Teaching and Learning in Multilingual Contexts

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1 Problems in Defining the Concepts of L1, L2 and L3

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Introduction

With the increased interest in multilingualism and third language acquisition (TLA) in recent years, and the rapidly expanding research in the area, several authors have felt the need to review and reflect on parts of the terminology used in this field (Aronin *et al.*, 2011; De Angelis, 2007; Franceschini, 2009; Hammarberg, 2010; Kemp, 2009). When the research perspective is shifted from a bilateral view, which has prevailed in language learning theory (*bilingualism*; *L1/L2*; *second language acquisition*) to situations that explicitly involve more complex language settings and new areas of inquiry, the use of established terms may in some cases lead to complications. This is true even of very basic terms, such as *first language* (*L1*), *second language* (*L2*) and, not least, *third language* (*L3*), which will be at the centre of the following discussion.

The use of the terms L1, L2 and L3 in the literature is quite disparate. Thus, for example, in the area of *second language acquisition* (SLA) research, the term 'second language' or 'L2' usually refers to (a) any non-native language in a speaker's repertoire, whereas in *third language acquisition* (TLA) studies, it is often used for (b) the chronologically second language acquired by a speaker. In the field of TLA, or language acquisition in a multilingual context, 'third language' or 'L3' may stand for (a) the chronologically third language (a frequent conception), or (b) the next language encountered after the simultaneous acquisition of two languages in early infancy (Cenoz, 2000), or (c) any non-native language currently being acquired by a speaker who is already familiar with one or more other non-native languages (e.g. Williams & Hammarberg, 2009 [1998]). In addition (d), the notion 'third or additional language' is used instead of 'third language' (De Angelis, 2007).

The purpose of the following considerations is to try to elucidate this rather inconsistent usage of the term, identify its various defining criteria

and discuss the basis for adopting a coherent and adequate terminology in this area of research. In the first place, this is a matter of identifying *the concepts for which there is need* and how these are related to each other, and in the second place to consider how they can best be *named by terms*. It appears timely to discuss this issue while TLA studies are still a fairly new branch of research, in the process of becoming more firmly established.

We can observe an increasing focus today on *language acquisition in a multilingual context*.¹ It is being taken into account that people's acquisition and alternate use of several languages is a natural and extremely widespread phenomenon. Many researchers assume bi- or multilingualism to be as frequent or more frequent in the world than monolingualism (see e.g. Aronin & Singleton, 2008: 2, 2012: 41; Cook, 1992: 578; de Bot, 1992: 2; Grosjean, 1982: vii; Hakuta, 1986: 4–6; Kecskes, 2010: 93; Tucker, 1998: 4). It is a fact that all humans have the capacity to acquire and use several languages. Speakers tend to develop bi- and multilingual competence in the course of their lives, in some cases starting in early infancy. It can be argued that the multilingual potential is an integral part of the human language faculty, and that multilingualism, rather than monolingualism, should be seen as the normal form of (mature) linguistic competence.

In this perspective, *the developing multilingual competence* is a key area of research. Some of the fundamental aspects of this competence are mentioned as follows: One is its *holistic* nature, the way a speaker's competence in various languages forms a unique and coherent whole, a *multicompetence* (Cook, 1991, 1992, 1993; cf. Grosjean, 1985), rather than constituting separated monolingual competences. The speaker's languages are assumed to form *subsets* within the same cognitive system (Paradis, 1981, 2004). They get simultaneously *activated* to varying degrees during comprehension and production (Green, 1986), which forms a basis for crosslinguistic influence (CLI). Depending on various factors in the speech situation, a speaker may adopt different *language modes*: a monolingual mode, striving to adhere to the use of one language, or a bi- or multilingual mode, allowing transfer and code-switching more freely (Grosjean, 2001).

Another aspect concerns the *hierarchical* relations between the languages in the speaker's mind, relations which have motivated the use of rank designations such as *primary* versus *secondary* system (Weinreich, 1953: 14), *tertiary* language (Hufeisen & Lindemann, 1998) or the common ordering of speakers' languages as *first*, *second*, *third* and so on (L1, L2, L3...). A crucial question then is, what is the nature of this hierarchy? It is essential to clarify this question in order to understand the concepts that are commonly called L1, L2 and L3.

