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Out of the mouths of babes: children and the formation of the Río de la Plata Spanish address system

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Abstract: This paper analyzes the effects of child language acquisition as a critical factor in a morphological change, namely, the replacement of the etymologically singular second person paradigm (*tuteo*) by its plural counterpart (*voseo*) in 19th century Río de la Plata Spanish. The account applies a sociohistorical model which proposes that young children can function as language change agents in environments characterized by unpredictable input variation, lack of normative mechanisms, and the emergence of peer networks among young learners. The model is then applied to explain the rapid generalization of *voseo* in the late 1800s, a well-documented but poorly understood process. This change was nestled in an environment characterized by the rapid breakdown and reshaping of social networks through country-to-city migration and massive immigration, and by the resulting contact between L1 and L2 speakers of Iberian and non-Iberian varieties. Our account hypothesizes that successive cohorts of children actuated the various stages of this change, by relying on child language acquisition biases in the learning of verbal morphology observed across Romance varieties. This study combines archival evidence and sociohistorical information with present-day acquisitional data. The latter offers a piece often missing in sociohistorical accounts of language change.

Keywords: child language acquisition; language change; Spanish; historical sociolinguistics; address forms

1 Introduction

This study analyzes the historical evolution of the second singular person (2s) informal address system of Río de la Plata Spanish (RPS). It focuses on the spread of

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voseo (i.e., the etymological second person plural) as the singular informal verbal form in the second half of the 19th century. Although the stages of this change are well documented, their actuation is yet to be adequately explained. The thrust of our argument is based on the hypothesis that young children played a central role in this process.

Many linguists have been skeptical about the possibility that children may be language change leaders (Aitchison 2001, 2003; Bybee 2010; Bybee and Slobin 1982) or have located the emergence of new norms in the social networks of older children and adolescents (Eckert 1999; Kerswill and Williams 2000; Kerswill et al. 2013; Rickford and Price 2013; Tagliamonte and D’Arcy 2009). By contrast, other studies do see young children as endowed with the capacity to initiate linguistic changes (Hudson Kam and Newport 2005, 2009; Kotsinas 1988; Senghas and Coppola 2001). This second hypothesis is central to some formulations of change in high contact settings (Aboh 2015; Bickerton 1981; DeGraff 1999, 2009; O’Shannessy 2013). Yet, even those who believe that child language acquisition may play a role in language change have rarely invoked authentic acquisition data to support their views. This study is an example of how some historical changes can be tied both to features of the acquisition process and to the local sociohistorical environment in which those changes took place.

The acquisitionally informed sociohistorical framework we employ has been proposed in detail before (Sanz-Sánchez and Moyna 2022). It assumes language acquisition through the lifespan (Sankoff 2019; Sankoff and Blondeau 2007) and proposes child language acquisition as the motive behind the actuation of some language changes. By applying child acquisition data to the analysis of a particular change in the history of Spanish, we account for its attested chronology and social diffusion more accurately than earlier proposals. This study presents a sociohistorically situated example of the protocol for the diachronic study of language contact advanced by DeGraff, i.e.: “to extrapolate from the better known (or the knowable) to the lesser known (or the unknowable)” (2009: 933), where recent L1 acquisition data offer the better-known analogue to more opaque historical situations.

The study is structured as follows. In Section 2, we review recent findings on child acquisition of variation, and in Section 3 we summarize the sociohistorical conditions required for contemporary data on L1 acquisition, to offer a plausible parallel to historical young children’s agency in language change. Section 4 elaborates on our case study of interest, namely, the evolution of RPS verbal address. We present a description of its sociohistorical embedding, describe the stages in the change, and show how data on verbal morphology acquisition provide a powerful correlate to the documented changes. Section 5 summarizes the main implications of this case for sociohistorical approaches to language change and concludes the study.

2 Children and language change

The question of whether young children (i.e., those traditionally thought to be within the critical period, roughly under the age of eight) can be leaders in language change is an old one. In generative approaches, language change is the result of children's construction of underlying grammars different from those of the previous generation. But how can language transmission be effective while simultaneously allowing for intergenerational differences ("the logical problem of language change", Kiparsky 2014: 16)? Generative answers to this apparent contradiction have relied on the potential for children to formulate new grammars via reanalysis, either as a consequence of unclear features in the adult output, or of the process whereby child learners interpret it (Cournane 2017; Kiparsky 2014; Kroch 2005; Lightfoot 1999).

Other historical linguists are skeptical that child acquisition plays any significant role in language change, because young children are typically observed to replicate adult input and shed off developmental errors as they grow (Aitchison 2001: 201–210; Croft 2000: 42–63). Some researchers view late childhood and early adolescence instead as crucial for the emergence of new peer norms (Eckert 1999; Kerswill 1996; Kerswill and Williams 2000; Labov 2001). Usage-based accounts are also reluctant to grant child language acquisition a role in historical change (Bybee 1985, 2010; Bybee and Slobin 1982; Tomasello 2003) and instead see grammar emergence as a function of frequency of use, which changes with individual experience throughout the lifespan (Bybee 2010: 118).

Generative, variationist, and usage-based approaches alike usually rely on the observation of child acquisition of monolingual norms (Clark 2009; Nardy et al. 2014; Shin 2016). In these settings, variation is either epiphenomenal to the underlying grammar (Kroch 2005) or shared across members of the speech community (Labov 1994, 2001; Shin and Miller 2021; Tagliamonte and D'Arcy 2009). In these conditions, structured variation can be acquired by very young children when it is already present in the adult language (Labov 1989; Smith 2021; Smith et al. 2013). Older children and adolescents have also been observed to continue acquiring sociolinguistic variation by overshooting their models, enhancing tendencies already present in adult vectors of change (*incrementation*, Labov 2007: 346; Tagliamonte and D'Arcy 2009). However, some forms of incrementation may also occur among younger children. For example, in a longitudinal study, Nardy et al. (2014) showed a preference for non-standard forms among a group of socioeconomically mixed 4–5-year-old French-speaking preschoolers. The process exhibited the strongest correlation between non-standard usage and level of peer integration, with the most social children showing less conformity with the standard. Similar forms of

incrementation in young children have been reported by Hall and Maddeaux (2020) and Cournane (2019).

But what happens when children face pervasive, unfocused variation? Such can be the case, for instance, in *catastrophic* settings (Labov 1994: 23–24), including population displacements through diaspora, wars, invasions, and mass migrations. The resulting heterogeneous communities are characterized by creolization (Aboh 2015; Bickerton 1981; DeGraff 1999, 2009) and new dialect formation (Sanz-Sánchez 2011; Trudgill 2004; Tuten 2003). In these contexts, adults cannot be expected to produce a sociolinguistically systematic variable norm. Instead, the task of establishing this new grammar is often said to fall on young children, whose acquisitional tendencies are not constrained by pre-existing social norms, thus resulting in “the deterministic nature of the process” (Trudgill 2004: 28).

Some authors have relied on child language acquisition as a motor for specific changes. For instance, in dialect contact studies, a minimum frequency threshold is sometimes said to be required for a feature to be acquired (Trudgill 2004: 110–112), leading to significant leveling of the adult input by children. Young learners are also suspected as the agents of grammatical change whenever morphological simplifications are enacted diachronically in contact situations (e.g., *be* leveling in Tristan da Cunha English, Schreier 2016). While these approaches emphasize the sociohistorical dimension of child language acquisition, they often omit the specifics of how the process would work and do not provide empirical confirmation for this hypothesis.

Yet, research on the acquisition of variation provides useful clues on how children deal with variable input in linguistically diverse communities. In monolingual contexts, variable features take longer to acquire than categorical ones (e.g., plural nominal morphology in Chilean vs. Mexican Spanish, Miller and Schmitt 2012). Bilingual children may also take longer to acquire variable features than their monolingual peers (Pirvulescu et al. 2014). Whenever young children have frequent access to both native and non-native features, a gradual emergence of new norms has been observed (Kotsinas 1988; Sharma and Sankaran 2011; Silva-Corvalán 1994) and the result of bilingual acquisition often differs from monolingual acquisition (e.g., Escobar and Potowski 2015: 88–93 for Spanish in the United States). These features may in turn be incorporated into new dialectal norms (e.g., English among London’s Indian immigrant youth, Sharma and Sankaran 2011). The sociolinguistic complexity of contact situations makes it hard to determine whether differences in the speech of bilingual and monolingual children are the result of their own interpretations of input features or if they are true innovations (De Houwer 2009: 106–107). In such contexts, acquisition cannot be measured solely as the reproduction of adult models, and in fact, some innovative patterns in bilingual communities do seem to appear first in young children, suggesting that this age group

may be responsible for initiating at least some changes (Cournane 2017; Thomason 2001: 148–149).

Any role young learners may have played is unlikely to be confirmed through the fragmentary written record that historical sociolinguists usually rely on (Auer et al. 2015; Hernández-Campoy and Conde-Silvestre 2012). Therefore, a hypothesis that advances the linguistic role of young children must propose a methodological broadening of what is considered acceptable evidence in the sociohistorical study of language change. This does not mean moving away from data into speculation, however, since any human child of today can shed light on the behavior of the children of yesteryear, allowing us to move from the “known and knowable” to earlier stages (DeGraff 2009: 933). Of special pertinence are studies that examine acquisition of linguistically or sociolinguistically unsystematic variation, which we discuss next.

3 Child language acquisition in highly variable natural settings

While most acquisition research focuses on the learning of standardized languages or clear sociolinguistic norms (Clark 2009; De Houwer 2009; Miller and Schmitt 2012; Nardy et al. 2014; Shin 2016; Shin and Miller 2021; Smith 2021; Smith et al. 2013), recent documented examples of how children handle unfocused variation offer a glimpse into at least some of the conditions that may have existed in historical high contact settings. These examples include mixed spoken languages, sign languages, and experimental evidence.

One such example is Light Warlpiri, a mixed language developed in aboriginal communities of Australia’s Northern Territory through contact among traditional Warlpiri, English, and Kriol (O’Shannessy 2013, 2019). While adults use a conventionalized code-switched talk combining Warlpiri structures with English/Kriol verb phrases, children have reinterpreted this code as a new variety, and developed several unique features (e.g., future/non-future marking) absent from the input. These innovations have been retained and passed on to cohorts of younger learners thanks to strong peer influence in unsupervised interaction among children of various ages. A similar example with even more unsystematic input is Fering, a variety of Frisian in contact with German. Hendricks et al. (2018) found high variability in gender marking (masculine vs. common) among adults. Among the children, those with less exposure to Fering regularized in favor of masculine gender, while only those with more exposure produced gender at rates correlated with adult production. These results demonstrate young children’s regularization bias when

faced with the variable or unsystematic input typical of multilingual/multidialectal contexts with high rates of L2 adults.

