Decreolization as emergent grammar(s)

Some Afro-Bolivian data

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A restructured variety of Spanish spoken by small communities of Afro-descendents in Bolivia differs from modern Spanish in exhibiting no noun-adjective agreement for gender or number. Only a few individuals continue to speak this most basilectal variety; the majority of speakers exhibit at least some gender and number concord, in a fashion that proceeds generally rightward, from determiners and other prenominal modifiers to head nouns, postnominal modifiers, and predicate nominatives/adjectives. Number concord (plural marking) usually appears before gender concord in mesolectal varieties, and occurs at a higher rate than gender concord across the entire range of Afro-Bolivian speakers. A variationist analysis based on a corpus of recorded material suggests that this gradual emergence of (feminine) gender and plural marking represents a systematic form of decreolization governed largely by structural principles, namely the stepwise activation of agreement projections. Decreolization is represented as a series of nested intermediate grammars, each of which properly contains the preceding one(s).

Keywords: creolization, decreolization, Afro-Bolivian Spanish, gender concord, number concord, plural marking

1. Introduction: What is decreolization?

The concept of decreolization has enjoyed a long and varied history in creole studies, and at least since the pioneering work of DeCamp (1971 and earlier citations therein), Bickerton (1971, 1973, 1975), Washabaugh (1977), and others, the notion of a series of approximations to the superstrate language — the '(post-) creole continuum' — has provided the basis for much research on creole languages in contact with their original lexifiers. Assuming that creole languages in contact with their historical lexifiers do exhibit variation suggestive of approximation to

the acrolect (a view widely but not universally held among creolists), the motivations and mechanisms responsible for decreolization are the subject of ongoing debate. One group of scholars sees the desire to approximate the (nearly always) more prestigious acrolect as a major force of change. Thus DeCamp (1971) makes constant reference to sociolinguistic factors as motivators for creole continua, although concentrating primarily on formal linguistic analyses. Labov (1971: 450) asserts that 'Whenever a subordinate dialect is in contact with a superordinate one, linguistic forms produced by a speaker of the subordinate dialect in a formal context will shift in an unsystematic manner towards the superordinate'. Washabaugh (1977: 334) notes that 'The strongest motive for variation in decreolization is the pressure to avoid the basilect, not the pressure to acquire the acrolect'. Holm (2000: 50) observes that 'A creole continuum can evolve in situations in which a creole coexists with its lexical source language and there is social motivation for creole speakers to acquire the standard so that the speech of individuals takes on features of the latter — or avoids features of the former — to varying degrees'.

Some creole scholars adamantly reject the concept of decreolization, especially the idea of pressure to acquire the acrolect, as connoting an unrealistically servile attitude on the part of creole speakers towards the language of their erstwhile (or current) masters. Mufwene (cited in DeGraff 2001) feels that 'the suggestion that people from the lower class aspire at speaking like those of the upper class is so contrary to sociolinguistic reality around us' given that speakers of the creole suffer 'no social identity problem […]' Parkvall (2006: 327) counters that 'the incorporation of foreign linguistic material into one's own speech is not necessarily motivated by an urge to shift one's ethnic belonging […] plenty of ordinary mortals are less reflective about identity issues, and simply pick up bits and pieces of surrounding speech habits in a not always conscious fashion'. Moreover, although Mufwene's defense of creole-speaking communities' prerogatives for linguistic self-sufficiency are laudable, there are instances in which speakers of a stigmatized dialect or regional vernacular do indeed seek to emulate the speech of more successful individuals, irrespective of possible issues of ethnicity, or whether the prestige language is the historical lexifier for the non-prestigious creole language. This is especially true when the stigmatized language is widely portrayed as a 'broken', 'bad', or otherwise inferior version of the prestige language, rather than a complete language in its own right. The result is often linguistic insecurity, manifested by such phenomena as hypercorrection, malapropism, and unusually large idiolectal variations (e.g. Winford 1978, Núñez-Cedeño 1988, Bullock & Toribio 2010).

Many creole researchers, while not necessarily rejecting the notion of social pressures, focus on the internal consistency of grammatical changes in creole continua. Thus, for example, Bickerton (1973), in his analysis of the variability of the copula and pronominal system in Guyanese Creole, declares that 'all variation is

rule governed' (p. 642), and ultimately claims that the variation can be completely accounted for by modifications to syntactic deep structure (as it was conceived in the early 1970's). Bickerton (1980: 124) is even more adamant: 'the creole continuum is first and foremost a LINGUISTIC and not a SOCIAL phenomenon'. Washabaugh (1977) adds the possibility for variation constrained by lexical categories and usage patterns, as well as surface-level grammatical modifications. Rickford (1987: 34) observes that decreolization may show both quantitative and quantitative phrases: 'In some continua, between some points in time, only quantitative decreolization is evident, and some variables may show no movement at all […]' Winford (1997: 248–9) suggests that quantitative decreolization be regarded simply as language shift, and that 'decreolization' be reserved for 'the kinds of contact-induced changes that take place in creoles […] under pressure from varieties closer to the acrolect'.

At the heart of the discussion on decreolization is whether creole continua can only result from dynamic processes such as decreolization, or whether the range of variation could have existed since the emergence of the creoles. More to the point, scholars are divided on the issue of the creole continuum itself; at one pole are found viewpoints such as those of DeCamp (1971), which see the creole continuum as a smooth and seamless cline of variants within a single linguistic system, or among systems whose boundaries cannot be clearly discerned. Bickerton (1973: 641) rejects the notion that 'the continuum is simply produced by the random mutual interference of two discrete and self-contained grammars', and Bickerton (1980) proposes a unilinear model of decreolization as a series of incremental changes to the speakers' grammars. A more recent approach to variation within creole languges is to view intermediate or mesolectal varieties not as instantiations of continuous variation, but rather as the epiphenomenal result of two or more distinct systems that interact within one another. Winford (1997: 274) argues in favor of a 'co-existent systems approach to these situations, which sees the continuum as a sociolinguistic construct, the result of interaction between relatively stable grammars in contact, producing complex patterns of variation conditioned by social and situational factors and constrained by the degrees of overlap or mismatch between these grammars' (p. 274). He asserts that, at least in the speech communities he has studied, there is a high degree of homogeneity at the polar ends of the creole continuum (e.g. working class/basilect and educated middle class/acrolect), and that the interaction between the two systems is responsible for the variation characterized as a creole continuum.