The following section will deal with identifying the hierarchical relations between a learner's languages on which current research in the area is based, starting with the basic distinction between a native and a non-native language, and continuing with more complex situations involving

more languages. This will result in identifying several alternative models that underlie current conceptions of an acquisitional hierarchy. In the subsequent section, the properties and problems connected with these models will be discussed, as well as implications for the use of terms. The concluding section will comment on the rise of a terminology which is no longer quite adequate, and ways of handling the current terminological situation.

Identifying a Hierarchy for the Acquisition of Languages

L1 and L2 in the SLA tradition

An individual acquires languages during different periods of life, be it simultaneously, successively or in reciprocal alternation. Various factors in the acquisitional history (age, chronology, amount of exposition and use, context and manner of acquisition, affective factors, etc.) contribute to differences in how the speaker processes, acquires and masters the different languages. In the SLA tradition, a simple division is made between L1 and L2. A basic question then is, what is the fundamental difference between an L1 and an L2?

Among the various aspects in which a person's languages may differ (such as time of acquisition, level of proficiency, amount and domains of use, subjective identification; cf. discussion in Skutnabb-Kangas, 1981: 12–16), the type of criterion taken to define the concepts of L1 and L2 is usually one of time-relation. Since the alternative rank orderings of a person's languages according to time, proficiency, use or identification often do not yield the same result, it is important to keep these criteria apart so that it is possible to profile them against each other. The current discussion of criteria for defining L1 and L2 will thus focus on the time dimension. Two major time-related criteria can be discerned in the SLA literature:

- (1) *Chronological order of acquisition*. This means that L1 and L2 are defined through the priority/posteriority distinction. L1, being encountered first, develops as the original system, and L2 is subsequently added to the already established L1.
- (2) *Cognitive maturity*. This criterion is based on the cognitive development that comes with age during early childhood. The crucial distinction is the one between a language encountered and acquired up to a certain level during infancy, the period in which the child's linguistic categories, patterns and rules of use are first shaped, and a language encountered at a later age. This is not just a chronological division, but it

reflects a difference in the individual's stages of maturational, social and intellectual development. The distinction is the one between a *native language (NL)* and a *non-native language (NNL)*.

In a simple case with one language acquired from birth and another added after early childhood, the terms L1 and L2 can be interpreted according to either of the two criteria. But when these terms are also applied to more complex cases where a speaker has multiple NLs and/or NNLs, so that L1 comes to be used for one or more NLs and L2 for one or more NNLs, as has become customary in SLA research, this implies that the distinction is made according to the cognitive maturity criterion: any NL is designated as an L1 and any NNL as an L2. This has in effect become the standard conception of L1 and L2 in the field of SLA.

The validity of the NL/NNL distinction is evident when a language acquired from birth is compared to a language added in adolescence or adulthood. Thus, in contrast to an NL, we can observe that an NNL is usually subject to fossilisation, and that crosslinguistic influence tends to affect NNLs in regular ways, symptoms that bear witness to cognitively based differences between NL and NNL. In a neurolinguistic context, Paradis (2004, 2008, 2009) distinguishes between *implicit linguistic competence* in L1 and *explicit metalinguistic knowledge* of L2. His use of L1 and L2 here corresponds to NL and NNL. To summarise, the former is acquired incidentally, stored implicitly, used automatically, sustained by procedural memory, and involves different parts of the brain than the latter, which is learned consciously, stored explicitly, consciously controlled when used, and sustained by declarative memory (Paradis, 2008: 343). Paradis emphasises that the two mechanisms are distinct, but he allows for gradual replacement of explicit knowledge by implicit competence in L2 users through practice. 'As a skill becomes more proficient, processing shifts from the use of one mechanism (controlled, declarative) to another (automatic, procedural). [...] Practice leads to the *replacement* of controlled processes by automatic processes, thus improving automaticity' (Paradis, 2004: 36, italics in original).

A process of shift of mechanisms also seems to take place when an infant grows older and the NL type of acquiring and storing a new language is gradually replaced by an NNL type. For a period, the young child is thus likely to undergo a transition process during which a new language shows both NL and NNL characteristics. Different researchers vary somewhat as to how this process should be located in time. Paradis (2008) sets the endpoint for L1-type acquisition at about age five. McLaughlin (1984) posits age three as a practical cutoff point between FLA and SLA. Meisel (2011), reviewing research on neural maturation and age, finds that changes in the direction from L1-type to L2-type acquisition seem to take place at least up to age seven, with some crucial changes around age four. Hylltenstam

and Abrahamsson (2003), investigating age of onset of acquisition and ultimate attainment, report effects that appear to indicate that the child's capacity for L1-type acquisition starts decreasing successively already shortly after birth. What is constant in these findings is that the transition from NL to NNL acquisition proceeds with a temporal overlap, which, however, does not rule out the relevance of the NL/NNL distinction.

