

Bilingualism and Translation Competence

A research project and its first results

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Abstract

In translation studies it is sometimes assumed that bilinguals take a specific approach to translations and/or are in possession of a special competence for translating.

In my research project aspects of bilingualism and translation are investigated. The main question is whether and to what extent the two languages of bilinguals favour or hinder translation. To answer this question two approaches are pursued.

First, the relevant literature on bilingualism and translation is reviewed. One focus of interest is the mental representation of the two languages in bilinguals.

Second, an empirical investigation is carried out with bilingual subjects. By means of a special methodology data are gathered that should give important hints as to how the subjects make use of their two languages in translation.

The results of the research project should not only yield relevant insights for the description and improvement of bilingual translation processes but also for a theory of the development of translation competence in general.

1. Introduction

In translation studies it is sometimes assumed that bilinguals take a specific approach to translations and/or are in possession of a special competence for translating. The most extreme form of this view is held by Brian Harris in his hypothesis of a “natural translation”. According to this, bilingualism is not only a competence in two languages but also a competence of mediating between the two languages¹.

In the research project described in this paper, aspects of bilingualism and translation are investigated. Two of the main questions are whether the two languages of bilinguals play a positive or negative role in translation, and whether they favour or hinder it. Answers to these questions should be found by pursuing two approaches.

First, the relevant literature on bilingualism and translation is being reviewed. One focus of interest is the mental representation of the two languages in bilinguals. Are these represented in the same or in different areas of the brain? Thus light could also be shed on the forms and functions of the mutual influences of the two languages according to their mental representation.

Second, an empirical investigation is being carried out with bilingual subjects. By means of a special methodology data are being gathered that could give hints

¹ The concept of “natural translation” is discussed in detail in section 3.1 below.

1. as to how the subjects make use of their two languages in translation, e.g. in order to solve translation problems;
2. what the role and importance of the source- and target language have for them;
3. how meanings are constituted, represented and retrieved by the subjects, and what role the two languages play in these processes.

2. What is Bilingualism?

In the relevant literature very different concepts of bilingualism can be found (e.g. Altarriba / Heredia 2008, Treffers-Daller 2011). They can be subsumed under two polar views:

The first goes back to Bloomfield (1933) and Halliday/McIntosh/Stevens (1964). According to them bilingualism occurs when an individual can use each of the two languages in communication in such a way that s/he will be considered a native speaker in each of the respective speech communities.

The degree of competence in each of the two languages thus has to be very high, native or native-like, and largely the same in the two languages involved. Bilingual competence is therefore an extremely rare case characterised by discreteness. One either possesses bilingual competence (in its entirety) or one does not. According to this maximalist definition bilingualism is an exotic, exceptional phenomenon which hardly occurs in reality.

The second concept of bilingualism is extremely wide and thus largely the opposite of the one mentioned above. According to it bilingualism occurs when “a speaker can (...) produce complete meaningful utterances in the other language” (Haugen 1956), or has skills in one of the four modalities (speaking, listening, writing or reading) (MacNamara 1969; Appel / Muysken 1987).

Any real, i.e. communicative, use of a second language, however limited this use may be, is thus considered bilingualism. Even though a person’s competence in the non-native language was extremely limited and possibly restricted to one modality only, this person would nonetheless be subsumed under the heading of bilingualism. The concept is so widely defined that according to it nearly every person can be said to be bilingual. Almost every individual can utter a greeting, a farewell or something alike in a foreign language. In contrast to the narrow definition of bilingualism, which restricted the phenomenon to an extremely small number of people, the wide definition considers bilingualism to be the normal rather than the odd case.

A third concept of bilingualism takes a medial position between the very narrow and the very wide concepts outlined above. According to it bilingualism occurs when an individual uses or has to use two languages – or two varieties of one and the same language – in the conduct of her/his daily life. (e.g. Grosjean 2001) This also means that competence in each of the two languages (or varieties) can vary considerably both with respect to the various skills (speaking, writing, reading and listening), and with respect to the content to be communicated (e.g. the weather, a holiday) as well as the domain of the communication (e.g. an everyday conversation, an enquiry at a car registration office).

In adopting the third concept bilingualism is to be subsumed under the general human faculty of using linguistic varieties or – more generally – sign systems in communication in a

situationally adequate way. For translation this has important consequences pointed out by Grosjean (2001:11):

In fact, bilinguals acquire and use their languages for different purposes, in different domains of life, with different people. [...] It is thus perfectly normal to find bilinguals who [...] can only speak about a particular subject in one of their languages. This explains in part why bilinguals are usually poor interpreters and translators. Not only are specific skills required, but interpretation and translation entail that one has identical lexical knowledge in the two languages, something that most bilinguals do not have.

