different language channels. This has a profound impact both on production and comprehension: what we choose to say, how we choose to say something, how we understand things said to us, and what we consider relevant and appropriate.

According to the dual language approach attrition is both a conceptual and a linguistic phenomenon. Conceptual change will be reflected in language use. Decreasing exposure to any of the languages of an individual, information loss and/or change in his/her CUCB may result in vocabulary decrease and decline of some language skills. On the contrary, retention increases after the CUCB is firmly established in the language learner's mind. This claim is in line with research in neuro-linguistics (e.g. Goral 2004).

3. The nature of bidirectional influence

We know a lot about how the L1 affects L2, but a lot less about the opposite direction. The effect of L1 on the L2 is usually called "transfer" and tracked through syntactic errors, structural changes, wrong choice of words, etc. Consequently, attempts to identify the L2 →L1 effect in a monolingual approach will also look for similar transfer phenomena (e.g. Cook 2003). But what can be transferred from the L2 to the L1? Why should the nature of L2→L1 effect be similar to L1→L2 effect? While the L1→L2 effect is mostly described as negative on account of its grammatical, lexical and/ or phonological errors, the L2→L1 influence is generally positive, since it enhances the knowledge base still dominated by L1. We can observe the bidirectional influence between the two language channels as a developmental issue spreading from an additive to a synergic period. During the additive period, the interaction of the two or more languages and the L1-dominated conceptual base lead to transfer of a sound pattern, a lexical item or a structure from one language system to another. This period is dominated by the L1→L2 influence and hardly allows demonstration of the L2→L1 effect. The synergic period begins when the quantitative process turns into a qualitative change: knowledge or skills acquired through one language are blended with existing knowledge and can be used through both language channels. Now the L2→L1 influence becomes testable and code-switching possible. The L2→L1 effect is cognitive and pragmatic rather than syntactic or lexical.

4. How to demonstrate the L2-L1 effect?

When looking for evidence to demonstrate the L2-→L1 effect, the first thing we need to do is to define what makes the use of a particular language unique. Native speakers of a particular language have preferred ways of saying things (cf. Wray 2002) and preferred, conventional ways of organizing thoughts (cf. Kecskes 2007). Preferred ways of saying things are usually reflected in word selection and the use of formulaic language and figurative language. English native speakers *shoot a film*, *dust the furniture*, or ask you to *help yourself* at the table.

Preferred ways of organizing thoughts refer to the logical structure of utterances as well as to the ways utterances are connected and text is organized. But how are preferred ways of saying things and preferred ways of organizing thoughts affected by the new language (L2)?

4. 1 Preferred ways of organizing thoughts

According to several studies, well-structured sentences and the adequate use of more complex sentence structures are the best signs of the developmental level of mother tongue use. So in our study on the L2→L1 effect we looked for positive qualitative changes that are quantifiable (Kecskes & Papp 2000). Further, we investigated how the nature of linguistic operations in mental activities will change as a result of bidirectional influence between L2 and L1. The hypothesis
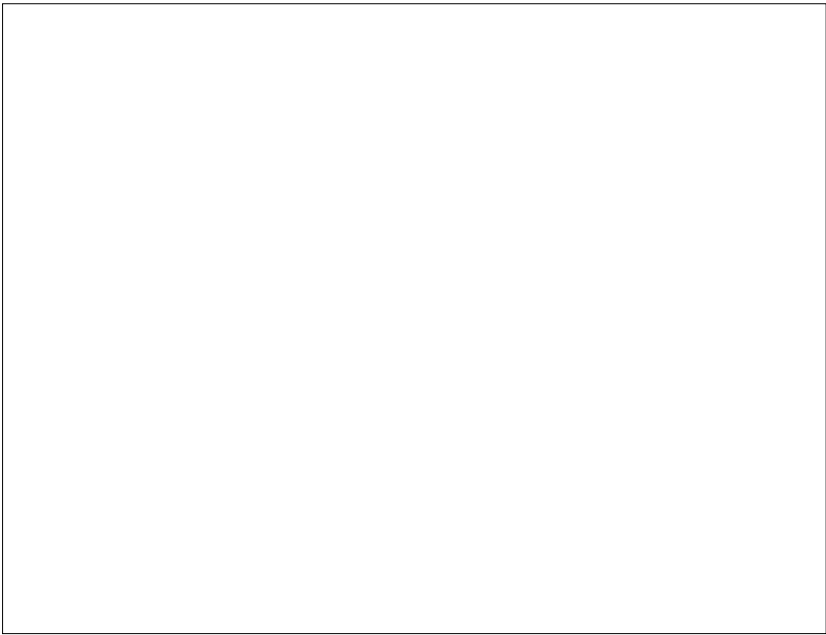
was that students (ages 14-15) with a high command of a foreign language are more bound to the use of linguistic operations in their mental activities and that this will influence their problem-solving strategies. In the experiment students were asked to write a short story *in the FL* based on a series of pictures. Then two pictures in the same series were slightly modified, and one picture that was in the foreign language version was removed. The second part of the task required students to describe *in their L1* what they had seen as well as to recall the picture missing in the FL version and describe it in the L1. We wanted to know to what extent students are bound to a particular language when doing different kinds of activities, and, secondly, to what degree their mental processes are language specific. Three types of texts were produced: **Equal:** Subjects followed their L2 language production in the L1 version and gave a kind of reproduction of the text they had developed in the L2. **Variation:** Subjects followed the story line of their L2 production but *their mental planning was more language-specific* using sentence types other than the ones in their L2 version. The motives in the story were similar, but they adjusted for example sentence structures to the requirements of the language in use. **Independent:** Subjects produced an entirely different story in their L1, which only slightly or not at all resembled their L2 production, with different sentence types and motives. The results can be summarized as follows:

Immersion class: 8% (E), 50% (V), 42 (I); Intensive class: 10% (E), 19% (V), 71% (I)
Control class: 4% (E), 10% (V), 86% (I).