Although no one has seriously proposed that the interaction of grammatical systems in a creole continuum is truly 'random', most research to date has been based on relatively small and grammatically simple subsets of an entire language, such as the use of particular verb markers, preverbal particles, negation systems,

and pronominal paradigms. In these cases, although it possible to postulate distinct and discrete grammars for the opposite poles of a creole continuum, the data are often insufficiently fine-grained to tease apart the proposed interactions of the opposing grammatical systems, and the potential replacement of one system by another. The present study offers data representing the variable marking of grammatical gender and number in determiner phrases (DPs) in a highly restructured variety of Spanish. The data are presented with enough detail to offer a hypothesis as to the grammatical basis for decreolization.

2. Spanish gender and number concord: A potential locus of decreolization

Spanish reveals its Romance heritage in its exceptionless systems of gender and number concord across the DP and extending into predicate nominals and adjectives:[1]

> Tod**as las**   casas   viej**as** están vac**ías**
> all.F.PL DET.F.PL house.PL old.F.PL be.3.S empty.F.PL
> 'All the old houses are empty'

Spanish-speaking children acquire full gender and number concord before the age of five (e.g. Mariscal 2009; Pérez Pereira 1991; Lleó 2006), and adult speakers do not deviate from full and exceptionless concord.[2] In Spanish- and Portuguese-derived creole languages, on the other hand, there is no gender concord or nominal plural concord, although fossilized lexical items may retain reflexes of Ibero-Romance nominal morphology. Since both gender and number marking are syntactically complex processes in Spanish, extending across the entire DP and beyond, into predicate nominatives and adjectives, and given that gender and number concord are logically independent of one another, the combined agreement mechanisms potentially represent a fruitful domain of research into decreolization.

To date, there have been no studies of gender and number concord as possible correlates of decreolization in speech communities where Portuguese is in contact with a Portuguese-derived creole.[3] Spanish is in contact with Palenquero in San

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1. In the glosses the following abbreviations are used: DET = determiner; M = masculine; F = feminine; S = singular; PL = plural.

2. In some dialects, phonetically-motivated processes of weakening of consonants in coda position partially or totally efface some instances of final /-s/ marking plural.

3. Cape Verde Crioulo has some reflexes of Portuguese plural determiners, including the plural indefinite article *uns* and the plural demonstrative/definite article *kes* (< Ptg. *aqueles* 'those'),

Basilio de Palenque, Colombia, but there is no evidence that Palenquero is under-going any decreolization, especially of gender and number morphology (Morton 2005; Schwegler & Morton 2003).[4] The present article offers data on a restructured variety of Spanish, now endangered and rapidly disappearing, which was until recently the principal language of a group of Afro-descendents in Bolivia. Traditional Afro-Bolivian Spanish (henceforth ABS)[5] exhibits no gender concord or marking of nominal or adjectival plural with /-s/. This variety is in contact with contemporary Spanish, with full gender and number concord; most speakers of ABS exhibit variable plural and gender marking in a fashion that can be characterized as decreolization. Moreover, unlike such dyads as Spanish-Palenquero, Portuguese-São Tomense, or even Spanish-Papiamentu and Portuguese-Cape Verdean Crioulo, the lexical and phonological differences between the concord-less Afro-Bolivian dialect and contemporary Spanish are minimal. For all practical purposes, the Afro-Bolivian DP represents a proper subset of the contemporary Spanish DP, in which only the presence or absence of gender and plural marking separates the two varieties. The corresponding data are detailed enough to permit an analysis based on the successive emergence of syntactic structures within the

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which sometimes results in combinations that resemble vernacular Brazilian Portuguese (VBP) and Afro-Choteño (Ecuador) Spanish (ACS) stripped plurals, e.g. *uns mnina* 'some girls', *kes mnina* 'those girls' (Baptista 2007:82f.; Baptista, Mello and Suzuki 2007:73–74). These same varieties sometimes add plural /-s/ to nouns when there are no plural quantifiers or numerals present, especially when the nouns are marked [+animate] (Baptista 2007:84), but adjectives are never marked for plural. Rather than representing a robust plural system, this appears to represent the retention of creole determiners originally derived from Portuguese plural forms, together with some hints of Portuguese plural marking on nouns; see also (Castro and Pratas 2006). Crioulo also exhibits a few cases of apparent feminine gender concord (Baptista, Mello and Suzuki 2007:75). Whether this represents recent drift in the direction of the former colonial language or the results of the original restructured Portuguese acquired by Africans remains a subject of debate. There is no evidence that non-creole Portuguese as spoken in Cape Verde exhibits variable plural or numer concord. Baxter (2002, 2004) provides data on variable plural with /-s/ marking in a restructured variety of Portuguese spoken in São Tomé, but there appears to be no connection with São Tomé Portuguese creole, which does not mark plural with /-s/ at all.

4. Lipski (2011) provides examples of partial feminine gender concord in the Palenquero as learned as a second language by school children in San Basilio de Palenque. However, there are no observed instances of feminine gender concord or plural marking with /-s/ among fluent Palenquero speakers.

5. Speakers of this restructured variety have no name for it, and to the extent that they are aware of differences with contemporary Spanish, simply feel that the restructured variety is an inferior form of Spanish. In the present article, the terms 'Afro-Bolivian Spanish' and 'traditional Afro-Bolivian dialect' are used interchangeably to refer to the restructured variety, described further in Section 3.

DP, each of which properly contains the previous stage. The resulting model portrays decreolization of gender and number concord as neither the interaction of two discrete grammars at opposite ends of the creole continuum nor continous variation within a single system, but rather as the stepwise elaboration of the syntactic structure of the DP through the successive activation of functional projections. These nested grammars provide a more nuanced view of co-existent systems as the source of morphosyntactic decreolization.

