





ORIGINAL ARTICLE

Bilingualism with minority languages: Why searching for unicorn language users does not move us forward

Evelina Leivada^{1,2} , Itxaso Rodríguez-Ordóñez³ , M. Carmen Parafita Couto^{4,5}  and
Sílvia Perpiñán^{6,*} 

¹Department of Catalan Philology, Universitat Autònoma de Barcelona, Barcelona, Spain, ²Institució Catalana de Recerca i Estudis Avançats (ICREA), Barcelona, Spain, ³Department of Linguistics, California State University Long Beach, Long Beach, USA, ⁴Language Variation and Textual Categorisation, Universidade de Vigo, Vigo, Spain, ⁵Center for Linguistics, Leiden University, Leiden, The Netherlands and ⁶Department of Translation and Language Sciences, Universitat Pompeu Fabra, Barcelona, Spain
*Corresponding author. Email: silvia.perpinan@upf.edu

(Received 1 June 2022; revised 15 November 2022; accepted 19 December 2022; first published online 13 February 2023)

Abstract

This paper addresses several problematic scientific practices in psycholinguistic research. We discuss challenges that arise when working with minority languages, such as the notion of monolingual/monocultural normality and its historical origins, the stereotype of native-speakerism, the quest for testing people who fit specific profiles, the implications of the policy that urges scholars to match bilingual groups to monolingual comparison groups, and the use of powerful theoretical narratives that may evoke problematic labels and ableist terminology. These issues invest the field of psycholinguistics with questionable practices that contribute to the marginalization of groups that do not tick the standard normative boxes. Surveying some of the most widespread scientific practices in the field of psycholinguistics, our emphasis is on how several processes and policies may embody stereotypes that contribute to the exclusion of certain groups from the scientific literature, with grievous consequences for the visibility and the representation of some minoritized languages.

Keywords: bilingualism; minority languages; native-speakerism; control group; monolingual-bias

Setting the context

This position article is the result of the observations of four linguists who are themselves minority language speakers and work on aspects of bilingualism in communities that feature minority languages. It reflects on some of the experiences we have had when submitting our research on minority languages to prestigious journals specialized in bilingualism. In some instances, the feedback highlighted the need of having a “monolingual” control group or of testing language combinations that were not feasible, in order to sustain the linguistic claims we made; in others, the fact

© The Author(s), 2023. Published by Cambridge University Press. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

that the minority language lacked a monolingual, stable, nonvariable variety to which we can compare it to was problematized as this “muddies the waters” of the study. In short, we want to reflect on the “monolingual-bias” that still prevails in many linguistic subfields, even in bilingualism research itself, and how these pre-conceived ideas undermine the study of underrepresented, minority languages. While the “monolingual-bias” in different fields of linguistic theorization is not new (Grosjean, 1989; Kachru, 1994), these practices run contra recent movements that diversify our scientific knowledge of bi-/multilingualism from an equitable perspective (López et al., 2021; Luk, 2022; O’Rourke et al., 2015; Ortega, 2019; Rothman et al., 2022) and raise fundamental questions that need addressing, especially in terms of what the field of bilingualism is, who the arbiters of such knowledge are, and how to best advance our knowledge about it. In this context, the main goal of this position paper is to bring these questions to the forefront and address the challenges and opportunities that studying bilingualism from a minoritized language perspective brings to the field.

Our article discusses the monolingual bias that the field continues to suffer from, and critiques the positions that understand bilingualism from monolingual lenses. This will take us to the issue of providing comparable control groups in experimental studies. While a comparison group can add an undeniable value to scientific research, the traditional method of comparing bilinguals to monolingual populations as mean of theorizing bilingualism outcomes has been under scrutiny in heritage acquisition studies for some time (Kupisch & Rothman, 2018). These studies have argued that even when a monolingual control exists for comparison purposes, monolinguals and bilinguals cannot be comparable on all grounds, and the researcher is at risk of adding a number of confounding variables in their explanations, especially if group heterogeneity remains unjustified. In this paper, we join this argument by focusing on another source of minoritized groups, namely so-called minority regional languages (e.g. Basque, Catalan, Galician) whose speakers are essentially bi-/multilingual. While the argument that requiring a monolingual control group would not hold in any bi-/multilingual setting, the stakes in these communities are high: it virtually leaves minority and minoritized languages out of the scope of academic investigation, being discriminated against precisely because of their sociolinguistic status. Of course, we do not deny that in many cases, it is useful to have a comparison group (e.g., if we take the addition of a language as our experimental manipulation). However, it is important to remain mindful of the fact that (i) not all linguistic communities have monolingual speakers and (ii) not all bilingual/bidialectal speakers have monolingual peers. Even more importantly, not having a monolingual comparison group does not entail a lack of comparative data across a continuum of bilingualism. In fact, replacing a categorical view of bilingualism as a “yes/no” variable with a nuanced approach that views it as a mosaic of different factors (e.g., degree of use, contexts of use, proficiency, and context of acquisition) is likely to reveal patterns of variation that may be meaningful in terms of understanding how being bilingual affects language knowledge, language development, and cognition (Leivada et al., 2021; Perpiñán & Soto-Corominas, 2021; Soto-Corominas, 2021). In other words, if it is true that there is not one bilingualism, but many (Hodge et al., 2018; Ooi et al., 2018), we need to zoom in on different bilingual experiences in order to understand their similarities and differences and

appreciate the individual characteristics of different sociolinguistic ecologies of speakers (Rodríguez-Ordóñez *et al.*, 2022). From this perspective, having *bilingual* comparison groups may serve well the purpose of understanding the dynamics of bilingualism.

This methodological issue also raises questions of speakerhood itself, especially in terms of evoking a(n ideal) “native speaker/signer” (Davies, 2003) both in monolingual and multilingual contexts (Bice & Kroll, 2019; Cheng *et al.*, 2021). This paper reflects on the origins of these methodological practices, which can be summarized as the quest for testing people who fit a very specific and homogeneous profile. Further practices that may marginalize smaller linguistic communities, often at the expense of theory and linguistic description (Larsson *et al.*, 2022), are the ever-growing emphasis on big data and its statistical implications, the use of automated techniques to collect data, the artificial homogenization of the sample to fit experimental designs, and the standardization of tests with a one-size-fits-all approach. Our lab-based studies need to take it to the streets in order to avoid the WEIRD (Western, Educated, Industrialized, Rich, and Democratic) biased samples that dominate most studies; 18–24-year-old undergraduate students are not representative of most populations. As an example, Vaid (2022), focusing on biscriptal bilinguals, reflects on the theoretical and ethical implications of this disconnect between the typical bilingual research participant and the typical bilingual. This systematic profiling and selection of the “ideal” speakers for experimental studies, we argue, perpetuates ableist stereotypes (*i.e.*, by focusing on the oral-auditory modality, and consistently excluding other modalities), reinforces monolingual/monocultural norms, promotes the study of well-represented, mostly Indo-European languages in occidental contexts, evokes labels and terminology that may be characterized as neo-racist (Holliday, 2017), and consequently, invests the broadly understood language acquisition field with questionable practices that contribute to the marginalization of already underrepresented groups (Dewaele *et al.*, 2022).