Beyond a two-level distinction

The exploration of TLA, or more generally, language acquisition by previously bi- or multilingual persons, means that the complexity of the learner's language background is being taken into account. A basic finding is that being already bi- or multilingual creates a different basis for acquiring a further language as compared to acquiring an NNL for the first time. There is evidence for various positive effects of bilingualism on cognitive development, metalinguistic awareness and communicative skills, as well as on attaining proficiency in a further language; cf. Cenoz (2003) for a review of research. An open question which still needs closer study and clarification is whether it makes a difference in these respects if the speaker's bilingualism is of a successive or a simultaneous type. In other words, does it matter whether the learner's bilingual background when acquiring a further language has the form of NL + NNL or NL + NL (in Cenoz' terms, $L1 \rightarrow L2 \rightarrow L3$ or $Lx/Ly \rightarrow L3$)? For the time being, I will deal with situations in which multilingual learners have prior experience of NNL acquisition, that is cases in which the learner possesses one or more prior NNLs as well as one or more NLs. Reasons for this focus are the role of a prior NNL as proposed in Hufeisen's (1998, 2005) *Factor-Model*, and also findings regarding the effect of *L2 status*, to which I shall return below.

In Hufeisen's Factor-Model, the conditions for successively acquiring L1, L2 and L3 are compared (Hufeisen, 2005: 37f.). These three consecutive situations are captured as bundles of factors of increasing complexity. Factors already present in *L1 acquisition* are the following:

- *Neurophysiological factors*: for example, general language acquisition capability, age.
- *Learner external factors*: for example, learning environment, type and amount of input.

L2 learning involves in addition

- *Affective factors*: for example, motivation, anxiety, assessment of own language proficiency, perceived closeness/distance between the languages, attitudes, individual life experiences.

- *Cognitive factors*: for example, language awareness, metalinguistic awareness, learning awareness, learner type awareness, learning strategies, individual learning experiences.
- Prior knowledge of L1.

L3 learning is further shaped by

- *Foreign language specific factors*: individual foreign language learning experiences and strategies, previous language interlanguages, interlanguage of target language.
- The added prior knowledge of L2.

Hufeisen views L2 and L3 in the context of instructed foreign language learning, but it is hardly likely that the conditions for naturalistic NNL language acquisition should be decisively different in the respects that she mentions. If this model, extended to also include non-instructed acquisition, correctly captures the factors at work, there are qualitatively distinct sets of conditions for acquiring L1, L2 and L3. By contrast, the set of factors that shape L3 acquisition does not change in any decisive qualitative way if the learner goes on to acquire further languages, according to Hufeisen (although a quantitative increase in e.g. knowledge of language facts, language awareness and skill in using strategies does arise; cf. e.g. Mißler, 1999, 2000).

This means that the two-level distinction usually made in research on bilingualism and SLA is replaced by a three-level distinction for multilingual learners. Hufeisen assumes a chronological sequence of one L1, one L2, one L3 and so forth. If instead the NL/NNL division is applied, extending usual SLA practice, the three levels will be *NL–First NNL–Non-first NNL*. (The principal modification of Hufeisen's model in this case will be that possible multiple NLs will entail the acquisition of multiple language knowledge and crosslinguistic awareness already at the NL level, which will affect the starting position for the following levels.)