The remainder of this article is organized as follows. After a brief description of traditional Afro-Bolivian communities in Section 3 and an overview of the principal morphosyntactic features of Afro-Bolivian Spanish in Section 4, the status of ABS as a potential locus of decreolization is discussed in Section 5. Section 6 describes data collection and analysis. Data on variable (feminine) gender concord and (plural) number marking are presented in Sections 7 and 8. These data reflect a cline of variation among speakers of varying degrees of fluency in ABS, and also show consistent differential behavior based on grammatical category. The predominance of number marking over gender marking is explored in Section 9. Sections 10 and 11 offer a syntactic model of expanding gender and number concord, via the successive activation of agreement projections. Section 12 recapitulates the analysis of the Afro-Bolivian data as a case of decreolization. Section 13 summarizes the entire study.

3.   Africans and Afro-Hispanic language in Bolivia

Highland Bolivia, known in colonial times as *Alto Perú* 'Upper Peru', then the *Audiencia de Charcas* 'Judicial district of Charcas', was the site of the earliest massive importation of African slaves to Spanish America. Most worked in the silver mining town of Potosí, in the royal mint and in domestic service. The African population in Bolivia was never large, and the cultural, linguistic, and demographic impact of Afro-Bolivians declined steadily from a high point in the early 17th century, when Africans represented nearly 5% of the population (Crespo 1977: 28). Despite the overwhelming adversities and the time span of more than four centuries, in this primarily indigenous and mestizo nation, a tiny Afro-Bolivian community has survived to the present day.[6] As will be demonstrated in the following

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6. Angola Maconde (2000) provides an excellent overview of contemporary Afro-Bolivian culture, and Angola Maconde (2008a) offers a collection of personal testimonials related in the traditional Afro-Bolivian dialect of Dorado Chico; Brockington (2006) provides some additional historical background, and Llanos Moscoso & Soruco Arroyo (2004) describe Afro-Bolivians' social situation.

sections, some of the oldest speakers in the primarily Afro-Bolivian communities speak, in addition to highland Bolivian Spanish, a restructured language that apparently arose from the acquisition of Spanish by some six to eight million *bozales* (African-born second language speakers of Spanish), forced into servitude far from their birthplace.[7] Most contemporary Afro-Bolivians live in scattered communities in the provinces of Nor Yungas and Sud Yungas, in the department of La Paz. The Yungas are tropical valleys no more than a few thousand feet above sea level, surrounded by some of the most forbidding mountain terrain in all of South America, with peaks reaching more than 15,000 feet. This torturous terrain, nearly vertical geography, lack of adequate roads and other infrastructure, and frequent mud and rock slides, have historically marginalized the small rural Yungas communities. The region is principally inhabited by an Aymara-speaking indigenous population, together with a considerable mestizo component; black Yungueños live both in villages with Aymara majorities and in scattered mountainside houses on lands once belonging to haciendas. The most important predominantly Afro-Yungueño communities in Nor Yungas province — harboring nearly all speakers of the traditional Afro-Bolivian dialect — are the following (population figures come from the last official census, of 2001[8]):

Coscoma	(pop. 402)	Chijchipa	(pop. 126)
Mururata	(pop. 236)	Dorado Chico	(pop. 34)
Tocaña	(pop. 171)		

In Sud Yungas, the principal black community is Chicaloma (pop. 634; now less than 50% black, but once the principal Afro-Bolivian community in the region), with black Bolivians scattered in many neighboring settlements

Although there are several thousand Afro-Bolivians scattered throughout the Yungas (Angola Maconde 2008b: 220 estimates that some 9,000 Afro-Bolivians live in this region), only a tiny fraction of this population maintains any usable fluency in the traditional Afro-Yungueño dialect, with a somewhat larger group possessing some passive competence. With the arrival of schools (in Spanish), following the massive social and political reforms that began in 1952, Afro-Bolivians

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7. Although little is known about the early linguistic history of Afro-Bolivians, it is unlikely that Afro-Bolivian Spanish arose through abrupt creolization. The first Africans taken to colonial Bolivia worked in the royal mint and in domestic service, and were not deprived of sustained contact with native Spanish speakers. Afro-Bolivian Spanish most probably arose as the Afro-descendent population migrated (not doubt forceably) to the Yungas, were surrounded by monolingual Aymara speakers, and were joined by newly-arrived Africans with no prior exposure to Spanish. Although consistent with known facts, this scenario remains highly speculative.

8. Available at <www.ine.gov.bo>.

in the Yungas were exposed to national varieties of the language, as well as to the written language. Although community oral histories do not provide a firm chronology for the gradual abandonment of the traditional dialect, extrapolation from numerous interviews and personal testimonials yields the conclusion that by the late 1960's use of the Afro-Yungueño dialect had diminished considerably as the vehicle for spontaneous communication in the Afro-Bolivian communities. Perhaps because to the extent that they were aware of their unique speech patterns, Afro-Bolivians did not regard the traditional dialect as essentially tied to their ethnicity, but rather as a sad reminder of the harsh conditions of the plantation peon system, there have been no systematic attempts at retaining or reviving ABS.

Within the region where the traditional Afro-Bolivian dialect is spoken, the most restructured variety is found in Mururata and Chijchipa. Only in these two communities are some of the following features found: (1) analogical preterites (e.g., *ponió* 's/he put'; Sp. *puso*, from *poner* 'to put', *hació* 's/he did'; Sp. *hizo*, from *hacer* 'to do', *vinió* 's/he came'; Sp. *vino*, from *venir* 'to come', *dició* 's/he said'; Sp. *dijo,* from *decir* 'to say'); (2) consistent use of the invariant 3rd person singular verb even with the first person singular pronoun *yo* (e.g., *yo es* 'I am'); (3) use of *nuay* < SP. *no hay* 'there is not' for 'I don't have;' (4) complete suspension of grammatical gender marking; and (5) nominal plural marking based on possessive or demonstrative plus the plural article *lu* (e.g. *mi lu huahua* 'my children' < Sp. *mis huahuas*; *eje lu mujé* 'those women; < Sp. *esas mujeres*). Only in Mururata and Chijchipa does this vernacular continue to be used spontaneously and on a daily basis by some residents, although modern Spanish predominates throughout the region. In these two communities, the Afro-Bolivian dialect is observed more often among older women, possibly because they spend more time in close proximity to one another in the coca fields and in their homes, while the men often work in widely scattered areas. These women may use the traditional dialect even when addressing small children. The latter typically respond in non-Afro Spanish, but passive competence is obviously complete. In both Mururata and Chijchipa there are still some young adults (in their twenties) and even a few children who have some active competence in the traditional dialect.