The formation of modern sign languages provides another window into language change through acquisition in unfocused high contact situations. Many deaf children born to hearing parents acquire language from an unsystematic mixture of native and non-native input, but even those whose input comes exclusively from non-native caregivers build regular systems from their irregular input (Singleton and Newport 2004). These children may match the gesture pattern of native signers or regularize on the basis of non-normative items, which thus become acquisition targets, as hypothesized in historical studies (Thomason 2001; Tuten 2003). The drive to regularize in L1 acquisition is clearest in deaf children with *no* access to sign language models (Goldin-Meadow and Mylander 1990; Goldin-Meadow et al. 2007). These children adapt the non-verbal hand gestures of their caregivers to develop innovative yet regular morphological and syntactic combinations. This mechanism may also be active in historical contexts of acquisition in heterogeneous environments, including a range of (native and non-native) adult grammars.

Studies on the recent emergence and systematization of Nicaraguan Sign Language (NSL) since the late 1970s (Goldin-Meadow et al. 2015; Kocab et al. 2016; Senghas and Coppola 2001) provide valuable real-time socially situated evidence of the emergence of grammatical norms among cohorts of signers in a new language community. These studies show that those in more recent cohorts or with earlier exposure to NSL exhibit more regular and elaborate grammars than those in older cohorts or with later exposure. Younger signers (especially those exposed to NSL by age six) developed a more elaborate grammar than older signers – who came into deaf schools when NSL still lacked a community of fluent native speakers – by regularizing the unsystematic input provided by the less fluent signers. NSL thus offers additional evidence with diachronic import, namely, the centrality of peer communication among children in the emergence of grammatical structure in new community norms.

Experimental studies of the acquisition of variation, which can control for degrees and types of variation in the input, also support the view that children must be considered as a potential source of language change. Several studies explore differences between learners of various ages in the acquisition of variable input in artificial languages (e.g., Hudson Kam 2015; Hudson Kam and Newport 2005, 2009; Perfors 2012; Sneller and Newport 2020). This research shows that adults are generally able to reproduce overall variation frequencies, only starting to overextend the use of certain forms when their input is very inconsistent and scattered, i.e., when it is too unpredictable. Children can reproduce systematic variation, but reorganize inconsistent input into systematic patterns instead. Moreover, even when adults overextend the use of a form, they never formulate a new consistent grammar,

while children eliminate unpredictability by creating systematic variable patterns (e.g., Hudson Kam 2015; Hudson Kam and Newport 2009). While not perfect models of natural acquisition, these experimental studies support the view that the regularity and predictability of focused languages emerge from the learning capability of young learners, not adolescents or adults.

Taken together, these strands of investigation strongly suggest that young children can actuate language change beyond what is commonly recognized in studies on acquisition of variation (see Section 2). Assuming cognitive uniformity in child language acquisition throughout history (*uniformitarian* hypothesis, Bergs 2012; DeGraff 1999, 2009; Labov 2001), these findings may shed light on historical changes where input was unsystematic by relying on constraints proven to operate in language acquisition and development today. If language change results from the accumulation of individual differences in lifelong acquisition, divergence in diachronic development is due to population-wide *differential selection* (Croft 2000), triggered by differences in the primary linguistic data and in the environmental conditions of acquisition. From a historical sociolinguistic perspective, therefore, the question is not whether adults or children introduce innovations in communal feature pools, but which innovations are enacted by individuals at different life stages (Sankoff 2019; Sankoff and Blondeau 2007), and which environmental conditions favor their spread. We return to this point in Section 5.

Here we incorporate L1 acquisition data to the historical sociolinguist's toolkit to shed light on the linguistic and sociodemographic dynamics of specific changes. While it may not always be possible to glean evidence from the historical record, L1 acquisition literature provides analogues. A successful sociohistorical analytical protocol seeking to incorporate acquisitional evidence must thus identify (a) the necessary environmental triggers for child agency to be critical in language change, and (b) linguistic parallels between child acquisition and the attested diachronic development in question.

Elsewhere (Sanz-Sánchez and Moyna 2022) we have proposed an acquisitionally informed sociohistorical model that supports the agency of young children in shaping language change, based on three conditions: (a) unsystematic variation without clear social correlates in the input; (b) lack of effective social systems to impose conformity with community norms; and (c) pre-adolescent contexts of peer interaction where young children may create new norms. Although lack of space precludes a detailed description of these conditions, we provide a summary below.

1. *Unsystematic variation in the input.* Large-scale migration, resettlement, and territorial expansion (Sanz-Sánchez and Tejedo-Herrero 2021; Schreier 2016; Trudgill 2004; Tuten 2003) have led to the creation of new communities where many of the sociolinguistic constraints typical of the contributing populations cease to operate, and where the community pool is (at least initially) markedly

diffuse (Trudgill 1986). In these situations, children lack access to systematically variable input, so that their acquisitional choices deviate markedly from those of more sociolinguistically stable contexts (i.e., Labovian-style variation). These situations are not unlike the genesis of sign languages, where newly established deaf communities create an interlanguage with some regularity out of heterogeneous mixtures (Kocab et al. 2016; Senghas and Coppola 2001; Senghas et al. 1997). Even when variability is limited to two languages, young children can select brand-new combinations from available options (Kotsinas 1988; Potowski 2008; Potowski and Matts 2008). In sum, unfocused variation with no clear social correlates prevents children from discerning community norms and leads them to delete parts of this unstructured variation as “noise” (Combrink 1978: 75) or to reorganize it into a more predictable grammar.

2. *Lack of norm enforcement.* The actuation mechanism that may allow these innovations to spread throughout the community is based, partly, on the lack of effective systems to impose conformity with community linguistic norms. In its most basic form, normativity requires choosing among competing options and imbuing them with shared symbolic value (see *enregisterment*, Johnstone 2016). The well documented role of older children and adolescents in creating these norms is predicated upon frequent peer interaction (Eckert 1999; Mendoza-Denton 2010). In fact, it may take as little as one generation for young speakers to settle on a common pattern of variation (Kerswill 1996; Kerswill and Williams 2000; Kerswill et al. 2013; Thomas 1997). While learners typically have access to the norms of their caregivers and peers, which usually correspond to those of the contributing communities, geographical isolation or the absence of norm-enforcing institutions have been linked to even more idiosyncratic feature combinations (Britain 1997; Schilling-Estes 2002; Trudgill 2004). Dialect and language contact may be behind unsystematic variation and the emergence of new varieties from L1 and L2 features (e.g., Tristan da Cunha English, Schreier 2016). Clear norms can also be missing in more historically stable communities, for example, if they lack access to prestige forms of the language (e.g., Gaelic in northern Scotland, Dorian 1994). While extreme and unfocused variability may be relatively uncommon in present-day Western communities, this cannot be assumed as a universal default. However, lack of normativity by itself cannot be a sufficient condition, because even then, pervasive variation can have different outcomes, sometimes persisting for generations and sometimes leading to new norms rapidly. What is behind these different outcomes?
3. *Young children peer networks.* Our final factor rests on the condition that young children have unsupervised contact with peers. This argument rests on the assumption that children’s input comes from a complex network of interlocutors (Cournane 2017; Stanford 2015), which may include caregivers, siblings, other

family members, and even cohort peers. If networks can form among entire cohorts of children at a very young age in contexts of pervasive non-systematic variability, they may provide the opportunity for new norms to emerge. A social condition that has facilitated these interactions is mandatory schooling, since the ratio of adults to children in school is such that most children talk to one another more than to adults. When young children share a diffuse set of communicative resources, this can lead to the emergence of norms through horizontal transmission, as was the case with NSL (Kocab et al. 2016: 149). Critically, the emergence of new norms need not wait until late childhood or adolescence: younger children can also negotiate variable features if they have access to peer networks (cf. Nardy et al. 2014; O'Shannessy 2013: 332–333, 2019). In modern societies, peer-to-peer interactions happen against the backdrop of social structures that facilitate them, such as school (cf. *schoolization*, Quinn 2010). However, the absence of widespread schooling should not be interpreted as an obstacle for child-based communication networks, since these can also develop whenever urbanization, women's paid labor outside the home, communal child-rearing practices, or other social factors bring children in frequent close contact.

Because every community is ecologically complex (Clements 2009, 2018; Mufwene 2001), it is unlikely that the three factors mentioned in this section will operate in isolation from other possible linguistic or social triggers. Therefore, the above conditions should not be interpreted as sufficient, but as necessary, in social scenarios where child language acquisition should be suspected in the actuation of changes (see O'Shannessy 2019 for a similar analysis). If we can then find correlates for the attested changes in acquisition literature, we can build a strong case that the observed changes can be attributed to the agency of young learners. We proceed to offer a case study that exemplifies the applicability of this heuristic protocol.

4 Informal address in Río de la Plata Spanish

We now apply the framework articulated above to study the stabilization of the 2s paradigm in RPS Spanish. The process was the result of a protracted competition between two pronouns, *vos* and *tú*, and their corresponding verb forms, during the colonial period. By the second half of the 19th century, the verbal paradigm had begun to restructure and stabilize in favor of *voseo* forms, in a sequence completed in the early decades of the 20th century. We argue that this morphological shift can be explained using the heuristics discussed in Sections 2 and 3, namely, environmental similarities and child acquisitional analogues.

4.1 The history of 2s paradigms in Latin American Spanish

Spanish has a complex address system rooted in its history (see Table 1 for a very simplified snapshot of this evolution in the European norm). Summarizing the evidence (Fontanella de Weinberg 1993, 1999; Hummel et al. 2010; Kany 1969; Moyna and Rivera-Mills 2016), Medieval Spanish inherited the Late Latin opposition between singular familiar *tú* and polyfunctional *vos* (singular, plural, familiar, deferential) and their respective paradigms. *Tú* forms were initially restricted to address children and *gente ruin* ‘the meanest social ranks.’ *Vos* forms, initially the unmarked polite option, started to show pragmatic ambiguity by the late 15th century: they were reserved for the highest reverential contexts, but they could also be used as equivalent to *tú* and interpreted as condescending (Anipa 2001). As a consequence, several honorifics (e.g., *vuestra merced* ‘your-PL mercy’) started to replace it, while the plural became unambiguous through the addition of *otros* (‘others’) (> *vosotros* ‘you all’). In the singular, non-deferential *tú*~*vos* variation ensued, until the latter disappeared from the European norm after 1700.