Hufeisen identifies prior L2 knowledge and L2-specific learning experiences as the crucial factors which make L3 learning different from L2 learning. This suggests a specific role for a prior NNL in the multilingual learner's linguistic background. TLA research in the recent decades has amply attested that not only NLs, but also prior NNLs may become activated in further NNL acquisition, contrary to a common earlier belief. Various interacting factors, such as crosslinguistic similarity, language proficiency, recency of use, and certain other factors, are known to contribute to lowering the activation threshold for a particular background language and thus favour crosslinguistic influence from that language on the acquisition of the current target language (see Falk & Bardel, 2010, for a recent state-of-the-art account). A particular indication that there is an additional cause for a prior L2 to become activated, as compared to an L1, are the recent findings regarding an

L2 status effect, that is, the observation that the status of being a non-native language furthers CLI from that language. The notion that L2 status constitutes a factor that interacts on a regular basis with the other CLI-promoting factors mentioned above was proposed by Williams and Hammarberg (1998, reissued 2009). Several authors have documented and discussed L2 status effects in various language constellations and in various areas of language: lexis (Bono, 2011; De Angelis, 2005; Williams & Hammarberg, 2009); syntax (Bardel & Falk, 2007, 2012; Falk, 2010; Falk & Bardel, 2010, 2011; Sanchez, 2011); phonetics and phonology (Hammarberg & Hammarberg, 2009; Llama *et al.*, 2010; Wrembel, 2010). Suggested explanations for the L2 status factor in L3 acquisition are (a) a different acquisition mechanism for L2s as opposed to L1s, and hence a reactivation of the L2-type mechanism, and (b) a desire to suppress L1 so as not to sound like a speaker of that language (Williams & Hammarberg, 2009: 63). The former is in line with Paradis' distinction of two separate neurolinguistic mechanisms for L1 and L2 (see above) and points to an affinity between NNLs in this respect, which is not shared with NLs. The latter explanation relates to the learner's perception that L1 is alien to the target language and hence inappropriate to make use of, which gives rise to a tendency rather to draw on another non-native language; cf. De Angelis' (2005: 11) discussion of such learner perceptions in terms of 'perception of correctness' and 'association of foreignness'.

Current models of the acquisitional hierarchy

A look at the ways in which the terms *first*, *second* and *third language* (L1, L2 and L3) have been used in the literature shows that they reflect a variety of conceptions of how the speaker's languages are related to each other in a hierarchy of acquisition. This can be formulated in a set of different models which are summarised in Table 1.1. Before discussing these models in the following section, I will here provide a few instructions on how to interpret the table.

The models differ in the number of *levels*, that is, whether the terminology categorises the speaker's languages in a two-order, three-order or *n*-order hierarchy. The terms can further be applied to different sizes of what I here call *language settings*, that is, situations involving different numbers of languages: two, three, three or more or any number of languages. The setting includes the speaker's already acquired language(s) as well as the current target language. For each of these cases, the table briefly states the usually occurring *terms* and their (explicit or implicit) *definitions*. These are based on a type of *defining criterion*, which may either consist of a linear chronological ordering of the languages, usually according to the time of first encounter, or rest primarily on the cognitive distinction between native and non-native language. Applying these various distinctions results in six models, which are here designated by letters A to F.

Table 1.1 Current models of an acquisitional hierarchy underlying definitions of L1, L2 and L3

Levels	Setting	Terms and definitions	Criterion	Model
2-level models: L1/L2	Bilingual	L1 = first acquired L2 = second acquired	Chronological	A
	Any size	L1 = any NL L2 = any NNL	Cognitive	B
3-level models: L1/L2/L3	Trilingual	L1/L2/L3 = first/second/ third acquired	Chronological	C
	≥Trilingual	L1/L2/'third or additional'	Chronological, with cognitive implications	D
	≥Trilingual	L1/Prior L2/L3, whereby L1 = any NL, Prior L2 = any prior NNL, L3 = current NNL	Cognitive	E
n-level model: L1/L2/L3/L4 /.../ Ln	Any size	Chronological numbering according to first encounter	Chronological	F

Discussion

The principal differences between the models in Table 1.1 relate to the *criteria* by which the terms are defined, and the number of *levels* in the acquisitional hierarchy that are adopted.

Chronologically based models

The models A, C and F rest on a pure chronological numbering of the speaker's languages, in principle ordered according to the time of the speaker's first encounter with the language. The definitions do not depend on a cognitive maturity factor as manifested in the infancy/post-infancy and NL/NNL distinction. (This does not mean that the researchers who work with chronological definitions are not aware of cognitive differences between L1, L2 and L3, only that this aspect is not taken into account in the definitions of the terms.) Model D is also basically chronologically based, although it constitutes a special case to which I shall return below.