4.   Basic features of the traditional Afro-Bolivian dialect

Traditional Afro-Bolivian Spanish is described in detail in Lipski (2008a) and earlier studies cited in that monograph. In addition to some phonological restructuring, the traditional Afro-Bolivian dialect differs from all other monolingual varieties of Spanish worldwide in the structure of DPs and verb phrases (VPs), both of which exhibit morphosyntactic reduction suggestive of the incomplete acquisition

of Spanish morphology during the formative period of this variety.[9] These grammatical features demonstrate that traditional Afro-Bolivian speech is not really a 'dialect' of Spanish in the widely accepted sense but rather a restructured language derived from Spanish. The principal grammatical features are as follows:

– Suspension of grammatical gender in nouns and adjectives. In general, nouns retain the etymological articles *el* (masculine) and *la* (feminine), although these articles are used infrequently. There are several cases where for no clearly discernible reason *la* is used instead of the etymological Spanish *el*: *la río* 'the river', *la cementerio* 'the cemetery', *la pozo* 'the well', *la barranco* 'the dropoff', *la patio* 'the yard', *la pulmón* 'the lung', etc.[10] The plural article is *lu*, which replaces Spanish *los* (masculine) and *las* (feminine): *lu mujé* 'the women'; *tudu lu gente* 'everyone'; *lu taza di cajué* 'the cups of coffee'. Adjectives take only the form derived from the Spanish masculine gender: *nuestro cultura antigo [nuestra cultura antigua]* 'our traditional culture'; *eje [esa] mujé* 'that woman'; *todito eso hierba, mezclao [toditas esas hierbas, mezcladas]* 'all those herbs, mixed together'; *lu persona mayó [las personas mayores]* 'the older people'; *nuestru [nuestra] medicina di nojotro* 'our own medicines'; *tudu un [toda una] semana* 'a whole week'.

– Zero-marked plurals; nouns do not take the normal Spanish plural form (adding *-s* to vowel-final words and *-es* to consonant-final words): *lu persona mayó [las personas mayores]* 'the older people'; *lu mujé [las mujeres]* 'the women'; *lu patrón [los patrones]* 'the landowners'; *algunu enfermedá [algunas enfermedades]* 'some illnesses'; *lu peón [los peones]* 'the peasants'.

– Missing definite articles in subject position and after prepositions (required in other Spanish dialects): *Ø perro ta flojo [los perros están flojos]* 'dogs are worthless'; *Ø patrón huasquiaba Ø mujé [los patrones huasqueaban a las mujeres]* 'the landowners beat the women'; *Ø nube ta bien rojo [las nubes están bien rojas]* 'the clouds are very red'; *Yo subía un lao di Ø pantalón [yo subía un lado del pantalón]* 'I rolled up one pant-leg'; *Ahora Ø custumbre ya pierdió [ahora la costumbre ya se perdió]* 'now that custom has been lost'.

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9. Many of the features are found in second-language learners' approximations to Spanish in other contexts, e.g. Rapa Nui Spanish, (Makihara 2005), the Spanish of Chinese immigrants in Spain (Clements 2009: chap. 6), and some indigenous interlanguages in Latin America. Afro-Bolivian Spanish, however, is spoken natively, and deviations from contemporary Spanish are consistent, e.g. use of the 3rd person singular as invariant verb form, and masculine gender as the sole survival of Spanish gender marking.

10. In early child Spanish it is not infrequent for the feminine definite article *la* to be overgeneralized, perhaps because of its transparency with respect to the plural article *las* and with the corresponding accusative clitics *la* and *las* (Clark 1985: 706).

– Restructured subject pronoun system, including no formal-familiar 2nd person distinction and no masculine-feminine distinction in the 3rd person: *yo* 'I', *oté* [Spanish *usted*] 'you (s.)', *ele* [Spanish *él*-masculine and *ella*-feminine] 'he' or 'she', *nojotro* [Spanish *nosotros*] 'we', *otene* [Spanish *ustedes*] 'you (pl.), *eyuh* [Spanish *ellos*-masculine and *ellas*-feminine] 'they' (masculine and feminine).

– Plural possessives based on POSSESSIVE ARTICLE + *lu* (evidently < Spanish *los* 'the' m. pl.): *mi lu huahua* [*mis huahuas*] 'my children', *su lu cosa* [*sus cosas*] 'his/her/their things'; *nustru lu hermano* [*nuestros hermanos*] 'our siblings'; *Arapata ya tiene su lu carro* [*Arapata ya tiene sus carros*] '[the village of] Arapata now has its cars'.

– Placement of object clitics between auxiliary verbs and infinitives: *yo va ti decí* [*yo voy a decirte/yo te voy a decir*] 'I'm going to tell you'; *¿por qué no viene mi mirá* [*¿por qué no vienes a mirarme?/¿por qué no me vienes a mirar?*] 'why don't you come see me?'; *¿quién va ti bañá?*[*¿quién va a bañarte?/¿quién te va a bañar?*] 'who is going to bathe you?

– Non-inverted questions: *¿cuánto hijo pue oté tiene?* [*¿cuántos hijos tiene usted?*] 'How many children do you have?'; *¿ande pue oté viví?* [*¿dónde vive usted?*] 'where do you live?'; *¿Andi pue oté ta trabajá?* [*¿dónde está usted trabajando?*] 'where are you working?'