In the Spanish American colonies, the initial address system combined medieval and early modern elements in a highly heterogeneous mix (Fontanella de Weinberg 1993). This inventory of forms continued to evolve on both sides of the Atlantic, in local patterns that often diverged from each other. The five centuries since have seen the consolidation of local norms including two main 2s non-deferential options, *tuteo* (essentially, the etymological Latin *TU* paradigm preferred in European Spanish) and *voseo* (which comprises a broad range of dialectal systems sharing some degree of preservation of *vos*). We focus on an area where a form of *voseo* is the spoken norm, namely the Atlantic Southern Cone, anchored by the prestige urban varieties of the capital cities of Buenos Aires (Argentina) and Montevideo (Uruguay). A sample of *tuteo* (as used in, for instance, Mexico City) and *voseo* in Montevideo and Buenos Aires can be seen in Table 2.

The lack of correlation between these present-day 2s informal address dialectal systems and the initial colonial input has puzzled scholars. The available

Table 1: Evolution of European Spanish pronominal address (from Penny 2002: 138–139).

	Before 1500	1500–1700	After 1700
Singular familiar	tú	tú ~ vos	tú
Singular deferential	vos	vuestra merced	usted
Plural familiar		vos+otros	vosotros
Plural deferential		vuestras mercedes	ustedes

Table 2: *Tuteo* and *voseo* for ‘you speak-2 SG PRES IND’ in three Latin American capitals.

	Mexico City	Montevideo	Buenos Aires
Singular familiar	tú <i>hablas</i> [a'βlas]	tú~vos <i>hablás</i> [a'βlas]	vos <i>hablás</i> [a'βlas]

documentary picture for the colonial period (Anipa 2001; Otte 1988) suggests that the feature pools brought by Spanish settlers contained both *tuteo* and *voseo* in complex patterns and variable frequencies that are now impossible to reconstruct reliably (Fontanella de Weinberg 1987, 1992). Colonial documents present overlapping *tuteo* and *voseo*, because the two paradigms exhibited syncretism and because the mixing of forms was pragmatically appropriate in some contexts, as shown in (1).

- (1) *si quieres_T venirte_T aqui a estar debaxo de mi mano trae_{T/V} tu_T mujer e hijos que yo te_T mantendre [...]. Los onbres de bien an de tener otros terminos que los que vos_V aveis_V tenido, el tiempo te_T dara el pago* (Catalina Martín to her son Francisco Marrero, Mexico City, 1574) (CORDIAM, Academia Mexicana de la Lengua).

‘If you want_T to come_T here to be under my care, bring_{T/V} your_T wife and children and I will support you_T. Good men should behave differently than you_V have_V. Time will give you_T what you deserve.’

Since there is no documentary support to attribute present dialectal differences to distinct usage preferences in the original contingents (i.e., Mufwene’s 2001 *founder principle* explanation does not apply), the modern dialectal choices are typically attributed to varying degrees of subsequent contact between Spain and the colonies. More specifically, current areas of *voseo* (primarily Southern Cone and Central America) were settled early and remained marginal throughout the colonial period. Wherever more sustained exposure to metropolitan Peninsular norms was found (Mexico, Peru, the Caribbean), *tuteo* spread at the expense of *voseo* (Lipski 2014; Páez Urdaneta 1981).

Explanations based on strong or weak contacts with Spain can only account for one direction of change, i.e., the expansion of *tuteo* at the expense of *voseo*. But they cannot explain several critical aspects of the actuation of the opposite change in those places where it occurred, namely the generalization of *voseo*, its attested chronology, and any intermediate stages. In what follows, we reconstruct the steps of this evolution embedded in its social context, tying the process to young children’s processing of verbal paradigms, as advanced in Section 3.

4.2 Address forms in 19th century RPS

4.2.1 The external ecology of address in RPS

The historical use of *voseo* in the Río de la Plata can be traced back to the area's demographic evolution since colonial times. Spanish settlement started inland in Paraguay and faced west towards the metal rich Andean region. The early contingents represented different Spanish varieties and other European languages, such as Basque and Portuguese (Boyd-Bowman 1985). The newcomers (mostly men) mixed with the local Guaraní population (Sarreal 2014: 17, 21), and the resulting *mestizo* population participated in the definitive founding of Buenos Aires (1580) on the western bank of the Río de la Plata. Montevideo was founded much later (1726–30) on the opposite shore with a similar population stock (Bertolotti and Coll 2014: 17–18).

Unlike other colonial centers (e.g., Mexico City, Lima), both cities remained small, with a flat social structure and widespread illiteracy (Szuchman 1990: 132). Political instability and border disputes resulted in internal migration and incorporation of indigenous groups, leading to the presence of indigenous languages in the hinterland well into the 19th century (Bertolotti and Coll 2014: 96). In the decades following independence from Spain (Uruguay: 1811, Argentina: 1816), these sparsely populated pastoral colonies became trade partners to industrialized European nations in search of commodities and markets for their manufactured goods. New technologies (e.g., barbed wire to close off lands) increased industrialization and reduced rural labor, causing internal migration to urban slums in the second half of the 19th century.

The demographic makeup of the region underwent even more profound changes after the 1850s, when local governments started to promote European immigration to increase population. It is estimated that between 1869 and 1959, immigrants and their descendants were responsible for over half of the total population growth of Argentina, adding 7 million inhabitants to the total (Germani 1966: 167). Uruguay increased its population sevenfold between 1850 and 1900, the highest growth in Latin America (Goebel 2010). The immigrant population concentrated in the capital cities, the population of which exploded in this period, as shown in Figures 1 and 2.

Most immigrants were Italians and Spaniards (Goebel 2010). The Italians came from the north first, and from the south later (Nascimbene 1988), and were therefore speakers of vastly different dialects. Many Spaniards were from the country's periphery (Galicians, Basques, Catalans) and spoke Spanish as a second language if at all. Smaller immigrant contingents came from North, Central, and Eastern Europe, as well as the Middle East. Most immigrants were housed in the same small-tenement

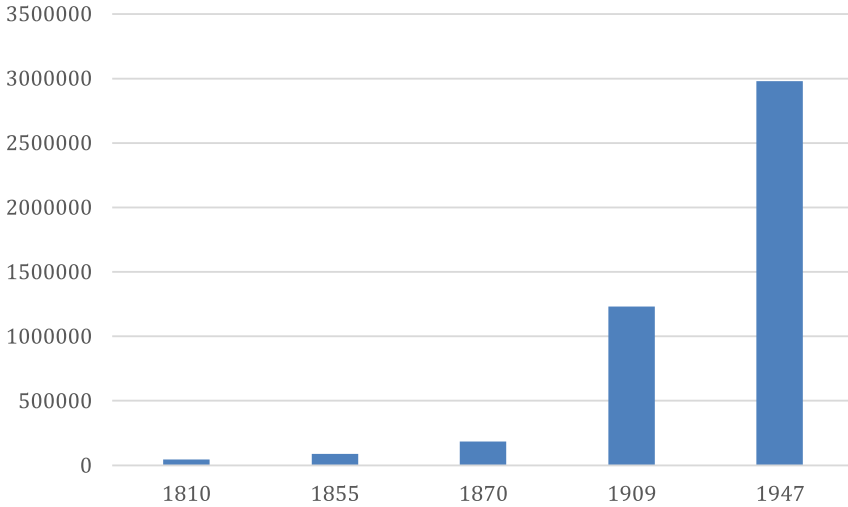


Figure 1: Population of Buenos Aires (1810–1947) (Source: Dirección General de Estadística y Censos 2003).

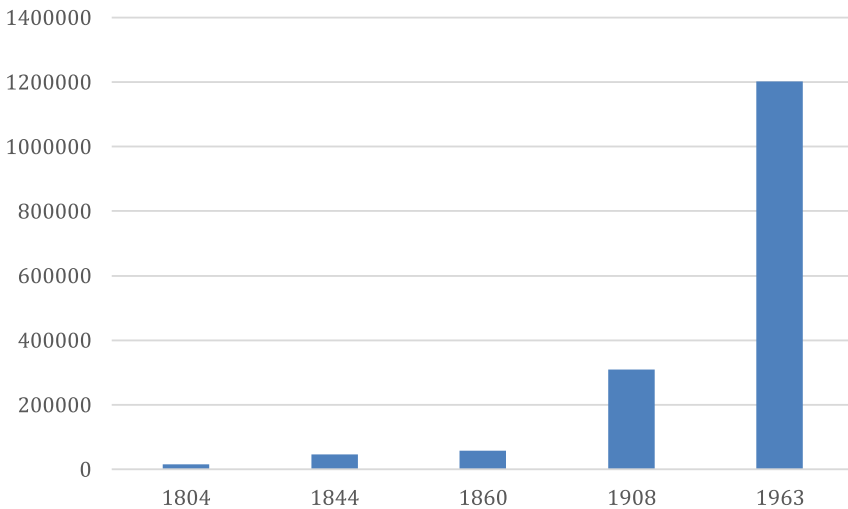


Figure 2: Population of Montevideo (1804–1963) (source: Pollero Beheregaray 2013; Instituto Nacional de Estadística n.d.).

slum blocks (*conventillos*) and new makeshift neighborhoods as the local working-class population (Klein 2013: 85–86). Over time, the local rural and working-class population and the recently arrived immigrants mixed, as documented by low rates

of endogamy (Goebel 2010). Given the size of the contingents, the local population could not assimilate newcomers gradually: instead, a new hybrid culture emerged.

One of the most important tools for social cohesion was the consolidation of public education. In Uruguay, primary school became free, mandatory, and non-denominational in 1877, leading to large increases in literacy (Sucazes and Andina n.d.). Argentina would follow suit in 1882. By creating the opportunity and the obligation of sending children to school, the young states sought to develop a strong sense of national identity (Oroño 2014). In the new schools, children from the foreign and local working classes learned and played together, further contributing to the emergence of a new urban RPS norm. These demographic shifts also served as the backdrop for the recorded changes in the local address patterns, which we survey next.

4.2.2 The internal ecology of address in RPS

During and immediately after the Spanish colonial period, the mostly rural Río de la Plata region offered an ideal environment for the survival of heterogeneous address patterns, acquired by generations of *mestizos* from the original mix of Iberian varieties and unimpeded by normative pressures. The dispersion and fragmentation of the population resulted in isolated networks that favored maintenance of colonial feature pools. Any *koiné* formation from that period failed to attain supralocal status (Trudgill 2004). The small influx of Spanish colonizers and the area's isolation meant that European innovations, such as the spread of *tuteo* (see Section 4.1), could have but little influence over the majority rural population, and likely only influenced the small urban élites.

Ironically, the conditions that favored prolonged *vos/tú* competition also make it virtually impossible to trace this variation accurately, since the limited use of writing left little evidence of informal address. However, the mixing of forms typical of informal Spanish documented elsewhere is recorded in this region between the late 18th and early 19th centuries, both in official documents, as in (2) (López Mazz and Bracco 2010: 118–9), and in family letters, as in (3) (Fontanella de Weinberg 1971).