A, C and F are basically the same type of model, applied to different sizes of settings: true bilingual, trilingual, quadrilingual and so on. In this respect, A (bilingual) and C (trilingual) are special cases of the wider model F (any size of setting). The questions of having two or three levels, or assuming a

maximum of three levels, are not inherent in the definitions of L1, L2 and L3 here. There can be only one each of L1, L2, L3.

This more general model has been characterised as *the linear model*, since it assumes a linear order of acquisition (Hammarberg, 2010). Such a model in its strict form presupposes *successive acquisition of languages* and clarity about *how many languages* the speaker knows so far. From a practical point of view, this is uncomplicated in cases of simple successive bi- and trilingual settings, L1–L2 and L1–L2–L3. But problems arise in more complex cases which involve *simultaneous* or *intermittent* acquisition, where the languages are difficult to order sequentially, or in cases of *limited* or *functionally restricted knowledge* of some languages, which leads to uncertainty about which (and thus how many) languages to count. For example, it is not *a priori* obvious how to judge elementary knowledge, fragmentary knowledge, just comprehension, mere reading knowledge, metalinguistic knowledge or 'bonus' knowledge of closely related languages (as e.g. comprehension of Norwegian and Danish by persons who master Swedish). These problems tend to worsen with increasing number of languages in the speaker's repertoire. Multilingual persons often do not acquire languages in one linear order, and it is oversimplifying to judge languages as either 'known' or not. A serious limitation with the linear model in its strict form is therefore that it cannot be applied to all multilingual speakers. In complex cases, it may not be feasible to identify a full linear chronology of acquisition.

A partial, or weaker, form of model F seems to occur more often in actual practice. It is possible, of course, to state that a certain language is, say, the fifth language that a person is acquiring, without ordering or even naming the prior languages. One may, for example, describe a learner as 'a German L1 speaker who is acquiring Russian as L5'. This identifies the first and the current target language, while leaving the other languages unspecified. If relevant, those languages may be mentioned in addition, and their chronology may be dealt with without necessarily giving them sequential numbers. In such a partial form of the linear model, the number given to the target language (in our example, 'L5') becomes a means of indicating the size of the learner's repertoire of languages. This version of the model allows for cases of simultaneous acquisition of languages, but does not solve problems of determining which languages to count as 'known'.

Hufeisen's (1998, 2005) Factor-Model is based on a linear acquisition order, but since it proposes different sets of cognitive factors that determine the conditions for acquiring L1, L2 and L3 and limits the acquisitional hierarchy to three levels even when a learner acquires more languages, it has a built-in cognitive content. Model D in Table 1.1 is a formulation of De Angelis' (2007) conception of the acquisitional hierarchy. It is in line with Hufeisen's model in that it is chronologically based but treats the languages from L3 on as one level in the hierarchy, subsumed under the label 'third or additional language acquisition'; 'it refers to all languages

beyond the L2 without giving preference to any particular language' (De Angelis, 2007: 11).

One question arises in connection with the terms L1, L2, L3 and so on: do we need designations of the speaker's languages that specify the acquisitional sequence per se, or do we need concepts that are related to a given or potential situation of performance? In the former case, L1, L2, L3, L4 and so on indicate steps in the successive expansion of the speaker's repertoire of languages, and the highest number indicates the current size of the repertoire. However, much research on multilingual speakers deals with what takes place in acquisition and with the linguistic products resulting from this process. Here, the main point of reference is located in the situation of performance or the resulting state, and the languages have their characteristic roles in this connection. Relevant phenomena are the target (or selected) language, the already familiar (or background) languages, cases of CLI (or background language activation), processes of comprehension, production and learning, coping strategies, language mode options, teaching methods adapted to the multilingual learner's conditions and so forth. A common practice is to use the labels L1, L2 and L3 in these contexts. When the terms are used according to a purely chronological model, they primarily define steps in the acquisitional sequence. With trilingual settings, this entails no practical problems. L1 and L2 are automatically identified with the native and the non-native background language, and L3 with the target language. However, with larger settings that are no longer limited to one L1, one L2 and a target language L3, the difference between describing an acquisitional sequence and relating languages to the current situation becomes obvious. It is less clear how relevant ordinal designations such as L2, L3, L4 are when related to a concrete performance situation. The problem is due to the fact that the number terminology is being used in different contexts, serving two distinct functions: describing an acquisitional sequence per se and characterising the languages in relation to the current situation of performance – a problem that does not surface with trilingual settings.