– Use of the Spanish 3rd person singular as invariant verb form for all persons and numbers. Verbs are inflected for tense, but only in the present, preterite (perfective), and imperfect: *nojotro tiene [nosotros tenemos] jrutita* 'we have fruit'; *yo no conoció hacienda [yo no conocí hacienda]* 'I never knew the haciendas'; *yo miró jay [yo miré]* 'I saw [it]'; *igualmente nojotro tenía que buscá* [*igualmente nosotros teníamos que buscar*] 'just the same we had to look for [it]'; *la pelea lu mujé trompeaba igual que el hombre* [*en las peleas las mujeres trompeaban/golpeaban igual que los hombres*] 'in fights, women would throw punches the same as the men'.

– Occasional constructions based on invariant *ta(ba)* + INFINITIVE instead of conjugated verbs:[11] *¿quién ta comprá?*[*¿quién está comprando?*] 'who is buying [coca]?'; *¿andi pue tía ta i?* [*¿adónde está yendo, tía?*] 'where are you going,

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11. The use of *ta* is superficially similar to the preverbal particle *ta* in Afro-Iberian creoles such as Palenquero, Papiamentu, and Cape Verdean Crioulo. Unlike in the latter languages, however, Afro-Bolivian speakers produce *ta* constructions only occasionally, as an apparent fast-speech reduction of the auxiliary verb *está* 'be' and the Spanish gerund, which is similar to the infinitive except for the desinences *-ando* and *-indo* (standard Spanish *-iendo*) instead of the canonical infinitive endings *-a(r), -e(r), -i(r)*. Although I recorded numerous examples of this combination, all speakers interviewed denied that this construction is normally used; some did acknowledge having heard it, but asserted that this was just sloppy speech. Lipski (2007) explores the possibility that this use of *ta* + reduced gerund *cum* infinitive may be an emergent phenomenon,

ma'am?'; *eje taba mirá* [*esa estaba mirando*] 'she was looking'; *eje perro ta ladrá* [*ese perro esetá ladrando*]'that dog is barking'

– Missing prepositions *a* and *en*: *yo nació [en] Mururata* [*yo nací en Mururata*] 'I was born in Mururata; *nojotro va [al] trabajo* [*nosotros vamos al trabajo*] 'we're going to the work site'; *Nojotro iba lavá ropa [en] la río* [*nosotros íbamos a lavar ropa en el río*] 'we would go wash clothes in the river'; *Ahí lu gente volvendo [del] la cementerio tiene que cená* [*allí la gente que volvía del cementerio tenía que cenar*] 'there the people who were returning from the cemetery had to eat dinner'.

– Use of *cun* (Spanish *con*) 'with' as coordinating conjunction between noun phrases, instead of *y* 'and': *Mi tata cun mi mamá es nació Mururata* [*mi padre y mi madre nacieron en Mururata*] 'my father and my mother were born in Mururata'; *Algunos también tenía qui trabajá doh día no mah, luneh cun marteh* [*algunos también tenían que trabajar sólamente dos días, lunes y martes*] 'some only had to work two days, Mondays and Tuesdays'.

– Use of *ta cun* [Spanish *estar con*] 'to be with' instead of *tener* 'to have' to express physical or mental conditions: *Yo ta cun cabeza blanco* [*tengo la cabeza blanca*] 'my hair is white'; *Ele ta cun treintitreh año* [*ella tiene treinta y tres años*] 'she is thirty-three years old'; *Ta cun la cabeza bien bañadito* [*tiene la cabeza bien bañada*] 'his head is well washed'; *¿Awicha ta cun cuánto cumpleaño?* [*¿cuántos años tiene, abuela*?] 'how old are you, grandmother?' [literally 'you are with how many birthdays?']

– Use of *nuay* [Spanish *no hay* 'there is/are not'] and *nuabía* [Spanish *no había* 'there was/were not'] instead of *no tener* 'to not have': *Yo nuay cajué* [*no tengo café*] 'I don't have any coffee'; *Ele nuay ningún marido nada* [*ella no tiene ningún marido*] 'she does not have any husband at all'; *Yo nuabía ni tata casi ni mama* [*yo no tenía padre ni casi una madre*] 'I had no father and almost no mother'.

– Use of *tener* 'to have' instead of *haber* 'to exist' to express existence: *Tiene un negrita qui taba aquí* [*había una mujer negra que estaba aquí*] 'there was a black woman who lived here'; *Tenía un señora, un negra* '[*había una señora, una negra*] 'there was a woman, a black woman'; *Tiene un señor aquí, acorda pueh de luh baile de lu negritu* [*hay un señor aquí que se acuerda de los bailes de los negros*] 'there is a man here who recalls the dances of the black people'.

which if left unchecked could lead to the grammaticization of *ta* as apparently occurred in the aforementioned creole languages.

5.   Is Afro-Bolivian Spanish a creole and can it therefore undergo decreolization?

The preceding section has demonstrated the considerable morphosyntactic differences between the traditional Afro-Bolivian dialect and all known varieties of Spanish, past and present. Given that this dialect is in contact with contemporary Bolivian Spanish, can one legitimately speak of an environment in which decreolization could occur? In other words, can Afro-Bolivian speech be regarded as a creole language? The fact that this dialect is given no specific name, either by the speakers themselves or their neighbors, complicates the matter of classification, as do the considerable lacunae surrounding the linguistic history of Afro-Bolivians from the 16th century to the early 20th century. In fact, absolutely nothing is known for certain about the linguistic situation of Afro-Bolivians beyond what can be extrapolated back to the turn of the 20th century. Early literary imitations of Africans in colonial Bolivia are suspect as being mere copies of equally extravagent stereotypes from Spain (Lipski 2005: 137–8). Perhaps of more relevance to the search for the origins of Afro-Bolivian Spanish is the humorous skit '*Entremés gracioso para la festividad de Nuestra Señora, año 1799*', recently discovered in the archives of Potosí, Bolivia (Arellano & Eichmann 2005: 163–217). The language attributed to Africans in this short play departs from similar literature produced in Spain and colonial Latin America. Although the short fragments of Africans' speech differ from contemporary Afro-Bolivian Spanish, there are some similarities, including use of the third person singular as invariant verb form, the loss of word-final /r/ in *mujé* [*mujer*] 'women', and the genderless third person pronoun *eye*: *eye me rom pagará* 'she will pay me for it' (p. 176). The pronoun *elle* (also pronounced [e.je]) was documented for Afro-Cuban language (Ortiz López 1998: 99–100; also Perl 2001), and the phonetically similar Afro-Bolivian *ele* 'he, she' is identical to the pronouns of Palenquero, Philippine Creole Spanish, and other Portuguese-lexified creoles, apparently deriving from Portuguese *êle* 'he'. However, there are no other demonstrably Portuguese or creole-Portuguese elements in Afro-Bolivian Spanish that might point to extra-territorial origins or influences.[12] In the balance, the origins of Afro-Bolivian Spanish remain largely unknown; the research reported in this article is simply predicated on the demonstrable grammatical differences between modern Spanish and the traditional Afro-Bolivian dialect, and the conclusion derived from numerous interviews and documentary sources that the use