- (2) *Preguntele lo que quería y me dijo estas palabras: padre, he tenido noticia, como vos_V también sabéis_V como muchas veces te_T dije que los [indígenas] de los Apóstoles se apropiaban la estancia de Ybirapatá* (Padre Miguel Ximénez reporting the last words of a Genoa Indian regarding a land dispute, Banda Oriental, 1728).

‘I asked him what he wanted and he said these words: Father, I have heard, as you_V know_V too, because I’ve told you_T many times, that the Indians of the Apostles have taken over the ranch of Ibirapatá.’

- (3) *Campbell pronto pasará á esa, visita_{V/T}lo no una vez, sino muchas, dad_Vle las gracias, y sirve_Tlo en quanto puedas_T* (Letter from Nicolás Anchorena to his brother? Juan José de Anchorena, Río de Janeiro, 1816, Archivo General de la Nación, Argentina, VII-4-3-8)
 ‘Campbell will soon be there. Visit_{V/T} him not once, but many times, thank_V him, and serve_T him in every way you can.’

Fontanella de Weinberg (1987: 110–120) showed that over the course of the 19th century *voseo* forms generalized at the expense of *tuteo* across syntactic contexts. In the earliest period documented, variability was the norm in both imperative and present forms. The first form where *voseo* prevailed was the imperative, followed by the present. The data as presented by Fontanella de Weinberg also hint at a different rate of change for the country and city. While those differences are likely, it is also possible that they were amplified in her account by the use of different types of sources (plays for the rural data, ego documents for the urban data) (Table 3).

Oral production is harder to ascertain, but through a combination of data taken from turn-of-the-century plays and later recordings of spontaneous speech from educated Buenos Aires speakers (*Proyecto de Norma Culta*), we can piece together the evolution of *voseo/tuteo* alternation in spoken language (Table 4). This evidence shows that *voseo* was virtually categorical in the imperative at the start of the 20th century, and two decades later, also in the present indicative. By contrast, in the present subjunctive the overall *voseo* percentage decreased over time.

The subjunctive present *voseo* forms are significant not only because their numbers dwindle, but because they do so at different rates according to their meaning. Indeed, present subjunctive forms can be used in deontic contexts, as negative imperatives (*¡No vengas!* ‘Don’t come!’), but they can also be used in epistemic contexts, where their role is to nuance the speaker’s degree of commitment towards the veracity of a statement (*Creo que vienes* ‘I think you will come-PRES

Table 3: *Voseo/tuteo* alternation in RPS before 1880 (Fontanella de Weinberg 1971, 1987:119).

	Imperative	Present indicative
<i>Rural Río de la Plata</i>		
1800–1830	V ~ T	V ~ T
1830–1850	V	V ~ T
1850–1880	V	V
<i>Buenos Aires</i>		
1800–1850	V ~ T	T (V)
1850–1880	V	V ~ T

Table 4: *Voseo* percentages in RPS after 1880 (*Moyna and Ceballos 2008; **Siracusa 1972). N.B.: Results are presented with no totals, because Siracusa (1972) does not report them.

	Imperative	Pres. indicative	Pres. subjunctive
<i>Play characters*</i>			
Born before 1850	75.9 %	65.4 %	49.7 %
Born 1850–1880	80.9 %	77.4 %	44.5 %
<i>Interview participants**</i>			
Born 1890–1915	99.4 %	92.9 %	25 %
Born 1916–1935	99.8 %	99 %	20.2 %
Born 1936–1945	99.1 %	99.9 %	16.9 %

IND' vs. *No creo que vengas* 'I don't think you will come-PRES SUBJ). When the present subjunctive data in Table 4 are reanalyzed according to these two distinct categories (Table 5), the decrease in *voseo* subjunctive is shown to start earlier and drop further in epistemic than in deontic contexts.

Starting in the mid-1800s, contact between speakers of Spanish dialects (urban, rural, Latin American, Peninsular) and L2 interlanguages as a result of internal and foreign immigration (see Section 4.2.1) generated extreme variability in the address pool.¹ Such contacts are reflected in period drama, where characters are represented as speaking different native and non-native dialects. L2 speakers often use the 2s address system inconsistently, as shown in (4), the depiction of an Italian immigrant, who mixes *voseo* pronouns (*vos*) with *tuteo* verbs (*levántate*).

Table 5: Percentages and totals of *voseo* and *tuteo* in present subjunctive forms from speakers born between 1850 and 1950 (Moyna and Requena to appear).

	Deontic		Epistemic	
	V (%)	T (%)	V (%)	T (%)
Speakers born 1850–1880	64 (48)	69 (52)	17 (53)	15 (47)
Speakers born 1880–1900	69 (46)	81 (54)	9 (35)	17 (65)
Speakers born after 1900	7 (19)	29 (81)	5 (14)	30 (86)

¹ Many of the contributing immigrant languages had multiple address forms, and the Romance languages typically have reflexes of etymological L. *tu/vos*. However, in most of these languages (Catalan, French, Italian varieties), the *vos* descendants are formal or deferential, rather than informal, and therefore, they do not compete with *tu*.

- (4) ¡Haragana!... Ya te lo decía esta mañana. **Levántate_T... levántate_T... Y vos_V**
 nada. ¡Si no **durmieras_{V/T}** tanto, **te_{V/T}** sobraría el tiempo!... (Sánchez 1972
 [1904]; *La Gringa, Act I, Scene IV*)
 ‘Lazybones!... I told you this morning. Get_T up... get_T up... And you_V ignored
 me. If you didn’t sleep_{V/T} so much, you_{V/T} would have time left over!’

If the native-born children of immigrants did not learn the address norm – reflected in Tables 4 and 5 – from their parents, who did they learn it from? As we show in Section 4.4, evidence points to their age peers. Starting in the late 19th century, living conditions in the booming working-class neighborhoods of Buenos Aires and Montevideo, as well as new state-sponsored schools, thrust these children together in an environment that contained competing 2s alternatives from several sources. In this environment, it was not teachers that exerted the most influence, but rather the children’s peers. Indeed, the school system attempted to propagate *tuteo*, which was presented to local teachers as the educated norm in textbooks and grammar treatises (Narvaja de Arnoux 2013; Oroño 2014) and was natural to the many Spanish-born educators (Goebel 2010: 199; Zubillaga 1993: 34).

It was all to no avail. By the turn of the 20th century, *tuteo* had been driven out of the 2s imperative and present indicative, much to the dismay of language gatekeepers. Given the overall effectiveness of education in Uruguay and Argentina, which succeeded in eliminating mass illiteracy and several non-standard linguistic features in a few generations, one might wonder why it failed in its efforts to eradicate *voseo*. In the coming sections we outline an acquisitionally informed answer to this conundrum.

4.3 The better known: second person address in child language acquisition

In what follows, we argue that the sequence observed for *voseo* adoption in RPS (imperative > present indicative > present subjunctive semantic split) is in fact grounded on universal cross-linguistic tendencies of child language acquisition. We support this proposal with L1 acquisition evidence from Spanish and other Romance languages.

In Romance, the imperative is the earliest verbal form acquired out of the three main forms produced during the pre-morphological stage (1;4–1;5), the others being the third person present indicative and the infinitive (Aguirre 2003: 5–7 for Spanish; Kilani-Schoch 2003: 273 for French; Noccetti 2003: 359 for Italian). Although the appearance of imperatives precedes the development of inflectional categories, their semantics and syntax are unambiguous: children use them accurately with volitional meaning, and, if accompanied by clitics, the latter appear correctly placed to the right (5).

- (5) Data from Salustri and Hyams (2006) and Montrul (2004: 113)
- | | | |
|----|--|---------|
| a. | Ajuda'm.
Help=IMP me
'Help me.' | Catalan |
| b. | Mettilo.
Put=IMP it
'Put it.' | Italian |
| c. | Témelo [% tráemelo]
Bring=IMP me it.
'Bring it to me.' | Spanish |

This evidence shows that these forms are indeed structural imperatives, and as such, occupy a position on the Force Phrase (FP) on the clausal left periphery (Rizzi 1997), allowing for deontic interpretation. The early acquisition of imperatives may be due to their higher perceptual saliency, morphological simplicity, and semantics derivable from context (Aguirre 2003: 20). In fact, the emergence of the imperative has been interpreted as a language-specific manifestation of a universal stage in verbal acquisition, the Root Infinitive (RI) (Salustri and Hyams 2003), since it shares its deontic value and its eventive interpretation. As such, its early timing is not coincidental. Salustri and Hyams argue that because the emergence of the imperative in Romance is not ungrammatical, it goes unnoticed as an acquisitional stage, but its early frequency of use exceeds adult models, peaking at around 40 % between the ages of 2;0 and 2;5 (2003: 696), a period that coincides with the RI.

Following the imperative, the emergence of the present indicative is related to the acquisition of the Agreement Phrase (AgrP), the locus of obligatory subject-verb agreement (Félix-Brasdefer 2006). In Spanish and related languages, children produce finite verbs with person contrasts very early (Bel 2001): 1s and 3s are produced virtually simultaneously between 1;7 and 1;9, while the 2s follows them chronologically and in frequency (Montrul 2004: 105) (6).

- (6) Data from Félix-Brasdefer (2006)
- | | |
|----|--|
| a. | <i>tú tienes baba</i> (Juan, 2;4)
you have=2 SG PRES IND beard
'you have a beard' |
| b. | <i>tú te llamas mamá</i> (María 2;1)
you=2 SG REFL call=2 SG PRES IND mommy
'your name is mom' |

The morphology of the present subjunctive emerges later and takes longer. This is because some of its uses are structurally determined and categorical, while others are optional and/or dependent on meaning, so that full mastery is impossible before certain cognitive milestones are achieved. Until quite late, a child may use subjunctive forms accurately in a specific context, while simultaneously failing to employ them correctly in a different context (Blake 1983). These acquisition stages are not random (Blake 1983; Pérez-Leroux 1998; Sánchez-Naranjo and Pérez-Leroux 2008). The process starts in the expression of purpose or volition through negative imperatives. The earliest correct use of these forms comes before age 2 (1;7–1;8) (López Ornat 1994), but these may be rote learned forms (Mueller Gathercole et al. 2002). It is not unusual for children to produce commands using ungrammatical indicative forms (7). That said, by age 2, two of the three children in Félix-Brasdefer (2006), had mastered negative command morphology (8).