The fact that subjects with higher level of FL knowledge (immersion and intensive classes) produced variation texts in higher numbers than subjects with lower level of FL can mainly be due to the effect of L2.

FL studies can bring about changes in the monolingual system only if the language learning process is intensive enough, rich in content and relies on significant learner motivation.

4. 2 Preferred ways of saying things

Our next study was dedicated to the developmental level of the CUCB after long term exposure to a foreign language (Kecskes & Cuenca 2005): How much and what kind of change has been brought about in the conceptual system of students under the influence of intensive study and use of the English language? To what extent do students rely on word association versus conceptual mediation, when they have to focus more on content than isolated words? The experiment took place in an immersion school near Barcelona where students speak Catalan and Spanish fluently, and are exposed to English from kindergarten age to age 18. They may enter the school between ages 1-6. All three languages are used as a medium of communication and instruction in the school. Our subjects were aged 13-14.

Two newspaper articles, one in Catalan and one in English, in accordance with the subjects' linguistic and real-world knowledge, were selected as tools for data collection. On two different days, students had to read one article at a time and had 30 minutes to summarize its content in the reverse language in form of a brief synopsis of the main ideas (40% of the original text). One day before the first test was administered, the task was explained to the students (practice texts), since they had no previous experience with summary writing: make a conceptual, rather than a lexical, summary that relies on the content and is not the translation

of words and expressions found in the original. So *length of summary* and *resemblance to the original* became the two aspects of data analysis. We had two hypotheses: 1) Based on their prior exposure to English, students would do a conceptual summary of the FL text in their L1. In the FL, conceptual summary is expected only if the CUCB already exists. However, the difference between conceptual and lexical summary is a potentiality rather than a necessity, since *not all FL learners with a CUCB will write conceptual summaries*. Other variables such as anxiety, gender, familiarity with task, emotional effect of text and others may influence summary production. But when a summary in the FL is conceptual rather than lexical, we can almost be certain that the given student has passed the hypothetical threshold and developed a CUCB. 2) Summaries in the L1 would be shorter than in the L2. We assumed that if a student understood the gist of the FL text, s/he would summarize it briefly in the L1, relying mainly on the content of the text. On the contrary, in the L1 to FL summary task, we thought that students would understand the text clearly in the L1, but would have trouble finding the right lexical items to express the conceptual content. Consequently, in the FL we expected verbose explanation of the key ideas of the L1 text.

In the analysis of text we focused on the use of key-expressions (carry key information in the text), content words and expressions and function words. But although the English text was easy, students had difficulty understanding it and produced rather loose ideas instead of a summary. They obviously needed to explain to themselves the English text. If one does not understand something properly, one may become verbose when having to explain this. The quantity of redundant constructions borrowed from the original English text revealed that the students' conceptual base is

loosely linked to the foreign language channel: their potential CUCB is still immature. Students were familiar with lexical equivalency but lacked the knowledge of culture-specific conceptual properties attached to the lexical phrases that denote concepts or conceptual structures.

The results provided evidence against our initial hypotheses that expected short, conceptually-based summaries from English to Catalan and more verbose, lexical summaries from Catalan to English. In fact, the opposite happened. Two clear patterns: from Catalan to English: short summary; from English to Catalan: long summary. Most summaries were lexically- rather than conceptually-driven.

Our hypotheses were built on the assumption that most of these students, after several years of English in content area classes, had passed the presumed threshold and had an emerging CUCB which makes conceptual mediation possible. But in most cases their CUCB was just starting to develop, and as a consequence students relied mainly on lexical association rather than conceptual mediation in their productions.

5. Conclusion

The bidirectional influence between languages is a developmental phenomenon. The L2➔L1 effect significantly differs from the L1➔L2 effect, since L2 influence is cognitive and pragmatic rather than syntactic or lexical (cf. above). The beneficial effect of FL learning on the development of L1 skills is just a potentiality - not a necessity. Not all kinds of L2 learning lead to the development of multi-competence. FL studies can bring about changes in the monolingual system only if the language learning process is intensive enough, rich in content and relies on significant learner motivation.

From the perspective of L1 use the dual language approach underlines that the beneficial effect of L2 on L1 is possible only if exposure to the L1 is maintained at an appropriate level, otherwise attrition may occur in L1 use. Introduction of L2 as a carrier of academic development (dual language schools, bilingual schools, etc.) requires careful planning that includes the maintenance of continuing exposure to L1. Content of exposure to both languages is more important than quantity of exposure.

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