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12. The occasional use of *ta* as a potential preverbal particle has already been discussed. Lipski (2008a: 73) suggests a paragogic final vowel as a possible source if Afro-Bolivian *ele* (< Spanish *él* 'he'), similar to the Afro-Bolivian *ayere* < *ayer* 'yesterday'.

of Afro-Bolivian Spanish antedates contemporary Spanish in the Afro-Bolivian communities.

Rather than wrangling over definitions, it is more useful to compare the traditional Afro-Bolivian dialect with other creole languages with Spanish and Portuguese lexifiers (cf. Lipski 2008a: chap. 8). Afro-Bolivian Spanish shares with all Spanish- and Portuguese lexified creoles the following traits: (a) absence of grammatical gender, either in the pronomonial system or within the DP; (b) the 3rd person singular subject pronoun *ele;* (c) no subject-verb agreement for person and number; (d) some use of preverbal TMA particles (i.e. occasional use of *ta* + INFINITIVE in Afro-Bolivian Spanish, subject to the provisos noted previously); (e) non-inverted questions (also found in some non-creole Spanish dialects, e.g. in the Caribbean, but non-existent in contemporary Bolivian Spanish). It shares with Palenquero and Cape Verde Crioulo some past-tense marking on verbal roots, and shares with Cape Verde/Guinea-Bissau Portuguese creoles the absence of a separate pluralizing marker (and with Cape Verde Crioulo the occasional presence of nominal plural marking with /-s/). Afro-Bolivian Spanish shares with all Afro-Iberian creoles the presence of null definite articles, and (at least some) use of 'to have' as existential verb. Like Cape Verdean Crioulo, nearly all the Afro-Bolivian Spanish lexicon comes from the lexifier language; there are no words of demonstrable African origin and the only identifiable extra-Hispanic lexical items are the several dozen Aymara-derived words relating to coca cultivation. Like all Spanish- and Portuguese-lexified creoles, there are systematic phonological differences between patrimonial Spanish words and their Afro-Bolivian counterparts, although these differences are relatively small when compared, e.g. with Palenquero, the Gulf of Guinea Portuguese-derived creoles, or Papiamentu. On the creole 'thermometer', Afro-Yungueño Spanish probably falls just below Cape Verde Crioulo as regards the relationship with the lexifier language, but above the structural distance between Gullah and English, or between Réunionais and modern French.

The sociolinguistic environment in which Afro-Yungueño Spanish evolved is also consistent with decreolization scenarios examined in other speech communities. The traditional dialect remained relatively isolated from any form of modern Spanish for an indeterminate time during the colonial and post-colonial periods, perhaps two centuries or more. In the Bolivian Yungas, Afro-Bolivian Spanish was surrounded by a nearly homogeneous indigenous population, virtually monolingual in Aymara, and at best able to muster only a rudimentary interlanguage as an approximation to Spanish. This interlanguage, which can still be found in the Yungas, bears little resemblance to Afro-Bolivian Spanish, and appears to have exerted little or no influence on the latter language (Lipski 2008a: chap. 7). Some Afro-Bolivians in the Yungas did make the long overland trek to Spanish-speaking cities and acquired more modern varieties of Spanish, some served in the Bolivian

military (including the Chaco War with Paraguay in 1932–35), and others permanently migrated out of the Yungas to Spanish-speaking eastern Bolivia. Research to date has not been able to determine what linguistic influence if any these Afro-Bolivians may have exerted on the traditional Yungueño dialect. It is not unreasonable to suppose that at least some contemporary Spanish morphosyntax trickled into Afro-Yungueño Spanish over the years, although given the widespread isolation from Spanish-speaking communities, it is not likely that the variation currently observable has existed since the formation of the traditional dialect.

The social reforms that followed in the wake of the 1952 'revolution' brought the region's first schools and with them the massive exposure to Spanish, and the concomitant notion that people who went to school were 'civilized' and that linguistic varieties that antedate the school system are part of 'uncivilized' behavior. However, although many Afro-Bolivians asserted that they were 'civilized' and thus no longer spoke the traditional dialect, speakers' implicit assignment of elements to either the traditional dialect or modern Spanish does not always coincide with features that strike linguists as separating creole and non-creole languages. When pressed for explicit comments on the traditional dialect or requests to speak in that dialect, Afro-Bolivians typically offered a collection of stereotypical phrases, including *andi tío/tía ta indo?* 'where are you going sir/ma'am?',[13] *yo va í* 'I'm going', *ele disí* 'he/she says', and words such as the Aymara-derived interjection *jay* (freely used to punctuate Afro-Bolivian discourse) and the vocative *cho*. The latter two words are also used by non Afro-Bolivian neighbors to mock Afro-Bolivians. Some elderly Afro-Bolivians corrected themselves by saying *ma̱ma* 'mother' and *plata̱no* 'plantain' with traditional Afro-Bolivian penultimate stress, after having pronounced the modern Spanish words *mamá* and *plátano*, respectively. Other lexical items also surfaced during these inquiries, including *poh* < Spanish *pues* 'well, then', *cotencia* 'large cloth or shawl used to gather picked coca leaves', *awicha* (the Aymara words for grandmother), used to refer to all older women, *dioselupai/diojelupai* < Spanish *Dios se lo pague* 'may God repay you', and *chaypu* (< Aymara *cchayphu*) 'dawn or early dusk'. However none of the Afro-Bolivians interviewed for the present study or overheard in spontaneous speech ever commented on any aspect of nominal morphology, either gender or number agreement, nor null articles or two-element plural possessives such as *mi lu amigo* 'my friends' as features that distinguish the traditional dialect from modern Spanish.[14] As a consequence,

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13. Some of these same stock phrases were observed by Powe (1998: 850–1), who erroneously analyzed these Spanish-derived combinations as representing a mixture of Spanish and Aymara.