Cognitively based models

The models B and E in Table 1.1 are based on the difference between the infant's and the older learner's stages of maturity during language acquisition and the corresponding NL/NNL distinction, allowing for one or more L1s and one or more L2s. Thereby, a cognitive element is inherent in the term definitions in these models.

Model B represents the standard use of the terms L1 and L2 in the SLA tradition, where only the categories NL (L1) and NNL (L2) are distinguished. Model E differs from B in adopting three levels in the acquisition hierarchy. By differentiating the concept of NNL in the speaker's repertoire, distinguishing prior NNLs from the currently selected target language, model E is

an extension and elaboration of model B which applies to trilingual and larger settings. Where model E is applied, the current target NNL is labelled L3, as it constitutes the third level after the NLs (L1s) and prior NNLs (prior L2s). Since L3 and prior L2s share the property of being NNLs, *L3 is to be seen as a special case of the more general category of L2*. One and the same term, L3, will serve to refer to the learner's current target language both in trilingual cases (with one L1, one L2 and one L3) and in cases involving more languages. This is a noteworthy practical aspect because we may get to deal with groups of learners with a varying number of background languages. The relevant levels to take into account according to model E are the following:

NL(s)/Prior NNL(s)/Current NNL, or expressed with digits: L1(s)/Prior L2(s)/L3.

It is characteristic of model E that it is by definition *situation-related*. Whereas L1 and L2 as general concepts apply to the speaker's languages on a permanent basis, the concepts *prior L2* and *L3* are defined in relation to a given situation of performance.

The two-level model B and the three-level model E are distinct but compatible, and complement each other as a less and a more elaborate model. They can, in principle, be adopted alternatively depending on research objective. Obviously, many topics in the wider field of SLA do not crucially deal with the complex composition of the learner's language background. In these cases, the distinction NL/NNL (L1/L2) may well be sufficient, and there is no need to make use of the concept of L3. Model E is available when multilingualism is in focus and the topic of research requires the three levels. Otherwise, staying with the conventional L1/L2 dichotomy will be simpler for many purposes. Therefore, even multilingual language learners may in some contexts be referred to as 'L2 learners' (according to model B) and in some contexts as 'L3 learners' (according to model E). A definition of L3 in the framework of model E is the following:

In dealing with the linguistic situation of a multilingual, the term *third language (L3)* refers to a non-native language which is currently being used or acquired in a situation where the person already has knowledge of one or more L2s in addition to one or more L1s. (Hammarberg, 2010: 97, italics in original)

Whereas many writers, particularly when dealing with learners in a trilingual setting, define the languages in accordance with the chronological model C, or seem to have definitions corresponding to model C in mind, or else do not define L1, L2 and L3 at all, model E has been applied by several researchers in recent years (e.g. Bardel, 2006; Bardel & Lindqvist, 2007; Falk & Bardel, 2010; Hammarberg, 2001; Lindqvist, 2006; Rast, 2010; Williams & Hammarberg, 2009 [1998]).

Concepts and names

Ideally, terms should express needed and well-defined concepts in a clear way. We have seen that the number terminology that we have discussed involves some problems in this respect. The terms L1, L2, L3 and so on are obviously modelled on a purely chronological conception of language acquisition, assuming a linear sequence of adding languages over time. In a simple bilingual setting in which the *first* and the *second* language (L1 and L2) are distinguished on the basis of temporal priority/posteriority (model A), the terms describe this in a direct way, pertinent to this particular group of speakers. But as soon as the existence of multilingual competence is acknowledged and the term definitions become based on the NL/NNL distinction (model B), the terms L1 and L2 take on a different meaning, and the numbers 1 and 2 (first and second) become metaphorical and not so transparent. When this is elaborated, and concepts such as First NNL, Prior NNL and L3 in the sense of Target NNL become parts of the picture, the labels L1, L2 and L3 become even less self-explanatory.

A further complication with the number terminology is that it is implicitly being used for two different purposes, as mentioned above in section 'Chronologically based models': indicating the growth and size of the language repertoire, and relating the languages to the performance situation.

