In this target article, Schmid and Köpke (2017; henceforth S&K) clearly and convincingly summarize the import of our growing understanding of patterns in first language attrition for theories of how two (or more) languages are learned and processed in the mind. They rightly emphasize that L1 attrition is not an unusual phenomenon but rather part of the continuum of normal processes of bilingual development. They further lay out the increasing evidence that there is no such state as ‘complete development’ of a language or an ideal native speaker grammar, that cross-linguistic influence proceeds not only from L1 to L2 but also from L2 to L1, and that language knowledge in bilinguals is susceptible to constant dynamic change. In my commentary, I focus on the implications of this discussion for the field of bilingual development as a whole. In particular, I consider the potential for three types of comparative studies to fruitfully advancing the field – comparison across different types of bilinguals, different types of co-activation and code switching, and different conditions of cross-linguistic influence.

The major message of S&K’s article for me is not related to attrition per se but rather to the growing need to integrate findings from the diverse strands of research emerging from the burgeoning field of bilingual development. Numerous different types of bilingual development have been singled out for study over the last 30 years including child simultaneous bilingual development (Genesee & Nicoladis, 2007), child sequential bilingual development (Schwartz, 2004), heritage language development (Montrul, 2016), third language development (Rothman, Cabrelli Amaro, & de Bot, 2013), multilingual development (Chevalier, 2015), language development after international adoption (Genesee & Delcenserie, 2016), bilingual aphasia (Lorenzen & Murray, 2008), as well as the L1 attrition in post-puberty L2 learners that is the focus of S&K’s article. Each type of bilingual development results from a different combination of relevant factors including age and context of exposure, amount and type of input, situations of use, relative proficiency, and the like. As a result, each provides a different window into possible changes in L1
grammar (and the outcome in the L2 grammar) that result from bilingualism, and thus into the central questions that define our field: How is language learned, stored, accessed, and processed? How can we best understand the initial state and the maturational constraints on language development? How is language learning affected by other cognitive processes? Which aspects of language are most vulnerable in development? Although S&K frame their article in terms of establishing a central place for L1 attrition at the ‘bilingualism discussion table’, the same case can and should equally be made for each of the several types of bilingual development. And a focus on L1 effects in each of these types of bilingualism should be a central part of our research agenda over the next 30 years.

This increased differentiation of types of bilingual development calls out for an increased focus on comparative research across the types to illuminate our understanding of the central questions just listed. Ideal would be direct large-scale comparisons of use of the same linguistic phenomenon across the same language pair for each of the different types of bilinguals in both L1 and L2. Comparisons across two types of bilingual development are already standard practice and have been very informative, as exemplified in S&K’s discussion of L1 attrition effects in heritage learners vs. L1 attriters (see p. 33). As far as I am aware, however, comparative research with more than three types of bilingualism is exceedingly rare if it exists at all. Although a host of practical difficulties would make such an endeavour challenging, the outcomes would be extremely informative. Another perhaps simpler approach would be a large-scale comparative study using computational modeling, varying the relevant factors in a highly controlled way, as hinted at by S&K in their section on the usage-based model (p. 645). Such a comparison would inform our understanding not only of language development but also of diachronic language change, as we consider which types of L1 (and L2) changes in which types of bilingualism most likely drive language change over generations (Meisel, 2011); L1 attrition is surely an important part of this process.

An additional point of comparison is the role played in bilingual development by domain-general cognitive capacities, a topic of central importance since the cognitive resources of a bilingual are both taxed and enhanced as the two (or more) languages are juggled in comprehension, production, and processing. S&K focus in particular on the role of language activation, arguing that the degree and mode of activation of the two languages during the daily life of a speaker plays a central role in determining the extent of L1 attrition. They claim that especially co-activation resulting from extensive code switching “leads to mergers [of grammatical patterns from the L1 and the L2] at the online level which may or may not then spill over to the underlying representation” (p. 656). In contrast, bilinguals who do not regularly co-activate the two languages in this way experience less L1 attrition. As S&K point out, the level of co-activation has clear theoretical
implications, for example in terms of establishing competition between cues and altering their frequency and reliability (usage-based model) or reassembling bundles of grammatical features (generative model). Two points are relevant here. First, more elaboration is needed of exactly what conditions of ‘code switching’ are necessary since several patterns are possible (Muysken, 2000). Must the switching be within sentences or can it be across sentences? Must it be within one speaker-interlocutor pair or within one conversation, or does it also count if a bilingual speaks L1 with speaker A and L2 with speaker B in the same context, such as colleague A vs. B at work, or spouse vs. child at home? If code-switching is common in a particular speaker’s professional context, will they show L1 attrition effects even though speakers who use the L1 in professional contexts typically show minimal attrition effects (p. 656). What is the dividing point where there is no longer enough switching between languages to lead to ‘mergers’ and thus attrition? Plenty of opportunity for comparative work is offered here. Second, S&K’s view of co-activation seems contradictory. On the one hand they say that extensive co-activation contributes to more L1 attrition because of “mergers at the online level” (p. 656), but on the other hand they say that when the activation level of the L2 is high, “speakers have to exert effort to suppress it”, contributing to “the development of enhanced inhibitory control” which reduces L1 attrition (p. 657). Thus, it is unclear whether more co-activation leads to more influence or less influence, and what the difference is between co-activation of the languages in the brain and co-use of the languages in production.

A third comparison highlights the potential locus of cross-linguistic influence leading to L1 attrition. S&K note that attrition is most likely to occur in structures where variability is tolerated, such that the ‘attrition grammar’ contains structures that may be dispreferred but are not fully ungrammatical in the ‘monolingual grammar’. The morphosyntactic structures discussed by S&K where attrition has been found are all examples of external interface structures – ones which involve the interface between syntax and discourse or pragmatics (Sorace, 2011). These have been the subject of growing interest in research on L2 ultimate attainment, heritage acquisition, and simultaneous bilingual acquisition, so it is not surprising to find that they are relevant in L1 attrition as well. However, there are numerous possibilities as to why these particular structures are vulnerable to cross-linguistic influence, each relating to different theoretical models. Is it because they are at an external interface where issues of non-core grammar are involved (i.e., discourse, pragmatics, information structure) (generative model), or because they involve issues of preference rather than outright grammaticality such that cues are more subject to change in reliability or validity (usage-based model), or because they involve a higher processing load for integrating different aspects of the grammar (cognitive factor model)? Comparative L1 attrition studies of structures that fulfill
Comparison as a fruitful way forward

one but not others of these criteria would be useful to gain further insight into the theoretical debates (see S&K’s footnote 2).

In sum, a range of comparative studies focusing on different types of bilinguals, different conditions of co-activation of the bilingual’s two languages, and different domains of cross-linguistic influence are likely to be a very productive way to advance our understanding of the intricacies of L1 and L2 development and change across the lifespan.

As a final note, I take issue with the term “attrition”, and also with the analogous term “incomplete acquisition” in the heritage language literature. S&K acknowledge the difficulty with the term “attrition” but nonetheless use it to maintain consistency with previous literature (footnote 1). However, precisely these authors are in an excellent position to change the perception in the field by taking a stand on changing this term. It is high time that we as a field decide on a more accurate and more positive term for language differences across speakers that does not put emphasis on the apparent deficiency of bilingualism but rather highlights the increasingly evident reality that there is no one monolingual norm or clearly definable situation of ‘complete acquisition’ (Dąbrowska, 2012; Kupisch & Rothman, 2016).

References


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