14. The first schools in the predominantly Afro-Bolivian Yungas communities were staffed largely by Aymara teachers, many of whom spoke obviously L2 varieties of Spanish and who made no attempt at teaching Spanish grammar or correcting their students' speech. Subsequently, native

although the following sections will describe patterns of variation in nominal gender and number marking, representing a cline from complete absence of concord to full Spanish multiple concord, there is no indication that Afro-Bolivians themselves consciously equate gender or number marking with more desirable or prestigious speech. For the purposes of the present study, therefore, there is no compelling reason to reject the analysis of contact between the traditional Afro-Bolivian dialect and contemporary Spanish as a potential environment for decreolization.

6.   Data collection for the present study

The Afro-Bolivian data were collected during the time period 2004–2007, as part of a longer study reported in Lipski (2008a). All interviews represent free conversation with the respondents, conducted in the presence of this researcher by native speakers of the traditional Afro-Bolivian dialect known to and respected by community members.[15] In every instance there was an explicit request to speak in the traditional dialect, which since it has no specific name within the Afro-Bolivian communities, was described with paraphrases such as 'our traditional way of speaking', 'the way we used to speak', and with prompting with specific configurations that differ from contemporary Spanish. Although approximately one hundred Afro-Bolivians were interviewed and recorded, in all of the traditional Afro-Bolivian communities as well as in nearby towns, many were not fluent in the traditional dialect, and were at best able to produce isolated phrases or short sentences, embedded in contemporary Bolivian Spanish discourse. In order to study the variation of gender and number agreement, only those speakers who were capable of sustained discourse in the traditional dialect are included. For the present analysis, the data come from thirty five speakers of the traditional dialect, from the communities of Dorado Chico, Coscoma, and San Joaquín in the Coripata sector of Nor Yungas, and Mururata, Chijchipa, Tocaña, and Santa Bárbara in the Coroico sector. This sample represents a nearly exhaustive selection of the most fluent

or near-native Spanish-speaking teachers were assigned to these schools. This transition from interlanguage to modern Spanish may be partially responsible for Afro-Yungueños' general lack of awareness of morphosyntactic differences separating their traditional dialect from modern Spanish, even when they themselves are proficient in both languages.

15. I am deeply grateful to Juan Angola Maconde, without whose unflagging support the research could not have been completed. My gratitude is also extended to Antonia Pinedo and Ramón Barra in Mururata, who greatly aided my work in that community. Carlos Pinedo and Juana Pinedo of Chijchipa were also able collaborators. My greatest debt of gratitude is owed to the long-suffering Afro-Bolivians, among the poorest people in one of the hemisphere's poorest nations.

speakers of the traditional dialect, as nearly as can be determined.[16] All but one of the speakers were born between 1918 and 1950. One speaker (from Chijchipa), the only younger individual known to be fluent in the traditional dialect, was born in 1971. For each speaker, approximately thirty minutes of recorded conversation were analyzed for tokens of potential feminine gender concord. Because there were no antecedent studies of Afro-Bolivian speech, there are no independently verified measures of proficiency in the traditional dialect. Since plural marking and gender concord are the dependent variables in the present study, the presence or absence of these features cannot be used as criteria without falling into circular reasoning. Therefore speakers were judged to be speaking the traditional dialect if they consistently exhibited the following three traits, none of which is present in any form in contemporary Bolivian Spanish: (a) no subject-verb agreement for person and number;[17] (b) use of the gender-unmarked subject pronouns *ele* (3 s.) and *eyu(s)* (3 pl.); (c) elision of final /r/ in verbal infinitives (in contemporary Bolivian Spanish, word-final /r/ is never elided). Interviewees were judged as fluent if they were able to produce paragraph-length discourse with no deviations from these criteria. Speakers were classified as vestigial if they were capable of producing at least paragraph-length discourse in the traditional dialect, but with at least some instances of subject-verb agreement or gender-marked 3rd person pronouns; there were no instances of individuals who pronounced the final /r/ in infinitives but who exhibited no subject-verb agreement or used genderless 3rd person pronouns. The distinction between fluent and vestigial speakers, while providing a descriptive label, is not essential to the study of Afro-Bolivian decreolization.[18]

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16. No Afro-Bolivians known to possess active competence in the traditional dialect were omitted from the interviews, except for one potential respondent, who refused to be interviewed. Anecdotal remarks by community members included mention of a literal handful of additional potential respondents, but these individuals had moved out of the communities and could not be located.

17. Afro-Bolivian subject-verb agreement is also subject to implicational relationships, as shown by Lipski (2006). The first type of agreement to appear in the direction of contemporary Spanish is the first person singular, followed by the first person plural. Even speakers who manifest subject-verb agreement only for first-person singular reference typically do not show agreement with auxiliary verbs such as *va* 'go' and *ta* 'be'. For example in the first person singular the periphrastic future *ir a* 'to go to' + INFINITIVE frequently retains the invariant form while main verbs exhibit subject verb agreement: the same speaker will say *yo tengo* 'I have' but *yo va [voy a] tené* 'I'm going to have'. For the present study, suspension of subject-verb agreement in the first person plural was considered the threshold for classification of fluency in the traditional dialect.

18. Despite the early admonitions of Rickford (1980: 172–174) on the difficulties of measuring individual speakers' competence as regards creole continua, the problem of determining the full range of linguistic knowledge available to individual speakers remains vexing, and clearly beyond the scope of the present study.