These considerations raise the issue as to whether it would be wise – and feasible – to abandon the expressions *first*, *second* and *third* language, particularly in the situation-related function, and replace them with some other designations. Hammarberg (2010) discusses the possible alternatives *primary* and *secondary* languages (following Weinreich, 1953: 14) and *tertiary* languages (as used by Hufeisen & Lindemann, 1998, and associated writers in Germany). Possibly, the short forms L1/L2/L3 could then, when used in the situation-related function, be replaced with PL/SL/TL, and *primary/secondary/tertiary language acquisition* (PLA/SLA/TLA) would be the terms for the related types of acquisition. Such a terminology would be in line with the cognitive models B and E and be compatible with the NL/NNL distinction. How well chosen these particular terms are, and how realistic it would be to try to get a revised terminology established on a larger scale, are matters open for debate and try-out. In any case, this naming issue is well worth serious discussion.

Conclusion

This review of concepts and terms has shown that the use of the terms *first*, *second* and *third* language (L1, L2, L3) is a complex matter which entails several problems. These conceptual problems have become more evident with the extension of the field of SLA research in recent years to exploring

language acquisition in multilinguals, and particularly cases that go beyond settings of one L1 – one L2 – one L3.

One cause of confusion is the *ad hoc* way in which the terminology in this area has developed. When the terms *first* and *second* language (L1, L2) were originally introduced, there was obviously no consideration of the normality and widespread occurrence of multilingualism and the more complex set of aspects involved in language acquisition by multilinguals; apparently one had no sense of the simplistic nature of this term dichotomy. The extension of these terms went separately in two directions. One was to redefine L1 and L2 in practice so as to correspond to NL and NNL (model B above). The other was to add the category of a *third* language (L3) (model C above). Both these term extensions were steps towards taking multilingual contexts into account. The latter terminology was connected with a focus on L3 acquisition in its own right and the rejection of a mere L1/L2 dichotomy for multilinguals. By these two separate extensions of the first/second distinction, the term L2 came to acquire a dual meaning. In neither case was a terminology envisaged which would capture the status of the multilingual's languages in various complex settings of acquisition.

The literature on language acquisition in multilinguals has been greatly dominated by a concern with trilingual settings. This may surely have practical reasons. When dealing with the differences between the acquisition of the first NNL and subsequent ones, it seems natural to focus on the next NNL, that is, the third language in sequence. In educational contexts, this applies both to the second foreign language at school for monolingually raised students and to the first foreign language for bilingual students from linguistic minorities. Similarly, in empirical research, trilingual settings will often be simpler and methodologically more attractive to study than larger settings. However, this concentration on trilingualism seems to have resulted in what we may call a *conceptual trilingual bias* in dealing with language acquisition in multilinguals. *Third* language, mostly conceived as language number three, has become the standard concept in connection with acquisition (the process), whereas the wider term *multilingualism* is commonly used in connection with competence (the state): multilingualism and TLA are often mentioned as a conceptual pair, despite the asymmetry of terms that this involves.

The examination of the models A to F in the foregoing sections speaks in favour of adopting a cognitive basis for the definition of the multilingual speaker's languages, particularly when they are viewed in connection with their status in acquisitional situations. This means treating the NL/NNL distinction as fundamental and defining the languages alternatively according to the two-level model B or the three-level model E, depending on what the purpose requires.

The difference between describing the gradual expansion and size of a linguistic repertoire and characterising the status of a speaker's languages

in situations of performance was indicated earlier. Today, the terms L1, L2 and L3 figure in both functions. Ideally, this distinction would need to be reflected clearly in the terminology, preferably by different sets of terms for the two purposes. Before this issue has found a solution, one should be explicit about the function in which the terms L1, L2 and L3 are being used.

Note

- (1) Some terminological preliminaries: In accordance with a widespread usage, I will here distinguish between *mono-*, *bi-* and *multilingualism* as the knowledge of *one*, *two* and *three or more* languages, respectively, at some significant level of proficiency, thereby not treating *bi-* and *multilingualism* as synonyms. The current discussion will deal primarily with *individual multilingualism* (elsewhere also called *plurilingualism*), rather than *societal multilingualism*. In contexts in which *acquisition* and *learning* are not separated, *acquisition* will be used as including both. Similarly, *second*, *third* (etc.) language (L2, L3 etc.) will also cover the notion of *foreign* language in contexts in which *second* and *foreign* are not separated. (Note that generally only *second* language is used in the literature in a sense distinct from *foreign* language.) These terminological choices may certainly be subject to discussion, but this is beyond the scope of the present considerations.

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