The fact that translation – together with *code switching* and *code mixing* – occurs frequently among bilinguals is the ultimate reason why translation studies are interested in bilingualism.

3. Translation and Translation Competence

It is an obvious fact that translation competence, as possessed by professional translators, is the result of a developmental process that is never final. The process is based on a predisposition to translate which every individual is endowed with. This innate predisposition is not controversial in translation theory. What is most controversial, however, is the way translation competence develops from an individual's innate predisposition. At the moment two highly controversial developmental models exist: *natural translation* and the concept of *translation as transfer*.

3.1 Natural Translation

The concept of *natural translation* goes back to Harris 1977 and Harris/Sherwood 1978. It is defined as “the translation done by bilinguals in everyday circumstances and without special training for it.” (Harris 1977:99) According to Harris and Sherwood bilinguals’ translation competence develops, or rather unfolds itself, to the same degree and parallel to the extent to which the competence of a person in the two languages involved develops. Harris (1977:99) points out that

[...] all translators have to be bilingual and [...] all bilinguals can translate.

In addition to some competence in two languages L_i and L_j , they all possess a third competence, that of translating from L_i to L_j and vice versa. Bilingualism is therefore a triple, not a double, competence: and the third competence is bi-directional.

Translation competence in the sense of *natural translation* is thus considered to be an aspect of bilingual competence. It is a natural phenomenon of bilinguals and must not be confused with translation competence as possessed by professional translators. With respect to the findings presented in section 2 the assumption that *all bilinguals can translate* can definitely not be corroborated (cf. Grosjean 2001). Several reasons seem to be responsible for that. The following three may be of special importance. First, even though bilinguals have competence in two languages these competences are usually not of exactly the same kind. They may be more competent for a particular topic in language A than in language B. Second, bilinguals often lack the meta-lingual and meta-cultural awareness necessary for rendering a source-language text effectively into a target-language and culture. And third, bilinguals’ competence in two languages does not necessarily include competence in transferring meanings and/or forms from one language into the other.

3.2 Translation as transfer (Toury 1986)

The second developmental model of translation competence was proposed by Toury. He agrees with Harris and Sherwood about an innate predisposition to translate and considers it to be *co-extensive with bilingualism*. The differences between the two concepts become evident when Toury points out that translation competence does not develop quasi-automatically and parallel to the development of a child's bilingualism. Bilingualism is considered to be a *necessary*, but not a *sufficient* condition for the development of translation competence. In addition to an individual's bilingual or quasi-bilingual competence an interlingual or transfer competence must be built up. Apart from other possible but hitherto unknown factors, it comprises the individual's ability to transfer texts equivalently on various levels according to a given purpose/aim and with regard to sense, communicative function(s), style, text type, and/or other factors; or to deliberately violate postulates of equivalence for a certain purpose (Hönig/Kußmaul 1982; Reiß/Vermeer 1984, Lörcher 1991a).

Translation competence, according to Toury, can thus be considered to be the sum of bilingual competence and interlingual transfer competence.

3.3 The Concept of a Rudimentary Ability to Mediate (Lörcher 1991a, b)

This concept goes back to Lörcher 1991a, b. Here only its main points shall be outlined.

- The concept assumes that every individual who has a command of two or more languages (even with various degrees of proficiency) is also endowed with a rudimentary ability to mediate information between these languages.
- The rudimentary ability to mediate realises itself in performance products which are to be called translations, even though they are imperfect or restricted.
- The rudimentary ability to mediate can be considered to be a special case of at least two universal innate abilities of the human intellect: that of categorizing and that of comparing, of differentiating similarities and dissimilarities.
- Both of these abilities, which also underlie any natural linguistic competence, make it possible for an individual to express sense and/or connections of signs in different ways. The mediations of sense and/or signs can occur within the verbal sphere, between the verbal and the nonverbal spheres and between different nonverbal spheres. As soon as an individual has at least partially acquired modes of verbal and/or nonverbal behaviour, rudimentary mediations between them are possible.
- Based on innate abilities of the human mind, the rudimentary ability to mediate and its modes of realization function irrespective of the genuine nature of the mediating situation and irrespective of the naturalness of its communication.

As a consequence translation competence is considered to equal – an even partial – competence in the languages involved plus an Interlingual (rudimentary) ability to mediate plus training/experience in translation.