- (7) a. * *No supa guaguau*. [Adult: *No chupes*.] (María 1;10) (López Ornat 1994: 301)
 No lick=3 SG PRES IND doggie [Adult: no lick- 2 SG PRES SUBJ]
 ‘Don’t lick me, doggie.’
- b. * *No toca ahí*. [Adult: *No toques ahí*.] (Juan 1;11.8) (Mueller Gathercole et al. 2002: 395)
 No touch=3 SG PRES IND there. [Adult: No touch 2 SG PRES SUBJ there]
 ‘Don’t touch there.’
- c. *No pujas*. [Adult: *No empujes*.] (Koki 2; 5) (Félix-Brasdefer 2006: 16)
 No push=2 SG PRES IND [Adult: No push=2 SG PRES SUBJ]
 ‘Don’t push!’
- (8) Félix-Brasdefer (2006: 27)
- a. *No mordas*. [Adult form: *No muerdas*.] (Juan 2;3)
 No bite=2 SG PRES SUBJ
 ‘Don’t bite!’
- b. *No te caigas*. (María 2;1)
 No you=REFL fall=2 SG PRES SUBJ
 ‘Don’t fall!’

After children have mastered the subjunctive in deontic contexts, they start extending it to non-deontic contexts, with a lag of about three months (Mueller Gathercole et al. 2002). It takes longer to extend the subjunctive to adverbial clauses (9a) and verbs that subcategorize for it (9b).

- (9) Data from López Ornat (1994: 469, 521)
- a. *me lo voy a comer todo cuando me levante* (María 2;05)

me it go=1 SG PRES IND to eat all when me=REFL get up=SG PRES SUBJ
 ‘I’m going to eat it all up when I get up.’

- b. *voy a dejar a la gente que ente (=entre) a mi fiesta* (María 2;11)
 go=1 SG PRES IND to let to the people that enter 3=SG PRES SUBJ my party
 ‘I’m going to let the people come in for my party.’

Blake (1983), Pérez-Leroux (1998), and Sánchez-Naranjo and Pérez-Leroux (2008) studied subjunctive acquisition in cohorts of children as young as 3 and as old as 12. They found that for most contexts 5-year olds showed significant improvement in correct mood choices for most contexts, but in some levels (e.g., predicates of doubt or attitude) adult use of the subjunctive was only achieved around age 10, when children had a fully developed theory of mind.

Taken together, these findings show that Spanish-acquiring children learn 2s morphology in a staggered fashion, starting with the imperative, then the present indicative, and finally, the present subjunctive, following the order of semantic-syntactic complexity. In uniformitarian fashion (Bergs 2012; DeGraff 1999, 2009), we submit that children in 19th-century Río de la Plata, faced with the task of negotiating a socially unfocused range of address options, were subject to the same acquisitional constraints as contemporary children. We now turn to the interpretation of the evidence of *voseo* spread in RPS by combining these acquisitional tendencies and the sociohistorical triggers articulated in Section 3.

4.4 The lesser known: towards a new account of RPS *voseo*

Our starting point for the actuation of the spread of *voseo* in RPS is the sociolinguistic situation in the urban areas starting in the mid-to-late 19th century. Given the demographic upheavals described in Section 4.2.1, children who acquired RPS at this time were exposed to massive quantities of doublets in the 2s informal paradigm without a clear community norm. This posed a challenge in terms of cognitive load and favored leveling through allomorphy reduction. In contact environments, doublets tend to suffer one of two fates: either one allomorph is eliminated or the two survive with different functions or meanings (Kroch 1994; cf. *reallocation*, Britain and Trudgill 1999; Trudgill 1986).

In the absence of normative pressures where parents spoke non-standard dialects or L2 interlanguages, children opted for *voseo* over *tuteo*, starting from the earliest form acquired – i.e., the imperative. Our reconstruction is corroborated by contemporary witness accounts. As early as 1828, poet and grammarian Juan Cruz Varela decried errors frequent in the speech of Buenos Aires thus: “It is very widespread among us, **but particularly among the children, to lengthen the last**

syllables of imperatives, and even to add a letter to them, and to say, for example, *tomá* instead of *toma*; *corré* instead of *corre*; *vení* instead of *ven*” (cited in Fontanella de Weinberg 1971: 497, translation and emphasis ours). Cruz Varela’s observation confirms children’s preference for *voseo* imperatives in the period immediately preceding the demographic changes in Section 4.2.2.

How can this selective preference for *voseo* imperatives be explained? Recall (Section 4.3) that the features of morphological simplicity and perceptual saliency offer advantages to acquisition. If we assume a random distribution of variants in the adult input, *voseo* imperative forms had an acquisitional edge over their *tuteo* competitors: whereas children acquiring the *tuteante* imperative encounter irregularities, such as morphophonological vowel alternations (*contar* ~ *cuenta* ‘tell=IMP’) and shortened forms (*salir* ~ *sal* ‘go out=IMP’; *poner* ~ *pon* ‘put=IMP’ *tener* ~ *ten* ‘have=IMP’), those who opt for *voseante* imperatives face no such complications (*contá*, *salí*, *poné*, *tené*) (Moyna 2009). This difference has been recently corroborated by Requena (2020), who showed that a child acquiring RPS mastered the *voseo* present indicative paradigm by age 2;11 and without errors, i.e., earlier than children who had to acquire other dialects. We propose that the regularizing tendencies of children, expressed in their preference for *voseo* imperatives, went mostly unchecked in a variety where few of Cruz Varela’s contemporaries shared his normative predilections. A few decades later, *voseo* imperatives seem to have become socially prevalent (i.e., not just typical of children), as shown by metalinguistic comments since the 1860s (Natanson 2021: 105).

Subsequent generations of children had robust evidence of *voseo* imperatives, but continued to hear doublets in other forms. Because imperatives were acquired in the earliest stages of verbal morphology, they anchored further doublet elimination in the next 2s verb form learned, i.e., the present indicative. Final stress became an additional 2s marker: *cantá* ‘sing=IMP’ > *cantás* ‘sing=2 SG PRES.’ In subordinate clauses, which are much less frequent, the input continued to be randomly distributed between *tuteo* and *voseo* subjunctives, thus providing an unclear target for acquisition.

In the next generation of children, who received robust *voseo* input in imperative and present indicative, but a random mix in the present subjunctive, one might have expected *voseo* to generalize to this new context (*constant rate effect*, Kroch 1994). However, this generation failed to extend stress-final endings to embedded subjunctive verbs. Instead, doublets were eliminated through semantic specialization, which was possible due to the existence of different subjunctive values, epistemic versus deontic.

Given these facts, the critical question is the timing for this radical reorganization of the 2s into a structurally and sociolinguistically consistent norm. If *tuteo* and *voseo* forms had competed for centuries since the colonial period, why did this

restructuring take place when it did? Formal factors alone (e.g., analogy) can't explain the actuation of this change. We submit that it was the sweeping social changes starting in the mid-19th century that triggered it. Before that, rural dwellers had been scattered across the countryside, while urban populations were confined to isolated settlements. Unfocused variation between the colonial *vos* and *tú* paradigms continued. By the second half of the century, incipient urbanization thrust rural and urban populations together. At the same time, massive contingents of immigrants arrived, creating a social buffer between the urban upper classes and the displaced rural poor, and further complexifying the already diffuse pool for address forms. In the late 19th century, the children of these different groups were the first to have consistent peer interactions outside the family in linguistically mixed schools and neighborhoods. When they did, they wasted no time in bringing order to the inconsistent dialect mix they had inherited, starting with the imperative and continuing with the present indicative.

The eventual patterning of stress-final *voseo* present subjunctive with negative imperatives and penult-stress *tuteo* with subordination was not random. Since the negative imperative is the first function in which subjunctive morphology is acquired, it presented a context where *voseo* could be consolidated before the normative forces of school had a chance to act. On the other hand, *tuteo* subjunctive appears in embedded clauses, a context where subjunctive acquisition takes considerably longer. This gave time to prescriptive forces to exert some pressure on the forms ultimately selected in these contexts. The chronology of the process (Tables 4 and 5) fully matches the onset of mass immigration and the universalization of education in the decades after 1870. Metalinguistic comments confirm the generational dimension of this change. The 1881 edition of a local school grammar decried *voseo* in the present imperative and present indicative (not in the present subjunctive) but warned that “teachers should abstain from disapproving of this usage in the family context, because it would pit parents and children against each other” (Narvaja de Arnoux 2013: 163). Thus, while it was too late to halt the generalization of *voseo* in the imperative and the present indicative, the army of teachers managed to salvage *tuteo* in the present subjunctive, at least in the subordinate contexts typically encountered in the written medium and in non-colloquial registers more susceptible to normativization. By the 1930s, local writers were defending this address norm against *tuteo*, now perceived as a mark of postcolonial servitude to the old metropolis (Toscano y García 2013: 227), a sign that *voseo* had become firmly entrenched in the RPS norm.

All in all, this sociohistorical, linguistic and acquisitional data offers compelling evidence that young learners were the agents of the dialectal focusing of *voseo* in RPS in the second half of the 19th century, in a pattern of norm forming across successive cohorts of learners reminiscent of other situations where children have been proven

to create new grammars (NSL or Light Warlpiri). By combining sociohistorical and L1 acquisition data, we can validate the claim that young children can contribute actively to the emergence of new norms in at least some ecologies, and that this process need not take place via incrementation of changes in progress by adolescents (Section 2). On the contrary, young learners can actively shape norms by favoring new grammars, whenever they are presented with unfocused variation, not exposed to clear sociolinguistic norms, and given the chance to socialize with other children early on. This proposal has several implications for sociohistorical approaches to language change, which we point out in our conclusion.

5 Conclusion: children in historical sociolinguistics

Numerous arguments have been advanced to discount child acquisition as the locus of language change. However, this rejection is based on the premise that childhood is a uniform developmental period and assumes that acquisition always takes place in contexts with straightforward sociolinguistic norms. Instead, linguistic development includes several distinct periods with age-dependent outcomes. Most significantly, language acquisition still occurs when children do not have a sociolinguistically focused norm to learn. Across multiple social environments, the only constant is the interface between individual age-specific cognitive affordances and the social landscape in which learners of various ages access forms and incorporate them into their repertoires (DeGraff 1999, 2009; Gleitman and Newport 1995; Stanford 2015). When the conditions outlined in Section 3 are met, young children's acquisitional paths may be critical in determining the direction of community language change.