Positionality statement

The four authors of this piece are to different extents speakers of four different minority languages (Galician, Basque, Catalan, and Cypriot Greek), alongside another language, representative of the variation that is found in linguistic communities that involve minoritized or nonstandard languages. Some of us grew up using the majority language of the society at home and later adopted the minority language as our natural second language, in some cases, becoming our language of identification. Some of us grew up with the minority language as our family language and learned the majority language as it was the vehicular language in school and nonfamilial settings. Some of us were exposed to both languages at home, yet became an object of ridicule in contexts where our linguistic choices were not socially dominant. Lastly, some of us grew up in a home environment that could have featured two languages; however, this did not happen due to social pressures to promote a strictly monolingual/monocultural identity. All of us, then, were active bilinguals-in-the-making growing up and suffered different types of prejudices for it, either as dominant speakers of the minority language or as dominant speakers of the majority language. Needless to say, our bilingual experiences shaped our

childhood, adolescence, and continue to shape our adult life, now that we all are multilingual researchers who also investigate multilingual language users. Our personal history undoubtedly made us reflect on issues such as language choice, language identification, and marginalization. Such experiences continue to inform our advances in the field of bilingualism, inasmuch as a need for a more inclusive theory of bilingualism is called for, with a particular emphasis on accurately describing the dynamics of minority language users. Of course, it is entirely possible that we ourselves have been inadvertently reproducing some of these preconceptions for which an apologetic stance is in order as we continue to rectify and move beyond these pitfalls: in this paper, we aim to seize the opportunity and actively reflect on and repair our collective practices. The preconceptions and discriminatory habits we describe in the following paragraphs are so entrenched and pervasive in society and in the field that even sensitive linguists may fall for them, which makes this shift in perspective more pressing.

On the origins of monolingual norms and the use of inclusive terms

Several fields of scientific research have recently been marked by an initiative to replace vague, inaccurate, progress impeding, and potentially harmful terminology with inclusive and more accurate language. The field of psychology took the lead in identifying lists that discuss inaccurate, misused, and ambiguous terms (e.g., terms like “brain region for X”) as well as their uses in the scientific literature (Lilienfeld et al., 2015, 2017). More recently, lists raising similar concerns within formal and experimental linguistics have been developed (Domínguez et al., 2019; Kupisch & Rothman, 2018; Leivada, 2020; Leivada & Murphy, 2021), in parallel to work identifying challenges related to data collection, participant recruitment, crowdsourcing, and variation (Cheng et al. 2021; D’Alessandro et al. 2021; Leivada et al. 2019; Sheehan et al. 2019). For instance, the term “bilingual advantage” should be used with caution. Claiming an effect as an advantage entails a qualification that depends largely on specific perspectives and interpretations of results (Leivada et al., 2021). At present, most research suggests that certain bilingual experiences may relate to delaying the overt onset of symptoms (but not the underlying neurological damage) of some neurodegenerative diseases by as much as 4–5 years (see Antoniou, 2019; Gallo et al., 2022 for recent overviews). In a hypothetical future scenario in which there will be medical treatments which can stop progression of dementia and hence early detection becomes crucial, bilingualism will flip immediately from its current advantage position to the complete opposite because a delay in observing overt symptoms would entail a delay in early intervention and treatment (Leivada et al., 2021). Today, ample evidence attests to the complex ways in which cognitive processes interact with sociolinguistic context (Beatty-Martínez et al., 2020; Kroll & Bialystok, 2013), but more disparate sociolinguistic contexts are needed to replicate these results. Terms like “bilingual advantage” have been argued to, unwillingly or unwittingly, contribute to discourses of “bilingual exceptionalism,” especially in terms of the different scientific stances that researchers take, which are often influenced by histories of imperialism, nationalism, postmodernism, and cultural neo-liberalism of Western wisdom (Jansen et al., 2021, p. 7).

Inaccurate or problematic terms often give rise to questionable practices. One such rooted practice in psycholinguistics is the need to recruit and match a monolingual and a bilingual group to be able to draw reliable conclusions on the basis of their comparison. The baseline for this comparison is often called the behavior of “the monolingual control group,” and although a search for this phrase on Google gives more than 6,000 results, the inclusive term is “comparison group” (Lilienfeld *et al.*, 2015). Why is this comparison so important in psycholinguistics? When this practice of comparing the two groups is scrutinized, the discussion usually revolves around the practical difficulties it entails: for example, the impossibility of fully matching the two groups, monolinguals and bilinguals, on all measures (Baker, 2011). More importantly, as psycholinguists are embracing more socially informed research (Cheng *et al.*, 2021; López *et al.*, 2021), one could argue that as long as some bilinguals remain socially disadvantaged in some contexts, claims about bilingual advantages could be considered incomplete, unless social disadvantages are also addressed. What is frequently left in the margins is the culture from which such disadvantages spring.

In Europe, the *monolingual habitus* became normalized in the Age of Enlightenment, when the notion of having one shared language among the nation’s members became a strongly promoted component of the political narrative (Gogolin, 2006, 2021). Influential 18th-century philosophers such as Jean-Jacques Rousseau and Johann Gottfried Herder sought to establish new links between cultures, geographical positions, nations, and languages. In this context, Herder echoed the nation-state ideology, one in which a particular language is considered a defining characteristic of a nation’s essence. European nation-states started to use monolingualism as a tool to trigger and reinforce a sense of unity. The basic premise on which this view stands is that monolingualism is a *norm* enforced not by a state policy, but by mere nature, such that being monolingual is the only *normal*, and naturalized outcome of being born in a nation-state (D’Alessandro *et al.*, 2021; Gogolin, 2006). It is from this norm that the notion of the “native speaker” also sprung, reinforced by ideals of linguistic ethnonationalism, and at present continuing to inform much of the social reality of many bilinguals, especially in the global north where systems of *monolingual hegemonic whiteness* become the naturalized norm (Flores, 2016). In linguistics, it is not unknown that Chomsky’s (1965, p. 3) influential notion of the *ideal speaker-listener, in a completely homogeneous speech community, who knows its language perfectly* became, even at least partially, guiding the research paradigm in many strands of linguistics. The notion of nativeness as its default model has long been cast doubt, especially in debates surrounding World Englishes (Kachru, 1994), teaching and language acquisition (Davies, 2003; Ortega, 2019), language revitalization (O’Rourke *et al.*, 2015), and variationist sociolinguistics (Rodríguez-Ordóñez *et al.*, 2022) to the point that its total eradication has been proposed, given the neo-racist ideologies it underpins (Dewaele *et al.*, 2022; Dewaele & Saito, 2022).