4. Bilingualism: On the Mental Status of the Two Languages

Research so far has concentrated largely on four aspects:

- I. Do bilinguals process words, sentences and discourse of each of the two languages in the same way?
- II. Do bilinguals process words, sentences and discourse of each of the two languages in the same way as monolinguals do or are there specific, bilingual processing mechanisms?
- III. Are there in the bilingual brain two mental lexicons, which are automatically kept apart (*independent storage*) or does the bilingual brain only possess one mental lexicon with a mechanism that relates the respective entries to the respective language in communication (*interdependent storage*)?
- IV. Are the languages of bilinguals mentally represented in one or two memory stores?

- I. Do bilinguals process words, sentences and discourse of each of the two languages in the same way?

In the relevant literature there seems to be some evidence for this assumption (cf. Fabbro 2001; Nicol 2001; Levelt ⁵1998). In the processing of a language in which a person has a lower degree of competence, pragmatic factors are more strongly employed as means of compensation.

- II. Do bilinguals process words, sentences and discourse of each of the two languages in the same way as monolinguals do or are there specific, bilingual processing mechanisms?

In the relevant literature there is a high degree of evidence for identical language processing among bilinguals and monolinguals. Specific bilingual mechanisms of language processing seem *not* to exist (cf. Fabbro 2001; Levelt/Roelofs/Meyer 1999; Nicol 2001; Treffers-Daller 2011).

- III. Are there in the bilingual brain two mental lexicons, which are automatically kept apart (*independent storage*) or does the bilingual brain only possess one mental lexicon with a mechanism that relates the respective entries to the respective language in communication (*interdependent storage*)?

The number of memory stores seems to depend on the respective type of bilingualism (*compound, coordinate, subordinate*).

Compound bilingualism is characterised by one set of meaning representations for both languages and two modes of expression, one for any of the two languages. This may suggest one mental lexicon for the two languages (Levelt/Roelofs/Meyer 1999). It is, however, still a matter of controversy (Fabbro 2001; Nicol 2001; Appel/Muysken 1987; Treffers-Daller 2011).

In *coordinate bilingualism* there are two sets of meaning representations, one for any of the two languages, as well as two modes of expression, one for either of the two languages. This type of bilingualism may suggest the existence of two mental lexicons. But there is no

unanimous consent about this (Fabbro 2001; Nicol 2001; Appel/Muysken 1987; Treffers-Daller 2011).

Subordinate bilingualism is characterised by one set of meaning representations, for L1, and two modes of expression of which the one for L2 is learned by means of that for L1. Subordinate bilingualism suggests the existence of one mental lexicon and one *in the process of construction* (Fabbro 2001; Nicol 2001; Appel/Muysken 1987; Altarriba/Heredia 2008).

There is still a third possibility, i.e. the assumption of three memory stores: one conceptual store, for encyclopaedic knowledge, and two language stores, for meaning representations *and* modes of expression for each of the two languages (Fabbro 2001).

IV. Are the languages of bilinguals mentally represented in one or two memory stores?

Three concepts can be distinguished:

1. Two-Store-Models

These go back to Scoresby-Jackson (1867) and postulate that both languages, at least to a large extent, are stored in different cortical areas.

This view could not be corroborated. Neither electrophysiological studies (event-related potentials, ERPs, e.g. N500), nor the more advanced functional neuroanatomy studies (positron emission tomography, PET, or functional magnetic resonance imaging, fMRI) support these models. The cerebral activation measurable occurs in the same cortical areas of bilinguals and monolinguals and independent of the respective language.

A possible reason is that bilingualism is to be subsumed under the general human faculty of using varieties or, more generally, sign systems in communication in a situationally adequate way (as described earlier).

2. One-Store-Models

They go back to Pitres (1895) and Minkowski (1927) who assume that both languages, at least to a large extent, are stored in the same cortical areas of the left and the right hemispheres. Electrophysiological as well as functional neuroanatomy studies have shown that the same cerebral activation occurs with bilinguals as well as with monolinguals in word-, sentence- and text-processing. Accordingly one-store models are generally preferred (cf. Levelt⁵1998; Levelt/Roelofs/Meyer 1999; Price/Green/von Studnitz 1999).