Of course, children do not act alone, but based on the input provided by adults or other peers (*cascade effect*, Clements 2018; DeGraff 1999, 2009). Depending on their sociolinguistic environment, children may reformulate this input quite radically through a process much more sociolinguistically complex than the mere reanalysis of equivocal adult input posited by generativists (Kroch 2005; Lightfoot 1999). The challenge for historical sociolinguists, therefore, is not to prove whether children can be leaders in language change. Instead, we need to identify which social environments favor specific age-based agencies in the emergence of norms across the whole community (young children? older children and adolescents? adults?) and how various groups of learners at different life stages and with different sociolinguistic experiences (ranging from the 'native' to the 'non-native') may have contributed to a particular change (Sankoff 2019; Sanz-Sánchez and Tejedo-Herrero 2021). For instance, we know that in more socially stable situations older children and

adolescents play a primary role in the spread of linguistic innovations (Sankoff 2019; Tagliamonte and D'Arcy 2009). While full historical reconstruction of these age-based agencies is severely complicated due to the scant record, we have exemplified how the picture may be supplemented with data from parallel contemporary acquisition studies. Specifically, we propose that young children should be suspected as key agents in the actuation of even more changes in historical ecologies that share the sociolinguistic triggers identified in Section 3.

A fruitful potential avenue of research is the cross-dialectal comparison of second person informal paradigms in Latin American Spanish. While the differences between Buenos Aires and Montevideo are small, and typically explainable as a lag between the larger center of innovation and a smaller city in its orbit, dissimilar outcomes are predicted if different social conditions apply. For example, in areas where colonial social stratification was maintained and/or there was little foreign immigration (e.g., Central America), *voseo* adoption is unlikely to have followed the same sociolinguistic route as in RPS. Lack of mass education in the 19th century would also have slowed down *voseo* spread, by eliminating one of the surest ways of creating children peer networks (e.g., Chile). However, if the sequence of *voseo* adoption through the paradigm presented here is indeed determined by acquisitional factors, this suggests a (near) universal implicational hierarchy (Moyna 2017). This corollary awaits confirmation.

Far from being speculative, our claim is supported by a constellation of evidence, such as the emergence of sign languages, apparent-time and longitudinal studies of the acquisition of linguistic variation by children, descriptions of L1 acquisition in monolingual as well as in multidialectal and multilingual communities, and experimental studies. All these sources strongly suggest that, in the absence of categorical or predictably variable input, young children apply regularization strategies to select specific input forms, either by reducing variation or by constructing systematically variable grammars. By following DeGraff's (2009) uniformitarian-minded invitation to incorporate acquisitional data into accounts of language change, our study sharpens the analytical procedure of previous sociohistorical literature that has advocated for the active role of young children (Schreier 2016; Trudgill 2004, 2011; Tuten 2003). This is because, unlike those previous accounts, we do not only conjecture that young learners must have shaped new dialectal norms but identify acquisitional data that lend strong support to this hypothesis.

Limitations remain, of course. The historical record is fragmentary, not just for child acquisition data, but also for some of the variation that young children were exposed to. The record for non-native speakers is particularly poor, and that for young children is missing almost entirely, so it must instead be gleaned indirectly from textual and metalinguistic evidence. In addition, acquisitional cross-linguistic and diachronic parallels are elusive for the development of address, whose

morphological, semantic, and pragmatic properties are language-specific. Thus, although we have proposed a similar account here as for the phonology of colonial Latin American Spanish (Sanz-Sánchez and Moyna 2022), our analysis must gloss over some distinctions in the acquisition of different levels of language structure (e.g., phonology vs. morphology). Differences in the timing of acquisition, frequency of exposure, and structural complexity of these levels must have impacted the progression of these changes.

In spite of these limitations, we believe our analysis supplements previous reconstructions of the sociohistorical embedding of address evolution in RPS. It sheds light on the precise conditions of *actuation* (Weinreich et al. 1968) by taking advantage of literature on language acquisition in situations that expose children to unsystematic variation, thus going beyond what can be accounted for based on written data alone. Incorporating acquisition analogues also makes us less dependent on assumptions about ‘typical’ or ‘normal’ language variation acquisition trajectories modeled on highly-stratified, linguistically normativized communities, and their expected contribution to the emergence of community norms (Leather and Van Dam 2002: 15). The combination of sociohistorical data, archival materials, and acquisitional literature can alleviate the endemic “bad data” problem and the risk for anachronism inherent in sociohistorical explanations (Bergs 2012).

This approach offers productive avenues for future research, since any hypotheses about the agency of specific groups of language users across their lifespan can be checked against the available data on L1 and L2 acquisition. Ultimately, we hope that this methodology can lead to the development of an acquisitionally informed historical sociolinguistics.

References

- Aboh, Enoch Oladé. 2015. *The emergence of hybrid grammars: Language contact and change*. Cambridge: Cambridge University Press.
- Academia Mexicana de la Lengua. 2021. *Corpus diacrónico y diatópico del español de América (CORDIAM)*. www.cordiam.org (accessed 20 May 2021).
- Aguirre, Carmen. 2003. Early verb development in one Spanish-speaking child. In Dagmar Bittner, Wolfgang U. Dressler & Marianne Kilani-Schoch (eds.), *Development of verb inflection in first language acquisition. A cross-linguistic perspective*, 1–25. Berlin & New York: Mouton.
- Aitchison, Jean. 2001. *Language change: Progress or decay?* Cambridge: Cambridge University Press.
- Aitchison, Jean. 2003. Psycholinguistic perspectives on language change. In Joseph Brian & Richard Janda (eds.), *The handbook of historical linguistics*, 736–743. Oxford: Blackwell.
- Anipa, Kormi. 2001. *A critical examination of linguistic variation in Golden Age Spanish*. New York: Peter Lang.
- Auer, Anita, Catharina Peersman, Simon Pickl, Gijsbert Rutten & Rik Vosters. 2015. Historical sociolinguistics: The field and its future. *Journal of Historical Sociolinguistics* 1(1). 1–12.

- Bel, Aurora. 2001. *Teoría lingüística i adquisició del llenguatge anàlisi comparada dels trets morfològics en català i castellà*. Barcelona: Institut d'Estudis Catalans.
- Bergs, Alexander. 2012. The uniformitarian principle and the risk of anachronisms. In Juan Manuel Hernández-Campoy & Juan Camilo Conde-Silvestre (eds.), *The handbook of historical sociolinguistics*, 83–101. Oxford: Blackwell.
- Bertolotti, Virginia & Magdalena Coll. 2014. *Retrato lingüístico del Uruguay: Un enfoque histórico sobre las lenguas en la región*. Montevideo: Universidad de la República, Facultad de Información y Comunicación.
- Bickerton, Derek. 1981. *Roots of language*. Ann Arbor: Karoma.
- Blake, Robert. 1983. Mood selection among Spanish-speaking children, ages 4 to 12. *The Bilingual Review* 10. 21–32.
- Boyd-Bowman, Peter. 1985. *Índice geobiográfico de más de 56 mil pobladores de la América Hispánica*, vol. 1. Mexico City: Instituto de Investigaciones Históricas, UNAM.
- Britain, David. 1997. Dialect contact, focusing and phonological rule complexity: The koineisation of Fenland English. *University of Pennsylvania Working Papers in Linguistics* 4. 141–169.
- Britain, David & Peter Trudgill. 1999. Migration, new-dialect formation and sociolinguistic refunctionalisation: Reallocation as an outcome of dialect contact. *Transactions of the Philological Society* 97. 245–256.
- Bybee, Joan. 1985. *Morphology: A study of the relation between meaning and form*. Amsterdam: John Benjamins.
- Bybee, Joan. 2010. *Language, usage and cognition*. Cambridge: Cambridge University Press.
- Bybee, Joan & Dan Slobin. 1982. Rules and schemas in the development and use of the English past tense. *Language* 58. 265–289.
- Clark, Eve. 2009. *First language acquisition*, 2nd edn. Cambridge: Cambridge University Press.
- Clements, Joseph Clancy. 2009. *The linguistic legacy of Spanish and Portuguese: Colonial expansion and language change*. Cambridge: Cambridge University Press.
- Clements, Joseph Clancy. 2018. Speech communities, language varieties, and typology. *Journal of Pidgin and Creole Languages* 33(1). 174–192.
- Combrink, Johan. 1978. Afrikaans: Its origin and development. In Len Lanham & K. P. Prinsloo (eds.), *Language and communication studies in South Africa*, 69–95. Oxford: Oxford University Press.
- Cournane, Ailís. 2017. In defence of the child innovator. In Éric Mathieu & Robert Truswell (eds.), *Micro-change and macro-change in diachronic syntax*, 10–24. Oxford: Oxford University Press.
- Cournane, Ailís. 2019. A developmental view on incrementation in language change. *Theoretical Linguistics* 45. 127–150.
- Croft, William. 2000. *Explaining language change: An evolutionary approach*. London: Longman.
- DeGraff, Michel. 1999. Creolization, language change, and language acquisition: An epilogue. In Michel DeGraff (ed.), *Language creation and language change: Creolization, diachrony, and development*, 473–544. Cambridge, MA: MIT Press.
- DeGraff, Michel. 2009. Language acquisition in creolization and, thus, language change: Some cartesian-uniformitarian boundary conditions. *Language and Linguistics Compass* 3/4. 888–971.
- De Houwer, Annick. 2009. *Bilingual first language acquisition*. Clevedon, UK: Multilingual Matters.
- Dirección General de Estadística y Censos. 2003. *Anuario estadístico de la Ciudad de Buenos Aires*. https://www.estadisticaciudad.gov.ar/eyc/publicaciones/anuario_2003/Intro/Intro3.htm (accessed 15 June 2022).
- Dorian, Nancy. 1994. Varieties of variation in a very small place: Social homogeneity, prestige norms, and linguistic variation. *Language* 70. 631–696.
- Eckert, Penelope. 1999. *Linguistic variation as social practice*. Oxford: Blackwell.