It is important to remember that this is not only a terminological issue but not a conceptual one. Advocacy for a socially informed psycholinguistics brings these core issues to the forefront given that the diverse social conditions in which bi-/multilinguals engage in throughout their lifespan bring paradoxes worth addressing. For instance, the so-called *heritage speakers* in the US do not share the same experiences as *heritage speakers* in certain European countries, rendering some comparisons

problematic (Bellamy et al., 2020; van Osch, 2019). In language revitalization contexts, the term *new speakers* is often used to describe the linguistic practices of those who acquired the language outside the family context (O'Rourke et al., 2015, p. 1). While these two profiles may seem polar opposites on a continuum of accessibility to language (e.g., literacy for heritage speakers, or speaking opportunities beyond the classroom setting for new speakers), and in an overall continuum of bilingualism (e.g., age of onset of exposure, or language dominance, Perpiñán, 2017; Silva-Corvalán, 1986, 1993), they sometimes co-exist within the same community. Relatedly, they may shift social attributes (e.g., degree of use, identity, positionality, and ideology) throughout the lifespan. Consequently, our research should be flexible enough to account for these dynamic and natural changes.

From a sociopolitical perspective, while linguistic diversity is usually proclaimed valuable by official state policies, in practice it is often ignored or even repressed by the educational systems (Gogolin, 2021). Additionally, in many cases in which institutional multilingualism is promoted, the official defense of bilingual or trilingual practices is invariably in favor of introducing English or another global language as a medium of instruction in the educational system, thinking that this experience will grant an economic and cultural advantage for future generations. This “bilingual” practice perpetuates the dominance of powerful languages and increases the marginalization of minority languages. This is the case of English in India, for instance, which is taught at the expense of other minority languages, with doubtful results (Treffers-Daller et al., 2022). This is also the proposal for some historical regions in Spain, such as the Balearic Islands, Basque Autonomous Community, or Galicia, where some federal political parties defend a trilingual educational system (i.e., Spanish, Catalan/Galician/Basque, and English) instead of an immersion system in the minority language, alleging economic advantages.

Even regions with historical minority languages that have recently achieved to have part of their educational system in the “official” minority language may neglect “other” minority languages used by their population. Probably as a result of fear of disappearance given its own endangered existence, or simply as the result of rancid nationalism, the “no country” language ends up always being ignored. Some cases in point are Roma people in Europe, speakers of Central and South American indigenous languages in the US, who may or may not be Spanish speakers but are expected to be proficient as being ethnically labeled as Latino or Hispanic, or indigenous communities in Québec. This changing landscape reflects the continued complex experience that multilingual language users go through in space and time, which highlights the importance of understanding bilingualism as a multidimensional construct that is shaped by both individual and contextual factors (Baum & Titone, 2014; DeLuca et al., 2019; Luk & Białystok, 2013).

The enforcement of policies that presume a monolingual/monocultural normality is prevalent in science. The present-day “unmaking of linguistic borders” (Cornips, 2018) is not reflected in scientific policies yet. For instance, most psycholinguistics journals have implicit (i.e., unwritten but emerging at some point of the peer review process) requirements that ask for (i) a comparison of monolinguals and bilinguals, matching the groups for language, (ii) fulfilling specific conditions for testing (e.g., some journals reject results obtained through online/remote testing, unless they are complemented by results obtained through controlled lab-based

testing), and (iii) having research proofread by “a native speaker of English.” Similarly, scholars, while acting in their capacity as reviewers, may marginalize research conducted with speakers/signers of a language other than English, claiming that “it is not clear what testing phenomenon X in language Y will get us,” when extensive research on X has been conducted exclusively by testing speakers of English. This is not a constructed comment, but a real assessment by a reviewer that passed the editor’s filter and was given as feedback to one of the authors of this paper. The assumption behind this assessment is that the default setting in psycholinguistics is English monolingualism, such that research in other languages needs an extra justification to be considered a valid domain of research.

The spirit behind the three aforementioned editorial policies is similar: Requiring a comparison of monolinguals and bilinguals, who speak/sign the same language, either presupposes that all languages have monolingual speakers/signers (i.e., the scientific embodiment of the traditional notion of monolingual normality) or, worse, implies that those linguistic communities that do not, should be excluded from the scientific arena. This would in fact be the case of communities where multilingualism is the norm (e.g., most Global South) or situations where revitalization efforts and further educational policies have dramatically changed the sociolinguistic landscape of these languages. For instance, most, if not all, speakers of three official minority languages currently used in Spain (Galician, Basque, and Catalan) do not have monolingual counterparts. Last, asking for native speakers, either as experimental subjects or professional proofreaders, encapsulates the neo-racist bias of native-speakerism mentioned above. This notion evokes an allegedly superior “birthright,” which is attributed to people with specific cultural backgrounds, typically associated with whiteness (Holliday, 2006, 2017). This stereotype is both scientifically unfounded—it is based on the mythical notion of full, pure, uncontaminated competence (Dewaele *et al.*, 2022)—and empirically void to the point that it leads to the following linguistic paradox: non-Western competent writers of English are sometimes asked by editors and reviewers to have their work proofread by competent writers of English.

Against this background, the next section discusses specific terms and policies that are pervasive in psycholinguistics. The identified issues have a shared characteristic: the quest for testing people who fit specific profiles. As our discussion will make clear, this systematic profiling, although convenient, might not be innocent. Among other things, it perpetuates monolingual/monocultural norms, it includes neo-racist labels and ableist terminology, and consequently, it invests the field of psycholinguistics with questionable practices that contribute to the continued marginalization of already underrepresented groups.

