

BLC Theory in a nutshell

Purpose

The main purpose of *BLC Theory* is to serve the empirical study of the following fundamental issues in the study of L1 acquisition, L2 acquisition, and bilingualism: (i) explaining individual differences in L1 proficiency, (ii) answering the question of whether there is an age-of-onset constraint on attaining a so-called ‘native’ control of an L2, (iii) explaining non-trivial individual differences in L2 acquisition, and (iv) making meaningful comparisons between L2 users and L1 users (Hulstijn, 2015, chapters 3-5). The best way to make these four issues empirical and to gain insight in them is to propose a model (theory, framework) of language cognition (ability, proficiency), consisting of some theoretical constructs, sufficiently defined to allow hypotheses to be derived from them. In short, *BLC Theory* serves as a *hermeneutic, strategic tool*, defining a *research agenda* aimed at reducing our ignorance with respect to four fundamental questions of language acquisition and language use.

The main constructs

There are two dimensions of language cognition (also called language ability or language proficiency): (i) *Basic Language Cognition* (BLC) versus *Extended Language Cognition* (ELC) and (ii) *Core* versus *Periphery*.

1. *Basic Language Cognition* (BLC) versus *Extended Language Cognition* (ELC)¹

BLC refers to the ability to produce spoken language in situations of everyday life, common to all adult L1-ers in a given language community. BLC pertains to (1) the largely implicit, unconscious knowledge in the domains of phonetics, prosody, phonology, morphology and syntax, (2) the largely explicit, conscious knowledge in the lexical domain (form-meaning mappings), *in combination with* (3) the automaticity with which these types of knowledge can be processed. BLC is restricted to frequent lexical items and frequent grammatical structures, that is, to lexical items and morpho-syntactic structures that may occur in any communicative situation, common to all adult L1-ers, regardless of age, literacy, or educational level. Let us assume that we computed the raw frequencies of lexical and grammatical elements in a huge corpus of spoken language, truly representative of language, produced - in a wide variety of communicative situations - by people of different ages and different levels of education and profession. The idea then is that BLC pertains to knowledge and use of the elements in the steep part of the skewed distribution of raw frequencies, i.e., to the elements that occur relatively frequently in such a corpus (Hulstijn, 2015, p. 22-24; Hulstijn, 2019, p. 160).

ELC is the complement or extension of BLC, in three ways. First, in ELC, utterances that can be understood or produced may contain low-frequency lexical items or uncommon morpho-syntactic structures. Second, ELC utterances may pertain to written as well as spoken language. Third, by definition, ELC is not shared by *all* adult speakers of the language. In other words, (i) ELC utterances can be lexically and grammatically less frequent (and often longer) than BLC utterances, (ii) they need not be spoken, or (iii) they may belong to registers and topics familiar to only a part of the population of adult speakers of a language.

¹ In earlier publications the term *Higher Language Cognition* was used for what is now called ELC.

Control of the *standard language*, as taught in school, is a matter of ELC. Only around 120 languages of the approximately 5000 languages of the world have been codified in the form of written standard languages, with norms for what is appropriate language use for a given genre. Not all students in elementary and secondary school are equally successful in attaining control of the standard language. Level of education, level of profession, and language-related leisure-time activities are potentially related to amount and types of literacy experiences. In societies with compulsory education for all children, all typically developing children learn to read and write, at least at a basic level. But not all children, adolescents or adults read and write to the same extent. Many so-called a-literate people (not illiterate but a-literate people), limit themselves to reading and writing short messages, for example, in social media. The content of people's ELC is therefore likely to vary by literacy-related attributes (Hulstijn, 2019, p. 164). This is an empirical matter and BLC Theory offers a framework for conceptualizing this.

2. *Core versus Periphery*. Core linguistic cognition includes knowledge in the phonetic-phonological, morphological, morpho-syntactic, and lexical domains and knowledge of how to use language forms appropriate to the communicative situation (including some pragmatic and sociolinguistic knowledge). Peripheral linguistic cognition, includes (i) interactional ability (i.e., the general ability – not specific to a particular language - to communicate with other people in monolingual and multilingual encounters), (ii) strategic competence of how to perform in verbal communication under adverse conditions (e.g., time constraint or with limited linguistic knowledge), (iii) metalinguistic knowledge (explicit knowledge of grammar and knowledge of the characteristics of various genres of oral and written discourse). While BLC falls within the Core, ELC pertains to both Core and Periphery (Figure 1).