- Escobar, Anna María & Kim Potowski. 2015. *El español de los Estados Unidos*. Cambridge: Cambridge University Press.
- Félix-Brasdefer, Julio C. 2006. Acquisition of functional categories in early Spanish: Evidence for the Strong Continuity Hypothesis. In Eric Chappetto & Ken De Jong (eds.), *Indiana University Linguistics Club working papers online*, 1–33. <https://scholarworks.iu.edu/journals/index.php/iulcwp/issue/view/1702> (accessed 15 June 2021).
- Fontanella de Weinberg, María Beatriz. 1971. El voseo en Buenos Aires en las dos primeras décadas del siglo XIX. *Thesaurus* 26. 495–514.
- Fontanella de Weinberg, María Beatriz. 1987. *El español bonaerense: Cuatro siglos de evolución lingüística (1580–1980)*. Buenos Aires: Hachette.
- Fontanella de Weinberg, María Beatriz. 1992. Una variedad lingüística en busca de su propia identidad: el español bonaerense a lo largo del siglo XX. In María Beatriz Fontanella de Weinberg, Patricia Vallejos de Llobet & Yolanda Hipperdinger (eds.), *Estudios sobre el español de la Argentina*, 63–81. Bahía Blanca: Universidad Nacional del Sur.
- Fontanella de Weinberg, María Beatriz. 1993. Usos americanos y peninsulares de segunda persona singular. In Ana María Barrenechea, Luis Martínez Cuitiño & Elida Lois (eds.), *Actas del III Congreso Argentino de Hispanistas*, 144–153. Buenos Aires: Asociación Argentina de Hispanistas.
- Fontanella de Weinberg, María Beatriz. 1999. Sistemas pronominales de tratamiento usados en el mundo hispánico. In Ignacio Bosque & Violeta Demonte (eds.), *Gramática descriptiva de la lengua española*, vol. 1, 1401–1425. Madrid: Espasa Calpe.
- Germani, Gino. 1966. Mass immigration and modernization in Argentina. *Studies in International Comparative Development Studies* 2. 165–182.
- Gleitman, Lila & Elissa Newport. 1995. The invention of language by children: Environmental and biological influences on the acquisition of language. In Lila Gleitman & Mark Liberman (eds.), *Language: An invitation to cognitive science*, 2nd edn., 1–24. Cambridge, MA: MIT Press.
- Goebel, Michael. 2010. *Gauchos, gringos, and gallegos: The assimilation of Italian and Spanish immigrants in the making of modern Uruguay 1880–1930*. *Past and Present* 208. 191–229.
- Goldin-Meadow, Susan & Carolyn Mylander. 1990. The role of parental input in the development of a morphological system. *Journal of Child Language* 17. 527–563.
- Goldin-Meadow, Susan, Carolyn Mylander & Amy Franklin. 2007. How children make language out of gesture: Morphological structure in gesture systems developed by American and Chinese deaf children. *Cognitive Psychology* 55. 87–135.
- Goldin-Meadow, Susan, Diane Brentari, Marie Coppola, Laura Horton & Anne Senghas. 2015. Watching language grow in the manual modality: Nominals, predicates, and handshapes. *Cognition* 136. 381–395.
- Hall, Erin & Ruth Maddeaux. 2020. /u/-fronting and /æ/-raising in Toronto families. *University of Pennsylvania Working Papers in Linguistics* 25(2). 51–60.
- Hendricks, Alison Eisel, Karen Miller & Carrie N. Jackson. 2018. Regularizing unpredictable variation: Evidence from a natural language setting. *Language Learning and Development* 14(1). 42–60.
- Hernández-Campoy, Juan M. & Camilo Conde-Silvestre. 2012. Introduction. In Juan M. Hernández-Campoy & Camilo Conde-Silvestre (eds.), *The handbook of historical linguistics*, 1–8. Malden, MA: Wiley-Blackwell.
- Hudson Kam, Carla. 2015. The impact of conditioning variables on the acquisition of variation in adult and child learners. *Language* 91(4). 906–937.
- Hudson Kam, Carla & Elissa L. Newport. 2005. Regularizing unpredictable variation: The roles of adult and child learners in language formation and change. *Language Learning and Development* 1(2). 151–195.

- Hudson Kam, Carla & Elissa L. Newport. 2009. Getting it right by getting it wrong: When learners change languages. *Cognitive Psychology* 59(1). 30–66.
- Hummel, Martin, Bettina Kluge & María Eugenia Vázquez Laslop (eds.). 2010. *Formas y fórmulas de tratamiento en el mundo hispánico*. Mexico City: El Colegio de México, Karl-Franzen-Universität Graz. Instituto Nacional de Estadística. n.d. Censos 1852–2011. <https://www.ine.gub.uy/censos-1852-2011> (accessed 15 June 2022).
- Johnstone, Barbara. 2016. Enregisterment: How linguistic items become linked with ways of speaking. *Language and Linguistics Compass* 10(11). 632–643.
- Kany, Charles. 1969. *Sintaxis hispanoamericana*. Madrid: Gredos.
- Kerswill, Paul. 1996. Children, adolescents, and language change. *Language Variation and Change* 8(2). 177–202.
- Kerswill, Paul & Ann Williams. 2000. Creating a new town koiné: Children and language change in Milton Keynes. *Language in Society* 29(1). 65–115.
- Kerswill, Paul, Jenny Cheshire, Susan Fox & Eivind Torgersen. 2013. English as a contact language: The role of children and adolescents. In Daniel Schreier & Marianne Hundt (eds.), *English as a contact language (Studies in English Language)*, 258–282. Cambridge: Cambridge University Press.
- Kilani-Schoch, Marianne. 2003. Early verb inflection in French: An investigation of two corpora. In Dagmar Bittner, Wolfgang U. Dressler & Marianne Kilani-Schoch (eds.), *Development of verb inflection in first language acquisition. A crosslinguistic perspective*, 269–295. Berlin & New York: Mouton.
- Kiparsky, Paul. 2014. New perspectives in historical linguistics. In Claire Bowern (ed.), *The Routledge handbook of historical linguistics*, 64–102. London: Routledge.
- Klein, Fernando. 2013. *Montevideo en el tiempo*. Montevideo: Ediciones B, Grupo Zeta.
- Kocab, Annemarie, Ann Senghas & Jesse Snedeker. 2016. The emergence of temporal language in Nicaraguan Sign Language. *Cognition* 156. 147–163.
- Kotsinas, Ulla-Britt. 1988. Immigrant children's Swedish – A new variety? *Journal of Multilingual and Multicultural Language Development* 9(1–2). 129–140.
- Kroch, Anthony. 1994. Morphosyntactic variation. In Katharine Beals, Jeanette Denton, Robert Knippen, Lynette Melnar, Hizami Suzuki & Erica Zeinfeld (eds.), *Papers from the thirtieth annual meeting of the Chicago Linguistic Society*, vol. 2, 180–201. Chicago: Chicago Linguistic Society.
- Kroch, Anthony. 2005. Modeling language change and language acquisition. <https://www.ling.upenn.edu/~kroch/papers/lsa-forum.pdf> (accessed 20 December 2020).
- Labov, William. 1989. The child as linguistic historian. *Language Variation and Change* 1. 85–97.
- Labov, William. 1994. *Principles of linguistic change. Volume 1: Internal factors*. Oxford: Blackwell.
- Labov, William. 2001. *Principles of linguistic change. Volume 2: Social factors*. Oxford: Blackwell.
- Labov, William. 2007. Transmission and diffusion. *Language* 83(2). 344–387.
- Leather, Jonathan & Jet van Dam. 2002. Towards an ecology of language acquisition. In Jonathan Leather & Jet van Dam (eds.), *Ecology of language acquisition*, 1–29. Dordrecht: Springer.
- Lightfoot, David. 1999. *The development of language: Acquisition, change, and evolution*. Oxford/Malden MA: Wiley-Blackwell.
- Lipski, John. 2014. The many facets of Spanish dialect diversification in Latin America. In Salikoko Mufwene (ed.), *Iberian imperialism and language evolution in Latin America*, 38–75. Chicago: University of Chicago Press.
- López Mazz, José & Diego Bracco. 2010. *Minuanos: Apuntes y notas para la historia y la arqueología del territorio guenoa-minuán*. Montevideo: Linardi y Risso.
- López Ornat, Susana. 1994. *La adquisición de la lengua española*. Madrid: Siglo XXI.
- Mendoza-Denton, Norma. 2010. Individuals and communities. In Ruth Wodak, Barbara Johnstone & Paul Kerswill (eds.), *The Sage handbook of sociolinguistics*, 181–191. London: Sage.

- Miller, Karen & Cristina Schmitt. 2012. Variable input and the acquisition of plural morphology. *Language Acquisition* 19(3). 223–261.
- Montrul, Silvina. 2004. *The acquisition of Spanish: Morphosyntactic development in monolingual and bilingual L1 acquisition and adult L2 acquisition*. Amsterdam/Philadelphia: John Benjamins.
- Moyna, María Irene. 2009. Child acquisition and language change: *Voseo* evolution in Río de la Plata Spanish. In Joe Collentine, Barbara Lafford, MaryEllen García & Francisco Marcos Marín (eds.), *Proceedings of the 2007 Hispanic linguistics symposium*, 131–142. Somerville, MA: Cascadilla.
- Moyna, María Irene. 2017. Out of mouths of babes: Solving some puzzles in Latin American Spanish variation and change. Paper presented at the 23rd International Conference on Historical Linguistics, University of Texas San Antonio.
- Moyna, María Irene & Beatriz Vanni Ceballos. 2008. Representaciones dramáticas de una variable lingüística: Tuteo y voseo en obras de teatro del Río de la Plata (1886–1911). *Spanish in Context* 5(1). 64–88.
- Moyna, María Irene & Pablo Requena. To appear. Tracing the emergence of the semantic split between *voseo* and *tuteo* in Río de la Plata second person subjunctives: A look at child language acquisition. In Israel Sanz-Sánchez (ed.), *Language acquisition across the lifespan and language change: Applications in historical sociolinguistics*.
- Moyna, María Irene & Susana Rivera-Mills (eds.). 2016. *Forms of address in the Spanish of the Americas*. Amsterdam/Philadelphia: John Benjamins.
- Mueller Gathercole, Virginia, Eugenia Sebastián & Pilar Soto. 2002. The emergence of linguistic person in Spanish-speaking children. *Language Learning* 52(4). 679–722.
- Mufwene, Salikoko. 2001. *The ecology of language evolution*. Cambridge: Cambridge University Press.
- Nardy, Aurelie, Jean-Pierre Chevrot & Stéphanie Barbu. 2014. Sociolinguistic convergence and social interactions within a group of preschoolers: A longitudinal study. *Language Variation and Change* 28(3). 273–301.
- Narvaja de Arnoux, Elvira. 2013. Grammar and the state in the Southern Cone in the nineteenth century. In José del Valle (ed.), *A political history of Spanish: The making of a language*, 152–166. Cambridge: Cambridge University Press.
- Nascimbene, Mario Carlos. 1988. *Los italianos y la integración nacional: Historia evolutiva de la colectividad italiana en la Argentina (1835–1965)*. Buenos Aires: Selección Editorial.
- Natanson, Brigitte. 2021. Tensiones en los proyectos educativos (Río de la Plata, siglo XIX): La palabra de Mariquita Sánchez, Petrona Rosende de Sierra, Rosa Guerra y Juana Manso. *América sin Nombre* 25. 97–111.
- Nocetti, Sabrina. 2003. Acquisition of verbal morphology in Italian: A case study. In Dagmar Bittner, Wolfgang U. Dressler & Marianne Kilani-Schoch (eds.), *Development of verb inflection in first language acquisition. A cross-linguistic perspective*, 351–378. Berlin & New York: Mouton.
- O'Shannessy, Carmel. 2013. The role of multiple sources in the formation of an innovative auxiliary category in Light Warlpiri, a new Australian mixed language. *Language* 89. 328–353.
- O'Shannessy, Carmel. 2019. Why do children lead contact-induced language change in some contexts but not others? In Edit Doron, Malka Rappaport Hovav, Yael Reshef & Moshe Taube (eds.), *Language contact, continuity and change in the genesis of Modern Hebrew*, 321–335. Amsterdam/Philadelphia: John Benjamins.
- Oroño, Mariela. 2014. La escuela y la lengua en la construcción de la identidad nacional uruguaya: Los libros de lectura usados en la escuela pública en los años 40 del siglo XX. *Boletín de Filología* 49(2). 215–236.
- Otte, Enrique. 1988. *Cartas privadas de emigrantes a Indias 1540–1616*. Mexico City: Fondo de Cultura Económica.