Methodological practices: The quest for monolingual and bilingual unicorns

The standard buzz phrase “monolingual, native speakers of language X”—often used as a shortcut to collectively describe participants who fit a desired profile—can be described as *the policy of “four words-four stereotypes.”*

First, referring only to speakers and excluding other modalities provides a biased, ableist framing. The literature review of most psycholinguistics studies seems to recognize only the reality of people who are able to use the oral modality. It is

important to acknowledge that when sign languages are studied, they are often approached through the impairment diagnosis model, a practice influenced by the oralist ideology, namely, the belief that oral languages are “normal” (Hill, 2013). The intricate assumptions between language and speech are even more problematic than the “one nation-one language” hegemonic bias that continues to propel the linguistic field. There is an important lack of understanding of cultural and linguistic characteristics of signing communities (McKee et al. 2013). Normalizing their exclusion through employing generic buzz phrases that *consistently* leave them out of scope contributes to the already insurmountable barriers that many research teams who work with deaf signers face.

Second, ascribing the status of “monolingual” to a group of participants is not a trivial issue. Often speakers/signers who are explicitly classified as monolinguals—a classification frequently dictated by the need to satisfy established journal policies—have exposure to more than one language. For example, the monolingual group in Gollan et al. (2005) had some exposure to an L2: “No special attempts were made to recruit monolinguals who had never been exposed to an L2 at all (such individuals would be unusual, given foreign language study requirements)” (p. 1223). To some degree, this is also a problem of terminology. If the term “bilingual” is used to describe any person who knows at least a few words in a language other than the native variety (Edwards, 2004, p. 7), there must be very few monolingual people in this world. The assortment of definitions that the term “bilingualism” presents, together with the fluctuation in how these bilinguals are usually dichotomously classified, do not facilitate cross-experiment comparisons either (Dunn & Fox Tree, 2009; Grosjean, 1998). Indeed, even when adopting a holistic view of bilingualism such as the one proposed by Grosjean, in which bilingualism is defined as “the regular use of two or more languages (or dialects), and bilinguals are those people who use two or more languages (or dialects) in their everyday lives” (Grosjean, 1985, p. 467), we take the risk of leaving out of the definition language users who, for circumstantial reasons, do no longer use their two or more language varieties frequently. Our view on bilingualism is more inclusive. We take the term to refer to a continuum of abilities in different domains/varieties/modalities, further acknowledging that these abilities may not be equally distributed. From this perspective, bi/multilingualism is a multidimensional construct that is defined by a number of individual and contextual factors, giving rise to partially overlapping subcontinua (i.e. new speakers, heritage language users, and attriters) that are subject to dynamic changes throughout the lifespan (DeLuca et al., 2019).

Back to the challenge of classifying who counts as monolingual vs. bilingual, narrowing the scope of the definition to capture only people who have some higher degree of proficiency in two or more languages does not fully solve the problem. For example, college students who have some exposure to another language through social media and/or foreign language requirements are variably classified as monolinguals vs. (low proficient) bilinguals across studies (cf. Gollan et al., 2005; Runnqvist & Costa, 2012). This variation matters because it suggests that these journal policies that revolve around having a monolingual baseline to which other groups are compared may lack a solid basis. More importantly, having strict policies that require the existence of a monolingual group in a psycholinguistics study almost always brings to the central position users of the same widely studied, official

languages. It was recently reported that the literature on child language acquisition involves at least one article published on around 103 languages, but these represent a mere 1.5% of the world's languages (Kidd & Garcia, 2022). The skewed distribution of articles toward English and other Indo-European languages is unsurprising given the systematic profiling that asks for the participants to have specific characteristics. Sustaining the Anglo-cultural bubble entails that other groups remain in the margins. The requirement of having a monolingual comparison group seems accentuated when non-English speaking populations are tested, leading to an interaction of these factors (i.e. English-centered policies, monolingual normality) that consolidates the creation of a dividing wall between those profiles that seem a perfect fit for inclusion in a scientific study and the understudied linguistic communities that do not neatly tick the normative boxes.

Third, “language X” is often a designation reserved for well-known, official languages, and this further contributes to diminishing the visibility of certain groups. For instance, large-scale studies that aim to find bilingual adaptations at the behavioral front often base their conclusions on a comparison of a monolingual and a bilingual group of participants. In many cases, the bilingual mega-category is a mix of people that speak or sign different L1s, acquired through variable developmental trajectories (e.g., heritage language users, immigrants that go through L1 attrition, sequential bilinguals, etc). To give a concrete example, Dick *et al.* (2019) present results from a sample of 4,524 children, generated from 21 study sites across the US. The bilingual group ($n = 1740$) uses English and another “language X,” where X stands for more than 40 different languages. The instruction given to the participants was the following: “Besides English, do you speak or understand another language or dialect?” [...] A dropdown menu was available, and participants were allowed to choose “Other” if their language was not represented.” (Dick *et al.*, 2019, p. 698). Some undetermined percentage of the 1,219 participants who chose Spanish probably speaks different varieties of Spanish, possibly in parallel to the national Standard Spanish. Similarly, when 17 children chose Italian, this may be a proxy for the lesser-known home variety (Montrul, 2016; Polinsky, 2018). Put another way, Spanish or Italian are good candidates for the designation “language X,” but Eonavian or Neapolitan are probably not.

Fourth, as explained in the previous section, the notion of nativehood is another terminological minefield. In practical terms, this designation may contribute toward excluding certain populations from scientific representation, as researchers are usually instructed to conduct their experiments with “native speakers/signers” (Cheng *et al.*, 2021). Seeking to ascribe a self-perception of nativehood to all speakers/signers of different languages ignores the facts of some linguistic communities that do not feature standard languages. Consider, for instance, the following experience in collecting data from Catalan:

“As a graduate student, I spent a summer in the Pyrenees (Andorra, Perpign[a]n, etc.) doing field research on the phonology of various dialects of Catalan. Many of our native informants were illiterate peasants. I was forcefully struck how difficult it was to elicit linguistic judgments from them regarding their language, which of course they spoke perfectly well. Just getting the plurals of certain nouns was tough. These folks seemed to be very hard of hearing

when it came to hearing the voice of competence! Their difficulty, it seemed, was that *their native language was largely transparent to them*—they had never thought of it as an object for observation and hence were largely unable to form even the most rudimentary judgments about its character. (Bob Matthews, in correspondence).” (Devitt, 2006, p. 497, emphasis added)

It seems that the ability to view one’s own language as a native system with a set of properties is an acquired behavior. In this context, seeking to apply the label “native speaker/signer” to a systematically marginalized group—that uses a nonstandard language in a way that does not reflect standard normative assumptions about (meta)linguistic behavior—simply strips the notion of native language off any theoretical substance. Crucially, this does not mean that these people do not have a mastery of their languages that is comparable to what one could term “native”; of course, they do. The issue at stake is the attribution of a label that comes from a monolingual normative reality to bilingual and multilingual communities that may involve a wealth of nonstandard varieties with unclear boundaries. Precisely because characterizations like “native language” and “first language” are intertwined with powerful ideologies, they are often used as the basis for language assessments such as “broken grammar,” “bad English,” and “incomplete acquisition” that may function as racialized signs of deviance, foreignness, and otherness (Rosa, 2016). In fact, social and racial factors seem to modulate linguistic judgments about one’s linguistic performance (Kutlu, 2020).