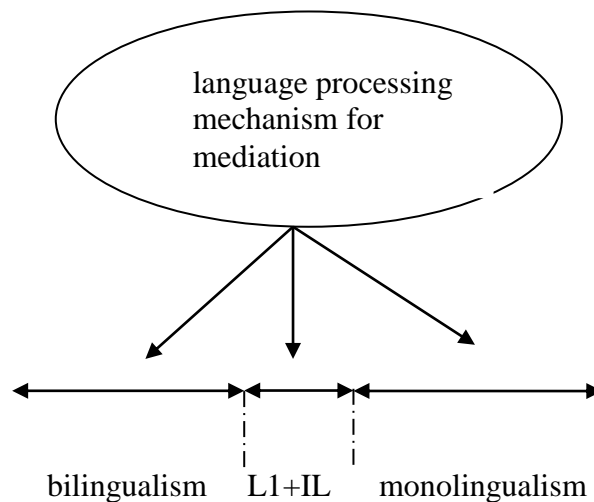
3. The Two-Component-Model

A special type of one-store models is the two-component model. With respect to translation Fabbro (2001) and Paradis (1984) assume a two-component model with two neurofunctionally separate and autonomous components in the same cortical area. These are responsible for translation and work in a way relatively independent of the reception and production systems. One component is responsible for a translation from language A to language B, the other one for a translation from language B to language A.

The considerations made so far yield the following insights

Actually, all verbal functions that are present in a bilingual individual have their homolog in a monolingual speaker. Bilinguals switch and mix languages, while monolinguals switch and mix registers; bilinguals translate from one language into another, while monolinguals may paraphrase from one register to another (i.e., they can express the same concept addressing their own little child or an audience of experts) (Paradis 1993, 1998). This is another reason why it is no longer reasonable to postulate the existence of neural mechanisms specific to bilinguals, as maintained by several neurologists in the past. (Fabbro 2001: 213)

By consequence, as regards the mental mechanisms of language processing, language competence in the sense of a bilingual competence on the one hand, and in the sense of a competence of a native language (L1) plus a partial competence in another language (*interlanguage*; IL²) on the other hand, do not differ in principle but rather by degree. This is also suggested by the wider definitions of bilingualism (Grosjean 2001). It can be diagrammatically represented as follows:



The considerations made above have important consequences for the investigation of translation:

- i. translation processes of bilinguals are likely to differ from translation processes of non-bilinguals, i.e. people with a native language and an interlanguage, not in principle, but only by degree.
- ii. As a matter of fact, it can be observed that many bilinguals have both subjective and objective problems in translating and in interpreting.
- iii. This is probably not caused by any specifics of neuronal processes but by the interaction of the two languages. The problems are probably similar to those of monolinguals, when they transfer meaning-sign-combinations from one register into another or from one variety into another.
- iv. Since little evidence for these phenomena can be found, the investigation of bilingual translation competence is a desideratum in research.

² The hypothesis of an *interlanguage* goes back to Selinker 1972. It assumes that second language learners do not normally acquire the full competence in the target language but an interlanguage system sharing features of the native and the second language.

5. Bilingualism and Translation: A Project for the Investigation of Bilingual Translation Competence

In the research project three goals are pursued. First, psycholinguistic aspects of the mental translation *process* are investigated by analysing translation *performance*. This is done in order to reconstruct translation *strategies*. These underlie translation *performance*, operate in the translation *process* and thus are not accessible to direct inspection. Second, insights into the combined use of the two languages of bilinguals during their translation processes shall be gained. And third, knowledge about aspects of the development of bilinguals' translation competence shall be acquired.

The basis of the investigation is a data corpus consisting of translations performed by 22 bilinguals (in the sense of Grosjean's definition). As one of the aims of the research project is to find out how bilinguals' translation competence develops, the subjects chosen are not trained but "native translators" (Toury 1986). Furthermore, their experience in translating varies considerably. This should yield insights into the respective stage of development of the subject's translation competence.

5.1 Methodology

As concerns the methodology employed in investigating bilingual translation processes, a distinction can be made between methods and procedures for the *elicitation* of data and those for the *analysis and evaluation* of data.

5.1.1 Methods for Data Elicitation

For the investigation of the 22 bilingual subjects' mental processes introspective procedures (thinking-aloud) are employed. During the last years many arguments have been put forward about the advantages and disadvantages of thinking-aloud. Elsewhere (Lörcher 1991b) seven arguments in favour of this method for eliciting information about translation processes were discussed. As a conclusion, it was pointed out that thinking-aloud is a useful tool for collecting data about mental processes in general, and translation processes in particular, if we take into account the conditions under which the data are externalised and their inherent limitations. (Ericsson/Simon 1984).