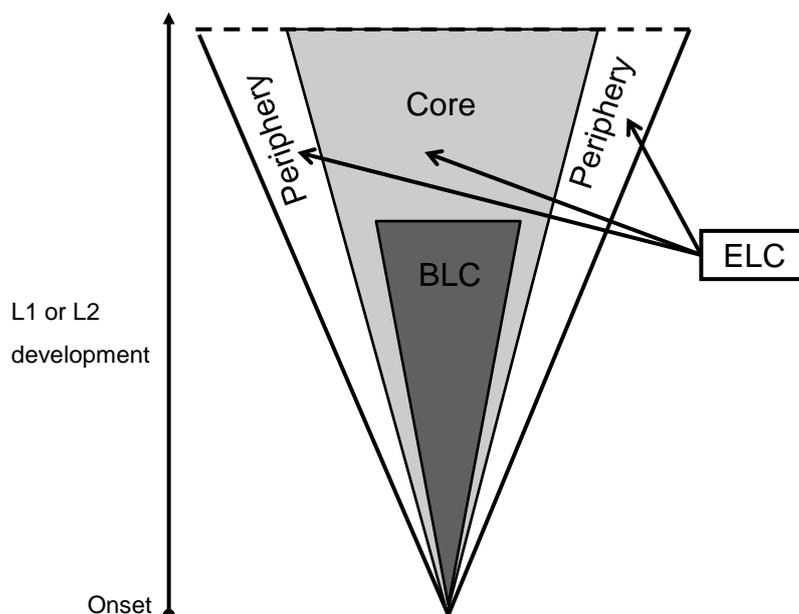


Figure 1. Core and peripheral components of language cognition, with BLC situated within, and thus partially overlapping with Core linguistic cognition. As the three arrows illustrate, ELC pertains to Peripheral linguistic cognition as well as to the part of Core linguistic cognition that does not overlap with BLC.

3. For each individual L1 and L2 learner, the acquisition process (i.e., the development of language cognition) is *gradual* and this is true for both the acquisition of BLC and the acquisition of parts of ELC.

4 *Native speaker*. In social terms, a native speaker is someone who typically acquires the language as a young child (before school age) and maintains the language into adulthood. In linguistic terms, a native speaker can be defined as someone who has acquired BLC and who may have acquired some or many elements of ELC. Native speakers differ in terms of a biographical-environmental dimension of degrees of multilingualism and in terms of literacy-related attributes. For details, see Hulstijn (2019), Figure 2 (p. 163) and Figure 3 (p. 165).

5. *Individual differences*. A theory of individual differences in language use and language acquisition is simultaneously a theory of commonalities. Individual differences may work out differently in control of the oral, every-day language and in control of the standard language. *Personal attributes* may be associated with language acquisition in different ways. In a population of people not affected by language-related disorders, individual differences in abilities like speed of information processing, working-memory capacity and intelligence may impact the *rate* of language acquisition (BLC and ELC) during childhood and later in life. However, they cannot, by definition, be associated with the *control* of BLC (once attained) simply because, by definition, BLC is shared by all adult native speakers, fast or slow, smart or not so smart. In contrast, attributes such as level of education, profession, and leisure-time activities (including literacy practices) will only be associated with the control of ELC, not with the control of BLC.

6. *Language communities and language typology*. It is an empirical matter whether the age at which a given percentage of children, adolescents or adults have acquired BLC, differs between societies (onset of literacy education) and between languages.

Corollaries to be empirically tested (Hulstijn, 2015, p. 52-53)

C1. All adult L1ers (not suffering from cognitive impairments), regardless of differences in age and intellectual functioning, are able to comprehend and produce, both correctly and quickly, isolated utterances consisting of high-frequency lexical phrases and high-frequency morpho-syntactic structures, when these utterances are perceived under normal acoustical conditions.

C2. Individual differences among adult L1ers will be relatively large in tasks involving ELC discourse, in all four modes of language use (reading, writing, listening and speaking) but all adult L1ers will perform at ceiling in BLC tasks, i.e., conceptually simple oral tasks (listening and speaking), involving frequent linguistic units, albeit that L1ers may differ in the speed with which they perform such tasks.

C3. Although the speed with which humans can process information increases over time until it reaches a peak around the age of 22 and from the age of 27 on gradually decreases, the vast majority of old people remain capable of processing linguistic information fast enough to allow for relatively unimpaired functional language use, provided that they continue to practice their language skills on a daily basis and do not suffer from severe mental disorders. This claim holds for all languages someone has acquired. In other words, continued language use modulates the decline in processing speed in old age, while the continued use of written language is modulated by level of education, type of occupation, and interests.

- C4.** Early bilinguals can acquire BLC in more than one language as long as they receive sufficient input in each language and continue using the language into adulthood.
- C5.** BLC, while being attainable by late L2 learners in the domains of receptive and productive vocabulary and receptive knowledge of grammatical structures, will generally not be attainable (i) in the domains of pronunciation or (ii) with respect to the production of some grammatical features in spontaneous, unmonitored speech.
- C6.** Late L2 learners can become as proficient in ELC as L1ers of the same intellectual, educational, professional and cultural profile, despite some deficiencies in their L2 BLC.
- C7.** The likelihood of a person acquiring BLC in two (or more) languages is determined (i) by amount of exposure and productive language use, and (ii) by age of onset (in particular with respect to pronunciation).

Comments on this text will be highly appreciated. Please send them to j.h.hulstijn@uva.nl

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<http://www.uva.nl/profile/j.h.hulstijn>. Select 'Downloads' and then "BLC Theory and Complexity Theory (2021)".