This matter does not have only sociolinguistic implications. If not all bilinguals identify as bilinguals, a journal requirement for presenting data from a bilingual comparison group either deprives some communities of the opportunity to participate in scientific studies or asks the researcher to misrepresent the group in order to be able to comply with the journal requirement. Bringing bidialectalism into this picture, ascribing the status of a native speaker/signer may be particularly complex in speakers/signers of “dialects.” Normative assumptions about linguistic behavior and identity do not apply as they do in monolingual settings, when the tested community speaks or signs a variety that in the mind of its users does not exist. It is not always a matter of absence of metalinguistic knowledge, as in the above-quoted experience in collecting data in the Pyrenees. In some cases, it is metalinguistic awareness itself that invests the relationship between an individual and their language(s) with another layer of complexity. For example, nonstandard language speakers may reduce their home variety to nothing more than “an accent” (Arvaniti, 2010). This is a challenge that one would not face when recruiting monolingual or even bilingual users of official languages used by nations that have long internalized Herder’s ideology, but one that will likely arise when one works with populations that have a linguistic reality that is not easy to translate into labels such as “monolingual,” “bilingual,” and “native.” If scientific journals employ labels or enforce policies that espouse an ideology that is not fit for all, inevitably some linguistic communities will be excluded as not fitting in any of the boxes.

As discussed in López et al. (2021), a change is needed in the way we theorize bilingualism and bilingual experiences for bilingualism/multilingualism studies to become more diverse and inclusive. We also need to consider that some methodologies have limitations, failing to provide an equitable representation regarding

ethnic heritage and varied bilingual experiences (Charity Hudley *et al.*, 2019; López *et al.*, 2021; Marks, 2008). For example, most electrophysiological (EEG) systems are not designed to accommodate coarse and curly hair common in individuals of African descent (Etienne *et al.*, 2020). Ethnic heritage can also affect pupil detection during eye tracking.¹ These technical constraints can make it difficult to test certain bilingual populations of interest; for example, the Papiamentto-Dutch bilinguals tested in Pablos *et al.* (2019). Additionally, not taking into account socially informed realities of linguistic variation may cast some doubt on the scope of experimental results. For instance, Zawiszewski and Laka (2020) investigate whether early Basque-Spanish bilinguals differ from “native speakers” in processing a number of grammatical features that they either share or not. One such structure is differential object marking (DOM), a core feature of Spanish, but presumably absent in Basque despite being documented among both so-called “native” and L2 speakers (Rodríguez-Ordóñez, 2016). The underlying assumption may be that DOM is prescriptively forbidden in Standard Basque, which is a variety that was created for written purposes. However, many L2 speakers are fostering a colloquial standard Basque where DOM is being replicated similar to patterns used in other regional varieties (Rodríguez-Ordóñez, 2020, 2021). This example suggests that whether a grammatical property is present or absent in a variety is often misunderstood in minority language contexts, providing further evidence that a more socially informed approach is needed in psycholinguistics.

A further piece of evidence for the need for studying most minority languages from a bilingualism perspective beyond the native/non-native constraint is the case of developmental language disorders (DLD) detection. It is known that minority languages have fewer, if any at all, diagnostic tools to assess grammatical maturity in school-aged children, and most of these tools are directly translated from the majority language, which puts a clear disadvantage on minority-language-speaking children. Nonetheless, in an effort to solve this problem, one may easily dismiss that most minority-language-speaking children are, indeed, bilinguals. A case in point is that of Gavarró (2017), who adapted the SASIT (School-Age Sentence Imitation Test) designed for English by Marinis *et al.* (2011) for Catalan. In her welcome attempt, Gavarró (2017) included items such as partitive clitics as potential markers of specific language impairment in Catalan. However, Catalan partitive clitics are susceptible to protracted development, even in simultaneous and balanced bilingual children (Soto-Corominas, 2018, 2021). Thus, by losing sight of the bilingual nature of these Catalan-speaking children, we run the risk of misdiagnosing them with a DLD, when in reality, they are just bilinguals. Together, these examples show that beyond methodological problems of native-speakearism in research design (Cheng *et al.*, 2021), researchers may make various implicit assumptions about language experience that are not always fully coterminous with the social realities of the people living these experiences.

Conclusion and outlook

In this position paper, we discussed several practices that invest psycholinguistics with questionable practices that contribute to the marginalization of groups that

do not tick normative boxes. Our discussion heavily draws on some of our experiences that attest to the presence of various types of stereotypes in our field of research. Aside from the mainstream requests to present data from a monolingual comparison group, to obtain data from bilingual groups with specific characteristics that, simply put, do not exist, or to explain why research in a minority or nonstandard language X is necessary in the first place, we have observed in numerous occasions that the promotion of these norms goes hand in hand with other policies that evoke different stereotypes related to gender, ethnic origin, and other social variables. While a detailed discussion of these topics is outside the scope of this paper, we would like to acknowledge their interaction with the practices we discuss. Few people would disagree with the claim that policies often work as barriers that aim to gatekeep places (e.g., institutions), granting access based on language status, ethnic heritage, and gender. All in all, we can and should draw parallels between the continued use of problematic notions such as the native/non-native speaker division “and long-standing questions of race, ethnicity, equality, and gender, to name just a few” (Slavkov et al., 2021, p. 2). If, as scientists, we fail to appreciate how these complex and intimately intertwined matters unfold in the context of well-established scientific processes that invite the enactment of asymmetrical power relations, then we simply ignore a crucial slice of reality.

Acknowledgements. EL acknowledges that this work has received support by the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement n° 746652 and from the Spanish Ministry of Science and Innovation (MCIN/AEI/10.13039/501100011033) under the Ramón y Cajal grant agreement n° RYC2018-025456-I, and the research project n° PID2021-124399NA-I00. SP acknowledges the support from the research project PID2020-114276GB-I00 funded by MCIN/AEI/10.13039/501100011033. MCPC acknowledges the support from the María Zambrano program (funded by the European Union, #NextGenerationEU).

The funders had no role in the writing of the study and in the decision to submit the article for publication.

Conflict of interest. The authors have no known conflict of interest to disclose.