To minimize these limitations retrospective procedures (ex-post thinking-aloud, retrospective probing immediately after translation task) are additionally employed. Such a combination of introspective and retrospective methods should minimize the weaknesses of each procedure when it is used separately. This triangulation of methods is also propagated by Ericsson and Simon (1984).

The subjects' translations, their thinking-aloud protocols interwoven with the translations and the retrospective information are recorded and serve as one data basis for the analysis. Furthermore the tracking system TRANSLOG is being used by the bilingual subjects. The TRANSLOG recordings serve as a second basis for the analysis. It is hoped that by means of a combination of introspective and retrospective procedures together with the data documented by the TRANSLOG system a rich and valid data corpus can be compiled.

5.1.2 Methods for Data Analysis and Evaluation

The *analysis and evaluation of data* is carried out by means of an interpretive approach, as this is customary in performance analysis. The primary aim of this approach is the hypothetical reconstruction of sense relations. In the process of interpretive reconstruction, certain data are interpreted as (observable) indicators of (unobservable, mental) translation strategies. These indicators represent the basis for the formation of hypotheses on the mental translation process. - A more detailed description of these phenomena is contained in Lörcher 1991a: 56ff.

The process of knowledge accumulation with respect to translation strategies has a dialectical nature. On the one hand, the analysts must have some knowledge of the concept of translation strategy in order to be able to ascribe the status of strategy indicators to certain signs. On the other hand, it is only by their indicators that translation strategies are constituted, so that knowledge of them can, to a very large extent, only be gained by means of strategy indicators. Therefore, the analysts must often proceed in a speculative and hypothetical way. They often do not interpret certain signs to be indicators as a result of their knowledge of the respective entity or of the relationship between an indicator and a segment of reality, but rather on the basis of considerations of probability. They can be corroborated or turn out to be false in the course of accumulating further knowledge of the phenomena and of gathering more experience in interpretation.

6. Projected Results and Perspective

The results of the research project should yield insights into several domains:

- concerning the description and analysis of translation processes of bilinguals: What status and roles do the two languages play for the bilinguals? In what ways do bilinguals use the two languages to deal with translation problems and try to solve them? What aspects of bilingual competence can help or hinder translation?
- concerning approaches to describing as well as improving the efficiency of translation processes among bilinguals, e.g. by comparing successful with unsuccessful translation processes and ascertain what factors may be responsible for success or failure.
- concerning approaches to describing as well as improving the efficiency of translation processes among non-bilinguals, since differences between bilingual and non-bilingual language competence are by degree and not in principle.
- concerning a theory of the development of translation competence in general. As the investigations of the mental translation processes of professional and non-professional translators suggest, the process-oriented approach to translation is a decisive indicator of the developmental stage of translation competence (Lörcher 2002). By means of an investigation into bilingual translation processes insights could be gained as to whether and to what extent bilinguals take a sign- or a sense-oriented approach to translation.

Elsewhere (e.g. Lörcher 1995) I have presented considerations concerning a developmental model of translation competence. These were based on a data corpus of translations performed by (advanced) foreign language learners and professional translators. The mediations performed by foreign language learners are characterized by primarily sign-