- Páez Urdaneta, Iraset. 1981. *Historia y geografía hispanoamericana del voseo*. Caracas: La Casa de Bello.
- Penny, Ralph. 2002. *A history of the Spanish language*. Cambridge: Cambridge University Press.
- Pérez-Leroux, Ana Teresa. 1998. The acquisition of mood selection in Spanish relative clauses. *Journal of Child Language* 25(3). 585–604.
- Perfors, Amy Francesca. 2012. Probability matching versus over-regularization in language: Participant behavior depends on their interpretation of the task. In Naomi Miyake, David Peebles & Richard P. Cooper (eds.), *Building bridges across cognitive sciences around the world: Proceedings of the 34th annual meeting of the Cognitive Science Society*, 845–850. Red Hook, NY: Curran.
- Pirvulescu, Mihael, Ana-Teresa Pérez-Leroux, Yves Roberge, Nelleke Strik & Danielle Thomas. 2014. Bilingual effects: Exploring object omission in pronominal languages. *Bilingualism: Language and Cognition* 17(3). 495–510.
- Pollero Beheregaray, Raquel. 2013. *Historia demográfica de Montevideo y su campaña (1757–1860)*. Montevideo: Universidad de la República.
- Potowski, Kim. 2008. I was raised talking like my mom: The influence of mothers in the development of MexiRicans' phonological and lexical features. In Mercedes Niño-Murcia & Jason Rothman (eds.), *Bilingualism and identity: Spanish at the crossroads with other languages*, 201–220. Amsterdam/Philadelphia: John Benjamins.
- Potowski, Kim & Janine Matts. 2008. MexiRicans: Interethnic language and identity. *Journal of Language, Identity, and Education* 7(2). 137–160.
- Quinn, Gary. 2010. Schoolization: An account of the origins of regional variation in British Sign Language. *Sign Language Studies* 10(4). 476–501.
- Requena, Pablo. 2020. Dialectal variation in child acquisition of Spanish 2sg verb morphology. Unpublished ms.
- Rickford, John & Mackenzie Price. 2013. Girlz II women: Age-grading, language change and stylistic variation. *Journal of Sociolinguistics* 17(2). 143–179.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In Lilianne Haegeman (ed.), *Elements of grammar: A handbook of generative syntax*, 281–337. Dordrecht: Kluwer.
- Salustri, Manola & Nina Hyams. 2003. Is there an analogue to the RI stage in the null subject languages? In Barbara Beachley, Amanda Brown & Frances Conlin (eds.), *Proceedings of the 27th annual Boston University conference on language development*, 692–703. Somerville, MA: Cascadilla Press.
- Salustri, Manola & Nina Hyams. 2006. Looking for the universal core of the RI stage. In Vincent Torrens & Linda Escobar (eds.), *The acquisition of syntax in Romance languages*, 159–182. Amsterdam/Philadelphia: John Benjamins.
- Sánchez, Florencio. 1972. *La Gringa and Barranca Abajo*. Introduction and notes by Giovanni Pontiero. Rutherford, New Jersey: Fairleigh Dickinson University Press.
- Sánchez-Naranjo, Jeannette & Ana T. Pérez-Leroux. 2008. In the wrong mood at the right time: Children's acquisition of the Spanish subjunctive in temporal clauses. *The Canadian Journal of Linguistics* 55(2). 227–255.
- Sankoff, Gillian. 2019. Language change across the lifespan: Three trajectory types. *Language* 95. 197–229.
- Sankoff, Gillian & Hélène Blondeau. 2007. Language change across the lifespan: /r/ in Montreal French. *Language* 83. 560–588.
- Sanz-Sánchez, Israel. 2011. Analogical imperfects and the fate of Iberian verbal morphology in Latin American Spanish. *Southwest Journal of Linguistics* 30(2). 55–99.
- Sanz-Sánchez, Israel & Fernando Tejedo-Herrero. 2021. Adult language and dialect learning as simultaneous environmental triggers for language change. In Whitney Chappell & Bridget Drinka (eds.), *Spanish socio-historical linguistics: Isolation and contact*, 104–137. Amsterdam: John Benjamins.

- Sanz-Sánchez, Israel & María Irene Moyna. 2022. Children as agents of language change: Diachronic evidence from Latin American Spanish. *Journal of Historical Linguistics*. <https://doi.org/10.1075/jhl.21033.san> (Epub ahead of print).
- Sarreal, Julia. 2014. *The Guaraní and their missions: A socioeconomic history*. Stanford: Stanford University Press.
- Schilling-Estes, Natalie. 2002. On the nature of isolated and post-isolated dialects: Innovation, variation and differentiation. *Journal of Sociolinguistics* 6(1). 64–85.
- Schreier, Daniel. 2016. Super-leveling, fraying-out, internal restructuring: A century of present *be* concord in Tristan da Cunha English. *Language Variation and Change* 28. 203–224.
- Senghas, Ann & Marie Coppola. 2001. Children creating language: How Nicaraguan Sign Language acquired a spatial grammar. *Psychological Science* 12(4). 323–328.
- Senghas, Ann, Marie Coppola, Elissa L. Newport & Ted Supalla. 1997. Argument structure in Nicaraguan Sign Language: The emergence of grammatical devices. In Elizabeth Hughes, Mary Hughes & Annabel Greenhill (eds.), *Proceedings of the 21st Boston University conference on language development*, 550–561. Somerville, MA: Cascadilla.
- Sharma, Devyani & Lavanya Sankaran. 2011. Cognitive and social forces in dialect shift: Gradual change in London Asian speech. *Language Variation and Change* 23. 399–428.
- Shin, Naomi. 2016. Acquiring constraints on morphosyntactic variation: Children's Spanish subject pronoun expression. *Journal of Child Language* 43(4). 914–947.
- Shin, Naomi & Karen Miller. 2021. Children's acquisition of morphosyntactic variation. *Language Learning Development* 18. 125–150.
- Silva-Corvalán, Carmen. 1994. *Language contact and change: Spanish in Los Angeles*. Oxford: Oxford University Press.
- Singleton, Jenny L. & Elissa L. Newport. 2004. When learners surpass their models: The acquisition of American Sign Language from inconsistent input. *Cognitive Psychology* 49(2). 370–407.
- Siracusa, María Isabel. 1972. Morfología verbal del voseo en el habla culta de Buenos Aires. *Filología* 16. 201–213.
- Smith, Jennifer. 2021. Child language acquisition and sociolinguistic variation. In Anna Ghimenton, Aurélie Nardy & Jean-Pierre Chevrot (eds.), *Sociolinguistic variation language acquisition across the lifespan*, 12–19. Amsterdam: John Benjamins Publishing Company.
- Smith, Jennifer, Mercedes Durham & Hazel Richards. 2013. The social and linguistic in the acquisition of sociolinguistic norms: Caregivers, children, and variation. *Linguistics* 51(2). 285–324.
- Sneller, Betsy & Elissa L. Newport. 2020. Age effects in the acquisition of phonological variation. In Stephanie Denison, Michael Mack, Yang Xu & Blair Armstrong (eds.), *Proceedings of the 42th annual meeting of the Cognitive Science Society, CogSci 2020*. <https://dblp.org/db/conf/cogsci/cogsci2020.html#SnellerN20> (accessed 20 May 2021).
- Stanford, James. 2015. Language acquisition and language change. In Claire Bowerman & Bethwyn Evans (eds.), *The Routledge handbook of historical linguistics*, 466–483. New York: Routledge.
- Sucazes, Daniel & Orual Andina. Undated. *Indicadores demográficos: Variables estadísticas relevantes durante el siglo XX. Área sociodemográfica*. Fascículo 4: Educación y Capacitación. Montevideo: Instituto Nacional de Estadística (Series monográficas). <http://www.ine.gub.uy/documents/10181/35704/Variables+Estad%C3%ADsticas+Relevantes+Durante+el+Siglo+XX+-+4+Educaci3n+y+Capacitaci3n.pdf/fe552325-ec0e-49dbaf41-307a87102ab3> (accessed 20 July 2019).
- Szuchman, Mark. 1990. Childhood education and politics in nineteenth-century Argentina. The case of Buenos Aires. *The Hispanic American Historical Review* 70(1). 109–138.
- Tagliamonte, Sali & Alexandra D'Arce. 2009. Peaks beyond phonology: Adolescence, incrementation, and language change. *Language* 85(1). 58–108.

- Thomas, Erik. 1997. A rural/metropolitan split in the speech of Texas Anglos. *Language Variation and Change* 9(3). 309–332.
- Thomason, Sarah G. 2001. *Language contact*. Edinburgh: Edinburgh University Press.
- Tomasello, Michael. 2003. *Constructing a language: A usage-based theory of language acquisition*. Cambridge, MA: Harvard University Press.
- Toscano y García, Guillermo. 2013. Language debates and the institutionalization of philology in Argentina in the first half of the twentieth century. In José del Valle (ed.), *A political history of Spanish: The making of a language*, 212–228. Cambridge: Cambridge University Press.
- Trudgill, Peter. 1986. *Dialects in contact*. Oxford: Blackwell.
- Trudgill, Peter. 2004. *New-dialect formation: The inevitability of Colonial Englishes*. Edinburgh: University of Edinburgh Press.
- Trudgill, Peter. 2011. *Sociolinguistic typology*. Oxford: Oxford University Press.
- Tuten, Donald. 2003. *Koineization in Medieval Spanish*. Berlin/New York: Mouton de Gruyter.
- Weinreich, Uriel, William Labov & Marvin Herzog. 1968. *Empirical foundations for a theory of language change*. Austin: University of Texas Press.
- Zubillaga, Carlos. 1993. *Hacer la América: Estudios históricos sobre la inmigración española al Uruguay*. Montevideo: Fin de Siglo.