Note

1. <https://www.tobiipro.com/learn-and-support/learn/eye-tracking-essentials/what-is-dark-and-bright-pupil-tracking/>.

References

- Antoniou, M. (2019). The advantages of bilingualism debate. *Annual Review of Linguistics*, 5(1), 395–415. <https://doi.org/10.1146/annurev-linguistics-011718-011820>
- Arvaniti, A. (2010). Linguistic practices in Cyprus and the emergence of Cypriot standard Greek. *Mediterranean Language Review*, 17, 15–45.
- Baker, C. (2011). *Foundations of bilingual education and bilingualism* (5th ed.). Bristol: Multilingual Matters.
- Baum, S., & Titone, D. (2014). Moving toward a neuroplasticity view of bilingualism, executive control, and aging. *Applied Psycholinguistics*, 35(5), 857–894. <https://doi.org/10.1017/S0142716414000174>
- Beatty-Martínez, A. L., Navarro-Torres, C. A., Dussian, P. E., Bajo, M. T., Guzzardo Tamargo, R. E., & Kroll, J. F. (2020). Interactional context mediates the consequences of bilingualism for language and cognition. Interactional context mediates the consequences of bilingualism for language and cognition.

- Journal of Experimental Psychology: Learning, Memory, and Cognition*, **46**(6), 1022–1047. <https://doi.org/10.1037/xlm0000770>
- Bellamy, K., van Osch, B., & Parafita Couto, M. C.** (2020). Consistent definitions matter! Problematising the ‘heritage’ labels in bilingualism research. Talk presented at *LUCL Sociolinguistics Series*. University of Leiden. <https://www.universiteitleiden.nl/en/events/2020/09/consistent-definitions-matter-problematising-the-heritage-labels-in-bilingualism-research>
- Bice, K., & Kroll, J. F.** (2019). English only? Monolinguals in linguistically diverse contexts have an edge in language learning. *Brain and Language*, **196**, 104644.
- Charity Hudley, A. H., Mallinson, C., & Bucholtz, M.** (2019). Toward racial justice in linguistics: Interdisciplinary insights into theorizing race in the discipline and diversifying the profession. *Language*, **96**(4), e200–e235.
- Cheng, L. S. P., Burgess, D., Vernooij, N., Solís-Barroso, C., McDermott, A., & Namboodiripad, S.** (2021). The problematic concept of native speaker in psycholinguistics: Replacing vague and harmful terminology with inclusive and accurate measures. *Frontiers in Psychology*, **12**, 715843. <https://doi.org/10.3389/fpsyg.2021.715843>
- Chomsky, N.** (1965). *Aspects of the theory of syntax*. Cambridge, MA: MIT Press.
- Cornips, L.** (2018). *The (un)making of linguistic borders*. Talk at FASoS, Maastricht University, 9 May 2018, Government, Maastricht.
- D’Alessandro, R., Natvig, D., & Putnam, M. T.** (2021). Addressing challenges in formal research on moribund heritage languages: A path forward. *Frontiers in Psychology*, **12**, 700126. <https://doi.org/10.3389/fpsyg.2021.700126>
- Davies, A.** (2003). *The native speaker: Myth and reality*. Clevedon, CA: Multilingual Matters.
- DeLuca, V., Rothman, J., Bialystok, E., & Pliatsikas, C.** (2019). Redefining bilingualism as a spectrum of experiences that differentially affects brain structure and function. *Proceedings of the National Academy of Sciences of the United States of America*, **116**(15), 7565–7574. <https://doi.org/10.1073/pnas.1811513116>
- Devitt, M.** (2006). Intuitions in linguistics. *The British Journal for the Philosophy of Science*, **57**, 481–513. <https://doi.org/10.1093/bjps/axl017>
- Dewaele, J.-M., Bak, T. H., & Ortega, L.** (2022). Why the mythical “native speaker” has mud on its face. In N. Slavkov, S. Melo-Pfeifer, & N. Kerschoofer-Puhalo (Eds.), *The changing face of the “native speaker”* (pp. 25–46). Berlin/Boston: De Gruyter Mouton. <https://doi.org/10.1515/9781501512353-002>
- Dewaele, J.-M., & Saito, K.** (2022). Positive psychology can help overcome the pernicious native speaker ideology. *The European Educational Researcher*. <https://doi.org/10.31757/euer.526>
- Dick, A. S., García, N. L., Pruden, S. M., Thompson, W. K., Hawes, S. W., Sutherland, M. T., Riedel, M. C., Laird, A. R., & Gonzalez, R.** (2019). No evidence for a bilingual executive function advantage in the nationally representative ABCD study. *Nature Human Behaviour*, **3**(7), 692–701. <https://doi.org/10.1038/s41562-019-0609-3>
- Domínguez, L., Hicks, G., & Slabakova, R.** (2019). Terminology choice in generative acquisition research: The case of “Incomplete Acquisition” in heritage language grammars. *Studies in Second Language Acquisition*, **41**(2), 241–255. <https://doi.org/10.1017/S0272263119000160>
- Dunn, A. L., & Fox Tree, J. E.** (2009). A quick, gradient Bilingual Dominance Scale. *Bilingualism: Language and Cognition*, **12**(3), 273–289. <https://doi.org/10.1017/S1366728909990113>
- Edwards, J.** (2004). Foundations of bilingualism. In T. Bhatia & W. Ritchie (Eds.), *The handbook of bilingualism* (pp. 7–31). Oxford: Blackwell.
- Etienne, A., Laroia, T., Weigle, H., Afelin, A., Kelly, S. K., Krishnan, A., & Grover, P.** (2020). Novel electrodes for reliable EEG recordings on coarse and curly hair. In *Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Annual International Conference, 2020*, 6151–6154. <https://doi.org/10.1109/EMBC44109.2020.9176067>
- Flores, N.** (2016). A tale of two visions: Hegemonic whiteness and bilingual education. *Educational Policy*, **30**(1), 13–38.
- Gallo, F., DeLuca, V., Prystauka, Y., Voits, T., Rothman, J., & Abutalebi J.** (2022). Bilingualism and aging: Implications for (delaying) neurocognitive decline. *Frontiers in Human Neuroscience* **16**, 819105. <https://doi.org/10.3389/fnhum.2022.819105>