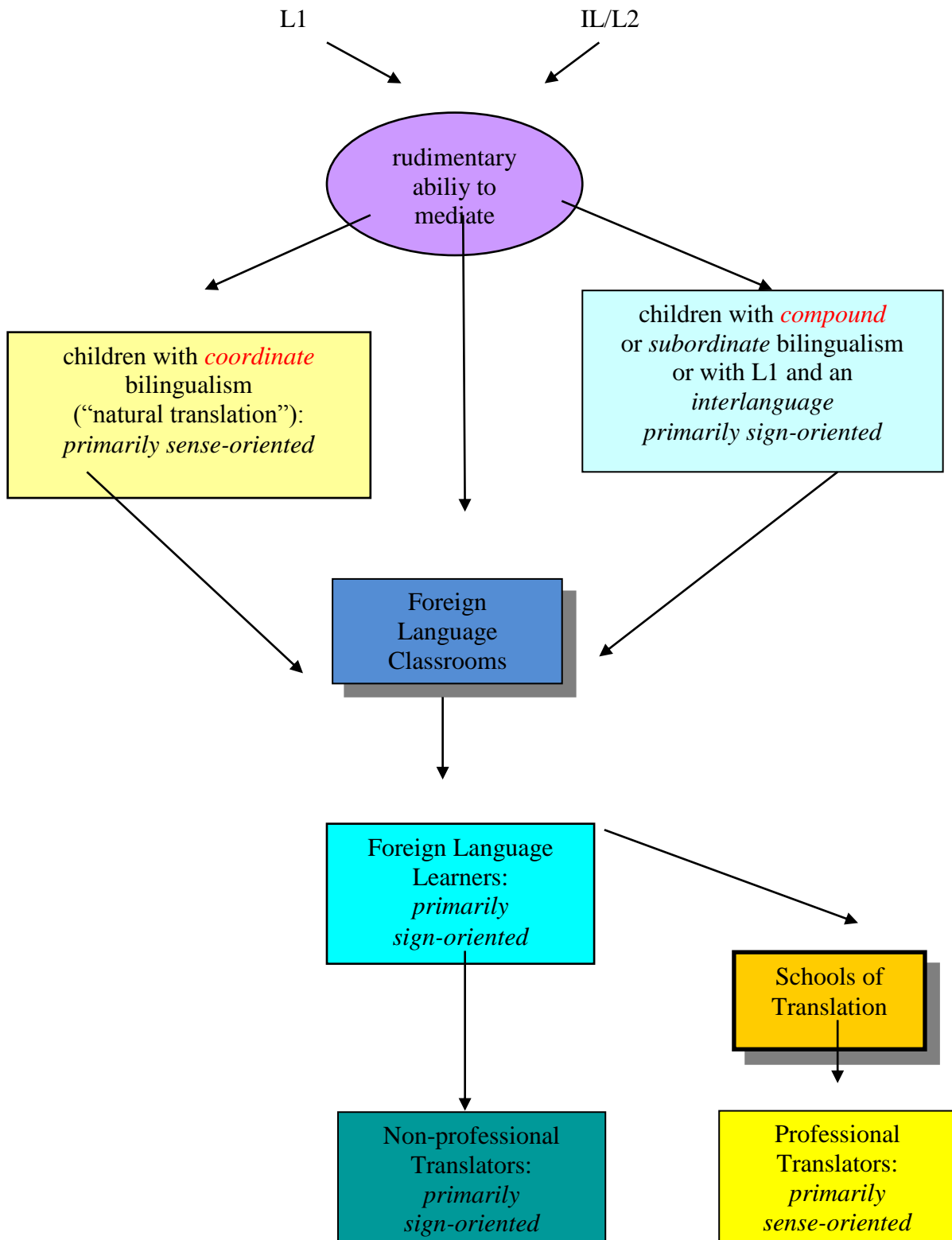
oriented procedures. They are made possible by a mother tongue competence and a partial (*interlanguage*) competence in a foreign language. The mediations normally take place in artificial mediating situations. They neither make communication possible nor easier, but serve didactic purposes.

Professional translators take a primarily sense-oriented approach to translation. Their developed mediating competence is based on a quasi-bilingual competence and unfolds itself in real mediating situations in which genuine communication takes place.

Hypothetically it can be concluded that the rudimentary mediating competence and its forms of realization in elementary translations, as can be observed with (*coordinate bilingual*) children in the sense of a *natural translation*, are characterized by a sense-oriented approach to translation. The rudimentary ability to mediate is based on a bilingual competence and unfolds itself in real mediating situations for purposes of making communication possible or easier. Children with *compound* or *subordinate* bilingualism, in contrast may take a mainly sign-oriented approach to translation. The research project in progress will hopefully illuminate whether, or to what extent, this hypothesis can be corroborated.

The development of an individual's rudimentary ability to mediate towards translation competence, as professional translators possess it in its elaborated realizations and non-professional translators in its largely deficient forms, is schematically represented in the following diagram:

The Development of the Rudimentary Ability to Mediate
Towards Translation Competence



The rudimentary mediating competence in its largely sense-oriented forms manifests itself in coordinate bilingual children's *natural translation*. In the foreign language classroom, in which translation is taken out of its communicative dimension and functionalized for the training and testing of foreign language skills, this rudimentary ability to mediate undergoes a decisive deformation. It is largely reduced to the level of the signs. This is documented in the translations of the foreign language learners and generally remains with non-professional translators. It is the task of the schools of translation to reverse this deformation. The professionals whom they train approach translations in a primarily sense-oriented way and thus adopt procedures used by coordinate bilingual children.

With regard to their approach to translation, coordinate bilingual children and professional translators have thus more in common with each other than with foreign language learners. It is, therefore, an urgent task, especially for the schools, to search for possibilities of developing the rudimentary mediating competence towards an elaborated translation competence. By maintaining an apparently inadequate concept and view of translation, this development has far too often been seriously hindered.

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