- Gavarró, A. (2017). A sentence repetition task for Catalan-speaking typically-developing children and children with specific language impairment. *Frontiers in Psychology*, *8*. <https://www.frontiersin.org/article/10.3389/fpsyg.2017.01865>
- Gogolin, I. (2006). Linguistic habitus. In K. Brown (Ed.), *Encyclopedia of Language and Linguistics* (pp. 194–196). Oxford: Elsevier.
- Gogolin, I. (2021). Multilingualism: A threat to public education or a resource in public education? – European histories and realities. *European Educational Research Journal*, *20*(3), 297–310.
- Gollan, T. H., Montoya, R. I., Fennema-Notestine, C., & Morris, S. K. (2005). Bilingualism affects picture naming but not picture classification. *Memory & Cognition*, *33*(7), 1220–1234. <https://doi.org/doi.org/10.3758/bf03193224>
- Grosjean, F. (1985). The bilingual as a competent but specific speaker-hearer. *Journal of Multilingual and Multicultural Development*, *6*(6), 467–477. <https://doi.org/10.1080/01434632.1985.9994221>
- Grosjean, F. (1989). Neurolinguists, beware! The bilingual is not two monolinguals in one person. *Brain and Language*, *36*(1), 3–15.
- Grosjean, F. (1998). Studying bilinguals: Methodological and conceptual issues. *Bilingualism: Language and Cognition*, *1*(2), 131–149. <https://doi.org/10.1017/S136672899800025X>
- Grosjean, F. (2008). *Studying bilinguals*. Oxford: Oxford University Press.
- Hill, J. (2013). Language ideologies, policies and attitudes towards signed language. In R. Bayley, R. Cameron, & C. Lucas (Eds.), *The Oxford handbook of sociolinguistics* (pp. 68–800). Oxford: Oxford University Press.
- Hodge, G., Sekine, K., Schembri, A., & Johnston, T. (2018). Comparing signers and speakers: Building a directly comparable corpus of Auslan and Australian English. *Corpora*, *1*, 63–76.
- Holliday, A. (2006). Native-speakerism. *ELT Journal*, *60*, 385–387. <https://doi.org/10.1093/elt/ccl030>
- Holliday, A. (2017). Native-speakerism. In J. I. Liontas (Ed.), *The TESOL encyclopedia of English language teaching*. John Wiley & Sons. <https://doi.org/10.1002/9781118784235.eelt0027>
- Jansen, S., Higuera del Moral, S., Barzen, J. S., Reimann, P., & Opoka, M. (2021). *Demystifying bilingualism: How metaphor guides research towards mythification*. London: Palgrave Macmillan.
- Kachru, Y. (1994). Monolingual bias in SLA. *TESOL Quarterly*, *28*(4), 794–800.
- Kidd, ε., & Garcia, R. (2022). How diverse is child language acquisition research? *First Language*. <https://doi.org/10.1177/01427237211066405>
- Kroll, J., & Bialystok, E. (2013). Understanding the consequences of bilingualism for language processing and cognition. *Journal of Cognitive Psychology*, *25*(5), 799170.
- Kupisch, T., & Rothman, J. (2018). Terminology matters! Why difference is not incompleteness and how early child bilinguals are heritage speakers. *International Journal of Bilingualism*, *22*(5), 564–582.
- Kutlu, E. (2020). Now you see me, now you mishear me: Raciolinguistic accounts of speech perception in different English varieties. *Journal of Multilingual and Multicultural Development*. <https://doi.org/10.1080/01434632.2020.1835929>
- Larsson, T., Egbert, J., & Biber, D. (2022). On the status of statistical reporting versus linguistic description in corpus linguistics: a ten-year perspective. *Corpora*, *17*(1), 137–157. <https://doi.org/10.3366/cor.2022.0238>
- Leivada, E. (2020). Misused terms in linguistics. *Inference: International Review of Science*, *5*, 2. <https://doi.org/10.37282/991819.20.3>
- Leivada, E., D'Alessandro, R., & Grohmann, K. K. (2019). Eliciting big data from small, young, or non-standard languages: 10 experimental challenges. *Frontiers in Psychology*, *10*, 313. <https://doi.org/10.3389/fpsyg.2019.00313>
- Leivada, E., & Murphy, E. (2021). Mind the (terminological) gap: 10 misused, ambiguous or polysemous terms in linguistics. *Ampersand*, *8*, 100073. <https://doi.org/10.1016/j.amper.2021.100073>
- Leivada, E., Westergaard, M., Duñabeitia, J., & Rothman, J. (2021). On the phantom-like appearance of bilingualism effects on neurocognition: (How) should we proceed? *Bilingualism: Language and Cognition*, *24*(1), 197–210. <https://doi.org/10.1017/S1366728920000358>
- Lilienfeld, S. O., Pydych, A. L., Lynn, S. J., Lutzman, R. D., & Waldman, I. D. (2017). 50 differences that make a difference: A compendium of frequently confused term pairs in psychology. *Frontiers in Education*, *2*, 37. <https://doi.org/10.3389/feduc.2017.00037>
- Lilienfeld, S. O., Sauvigné, K. C., Lynn, S. J., Cautin, R. L., Lutzman, R. D., & Waldman, I. D. (2015). Fifty psychological and psychiatric terms to avoid: a list of inaccurate, misleading, misused, ambiguous,

- and logically confused words and phrases. *Frontiers in Psychology*, 6, 1100. <https://doi.org/10.3389/fpsyg.2015.01100>
- López, B.G., Luque, A., & Piña-Watson, B. (2021). Context, intersectionality, and resilience: Moving toward a more holistic study of bilingualism in Cognitive Science. *Cultural Diversity and Ethnic Minority Psychology*. Advance online publication. <https://doi.org/10.1037/cdp0000472>
- Luk, G. (2022). Justice and equity for whom? Reframing research on the “bilingual (dis)advantage”. *Applied Psycholinguistics*, 1–15. <https://doi.org/10.1017/S0142716422000339>
- Luk, G., & Bialystok, E. (2013). Bilingualism is not a categorical variable: Interaction between language proficiency and usage. *Journal of Cognitive Psychology*, 25(5), 605–621. <https://doi.org/10.1080/20445911.2013.795574>
- Marinis, T., Chiat, S., Armon-Lotem, S., Gibbons, D., & Gipps, E. (2011). *School-age sentence imitation test English (SASIT) E60*. Reading, UK: Department of Clinical Language Science, University of Reading.
- Marks, C. (2008). Methodologically eliminating race and racism. In T. Zuberi & E. Bonilla-Silva (Eds.), *White logic, white methods: Racism and methodology* (pp. 47–62). Rowan & Littlefield Publishers.
- McKee, M., Thew, D., & Starr, M. (2013). Ethical issues in conducting research with deaf populations. *American Journal of Public Health*, 103(12), 2174–2178.
- Montrul, S. (2016). *The acquisition of heritage languages*. Cambridge University Press.
- O'Rourke, B., Pujolar, J., & Ramallo, F. (2015). New speakers of minority languages: The challenging opportunity. *International Journal of the Sociology of Language*, 231, 1–20.
- Ooi, S., Goh, W., Sorace, A., & Bak, T. (2018). From bilingualism to bilingualisms: Bilingual experience in Edinburgh and Singapore affects attentional control differently. *Bilingualism: Language and Cognition*, 21(4), 867–879.
- Ortega, L. (2019). SLA and the study of equitable multilingualism. *Modern Language Journal*, 103(S1), 23–38.
- Pablos L., Parafita Couto, M. C., Boutonnet, B., de Jong, A., Perquin, M., de Haan, A., & Schiller, N.O. (2019). Adjective-noun order in Papiamentu-Dutch code-switching. *Linguistic Approaches to Bilingualism*, 9, 710–735.
- Perpiñán, S. (2017). Catalan-Spanish bilingualism continuum: The expression of non-personal Catalan clitics in the adult grammar of early bilinguals. *Linguistic Approaches to Bilingualism*, 7(5), 477–513. <https://doi.org/10.1075/lab.15004.per>
- Perpiñán, S., & Soto-Corominas, A. (2021). Indirect structural crosslinguistic influence in early Catalan-Spanish bilinguals in adulthood: Predicate selection in Catalan existential constructions. *Applied Psycholinguistics*, 42(6), 1463–1502. <https://doi.org/10.1017/S0142716421000308>
- Polinsky, M. (2018). *Heritage languages and their speakers*. Cambridge University Press.
- Rodríguez-Ordóñez, I. (2016). Differential object marking in Basque: Grammaticalization, attitudes and ideological representations. Ph.D. Dissertation. University of Illinois at Urbana-Champaign.
- Rodríguez-Ordóñez, I. (2020). The acquisition of differential object marking in Basque as a sociolinguistic variable. In A. Mardale & S. Montrul (Eds.), *The acquisition of differential object marking* (pp. 105–131). Amsterdam: John Benjamins.
- Rodríguez-Ordóñez, I. (2021). The role of social meaning in contact-induced variation among new speakers of Basque. *Journal of Sociolinguistics*, 25(4), 533–556.
- Rodríguez-Ordóñez, I., Kasstan, J., & O'Rourke, B. (2022). Responding to sociolinguistic change: New speakers and variationist sociolinguistics. *International Journal of Bilingualism* 26(5), 529–541.
- Rosa, J. D. (2016). Standardization, racialization, languagelessness: Raciolinguistic ideologies across communicative contexts. *Journal of Linguistic Anthropology*, 26, 162–183. <https://doi.org/10.1111/jola.12116>
- Rothman, J., Bayram, F., DeLuca, V., Di Pisa, G., Duñabeitia, J. A., Gharibi, K., Hao, J., Kolb, N., Kubota M., Kupisch, T., Laméris, T., Luque, A., van Osch, B., Pereira Soares, S. M., Prystauka, Y., Tat, D., Tomić, A., Gharibi, K., Hao, J., Kolb, N., . . . Wulff, S. (2022). Monolingual comparative normativity in bilingualism research is out of “control”: Arguments and alternatives. <https://doi.org/10.1017/S0142716422000315>
- Runnqvist, E., & Costa, A. (2012). Is retrieval-induced forgetting behind the bilingual disadvantage in word production? *Bilingualism: Language and Cognition*, 15, 365–377. <https://doi.org/10.1017/S1366728911000034>

- Sheehan, M., Schäfer, M., & Parafita Couto, M. C. (2019). Crowdsourcing and minority languages: The case of Galician inflected infinitives. *Frontiers in Psychology*, *10*, 1157. <https://doi.org/10.3389/fpsyg.2019.01157>
- Silva-Corvalán, C. (1986). Bilingualism and language change: The extension of Estar in Los Angeles Spanish. *Language*, *62*(3), 587–608. <https://doi.org/10.2307/415479>
- Silva-Corvalán, C. (1993). On the permeability of grammars. In W. J. Ashby, M. Mithun, & G. Perissinotto (Eds.), *Linguistic perspectives on romance languages: Selected papers from the XXI linguistic symposium on romance languages, Santa Barbara, February 21–24, 1991* (pp. 19–42). John Benjamins. <https://benjamins.com/catalog/cilt.103.08sil>
- Slavkov, N., Melo-Pfeifer, S., & Kerschhofer-Puhalo, N. (2021). Introduction: The changing face of the “native speaker”. In N. Slavkov, S. Melo-Pfeifer, & N. Kerschhofer-Puhalo (Eds.), *The changing face of the “Native Speaker”: Perspectives from multilingualism and globalization* (pp. 1–22). Berlin, Boston: De Gruyter Mouton. <https://doi.org/10.1515/9781501512353-001>
- Soto-Corominas, A. (2018). Acquisition of Catalan and Spanish Morphosyntax in the Catalan-Spanish Bilingual context. *Electronic Thesis and Dissertation Repository*. <https://ir.lib.uwo.ca/etd/5441>
- Soto-Corominas, A. (2021). Acquisition of quantified partitivity in Catalan-Spanish bilingualism: Influence from child-level and language-level factors. *Linguistic Approaches to Bilingualism*, *11*(6), 873–908.
- Treffers-Daller, J., Mukhopadhyay, L., Balasubramanian, A., Tamboli, V., & Tsimpli, I. (2022). How ready are Indian primary school children for English medium instruction? An analysis of the relationship between the reading skills of low-SES children, their oral vocabulary and English input in the classroom in government schools in India. *Applied Linguistics*, 1–30. <https://doi.org/10.1093/applin/amac003>
- Vaid, J. (2022). Biscrptality: A neglected construct in the study of bilingualism. *Journal of Cultural Cognitive Science* *6*, 135–149. <https://doi.org/10.1007/s41809-022-00101-3>
- van Osch, B. (2019). Vulnerability in heritage speakers of Spanish. PhD Dissertation, University of Amsterdam. <https://www.lotpublications.nl/vulnerability-in-heritage-speakers-of-spanish-in-the-netherlands>
- Zawiszewski, A., & Laka, I. (2020). Bilinguals processing noun morphology: Evidence for the language distance hypothesis from event-related potentials. *Journal of Neurolinguistics* *55*, 100908.

Cite this article: Leivada, E., Rodríguez-Ordóñez, I., Parafita Couto, MC., and Perpiñán, S. (2023). Bilingualism with minority languages: Why searching for unicorn language users does not move us forward. *Applied Psycholinguistics* *44*, 384–399. <https://doi.org/10.1017/S0142716423000036>