7.   Gender concord in the Afro-Bolivian DP

Although all the Romance languages mark masculine and feminine grammatical gender, creole languages with Romance lexifiers do not generally exhibit grammatical gender, either in the pronominal system (e.g. single pronouns for 3rd person singular and plural), nor in the form of DP-internal and predicate adjective gender concord.[19] Speech communities in which a creole language is in contact with its original lexifier language typically exhibit clines of variation that have been described as post-creole continua. The development of gender marking and gender concord during decreolization would therefore be expected to be variable, perhaps spreading from the most common lexical items and morphosyntactic configurations until a fully developed gender concord system has been attained. Such a situation has been described, for example, in Helvécia (Brazil) restructured Portuguese (Baxter 1997, Baxter & Lucchesi 1993, Baxter et al. 1997), formed under historical circumstances similar to those involved in the origins of Afro-Yungueño Spanish (Lipski 2006). Baxter et al. (1997) found that gender marking in the Helvécia NP is governed by a partially overlapping set of morphosyntactic constraints. Among those configurations favoring gender agreement are (preposed) possessives and preposed adjectives. Determiners such as articles exhibit more variation, while postposed adjectives and quantifiers such as *tudo* 'all' strongly disfavor gender agreement. The morphological shape of the head noun influences gender agreement. Feminine nouns marked for gender with the canonical word marker *-a* and which alternate with masculine counterparts marked with *-o* such as *minina* 'girl' (standard Ptg. *menina* vs. *menino* 'boy') attract gender concord more than feminine nouns that do not alternate with masculine counterparts such as *casa* 'house', as do nouns ending in the prototypical feminine theme vowel *-a* such as *coisa* 'thing'.[20]

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19. Some Romance-derived creoles have fossilized forms that appear to reflect the presence of grammatical gender, particularly when dealing with kinship relations or occupations. Thus for example Philippine Creole Spanish (Chabacano) as spoken in Zamboanga has pairs like *bonito/a* 'pretty'; *guapo/a* 'good looking', *maestro/a* 'teacher', *viudo/a* 'widower/widow', *cocinero/a* 'cook', *difunto/a* 'dead person', etc. (Lipski 1986, 1987). These lexical items are not part of an active process of gender marking, but rather have survived (or have been reintroduced) due to their high frequency in everyday discourse. Baxter (2010) demonstrates some vestiges of gender marking in Malacca Creole Portuguese, and Lipski (2011) documents the (re-?) emergence of feminine gender marking in Palenquero as spoken by young community members who learn the language in school.

20. A JPCL reviewer points out that the presence of feminine gender concord with *minina* 'girl' as opposed to *casa* 'house' may have to do with the animacy of the former noun. In Afro-Bolivian Spanish, animacy of the head noun has no demonstrable correlation with the presence of feminine gender concord.

The maximum Spanish DP template is of the form:

QUANTIFIER + DETERMINER + ADJECTIVE + NOUN + ADJECTIVE

e.g. *todos mis buenos amigos bolivianos* 'all my good Bolivian friends'. In the basilectal form of the Afro-Bolivian dialect, gender concordance is nonexistent, although Spanish fossilized masculine and feminine definite articles sometimes occur when definite reference is indicated; all other determiners and adjectives are derived from the Spanish masculine gender. Examples of this basilectal configuration are given in (1)–(12); the (a) examples are in traditional Afro-Bolivian Spanish, and the (b) versions contain the modern Spanish equivalents to the bracketed elements in (a):

(1) a. si esi es [un   gaína] o un   conejo
         if that is DET.M.S chicken or DET.M.S rabbit
     b. [una   gallina]
         DET.F.S chicken
         'whether it is a chicken or a rabbit'

(2) a. [nuestro cultura antiguo]
         our.M.S culture former.M.S
     b. [nuestra cultura antigua]
         our.F.S culture former.F.S
         'our former culture'

(3) a. [otro]   cosa
         other.M.S thing
     b. [otra]   cosa
         other.F.S thing
         'another thing'

(4) a. [ningún] misa nada,   [ningún] mujé
         no.M.S   mass nothing no.M.S   woman
     b. [ninguna] misa nada,   [ninguna] mujé
         no.F.S   mass nothing no.F.S   woman
         'no mass, no woman'

(5) a. [algunos   enfermedá]
         some.M.PL illness
     b. [algunas   enfermedades]
         some.F.PL illness.PL]
         'some illnesses'

(6) a. Yo tenía que   poné agua [todo los   tarde]
         I had COMP put water all.M.S DET.M.PL afternoon

     b.   [todas   las   tardes]
         all.F.PL DET.F.PL afternoon.PL]
         'I had to put water [to boil] every afternoon'

(7)   a.   [tudu   un]   semana
         all.M.S DET.M.S week
     b.   [toda   una]
         all.F.S DET.F.S
         'a full week'

(8)   a.   tres   [jornada adelantao]
         three   workday advanced.M.S
     b.   [jornadas   adelantadas]
         workday.PL advanced.F.PL
         'three days' work in advance'

(9)   a.   asimismo la   gente era   [vivo]
         just-same DET.F.S people were   clever.M.S
     b.   [viva]
         clever.F.S
         'just the same people were clever'

(10) a.   con sebo de vaca [negro]
         with fat   of cow   black.M.S
     b.   [negra]
         black.F.S
         'with fat of a black cow'

(11) a.   los   hombre con [camisa blanco]
         DET.M.PL man   with shirt   white.M.S
     b.   [camisas blancas]
         shirt.PL white.F.PL
         'the men in white shirts'

(12) a.   [lus   jovencita   recién casau]
         DET.M.PL young-woman recent married.M.S
     b.   [las   jovencitas   recién casadas]
         DET.F.PL young-woman.PL recent married.F.PL
         'the recently married young women' (Angola Maconde 2008a: 100)

Most speakers, even when attempting to speak only in the traditional dialect, do from time to time produce DPs with at least some gender concord (and also some number concord, as is noticeable in the previous examples). The appearance of gender concord is not a 'mix and match' collection of random appearances, but

generally follows a consistent pattern. The first (and most frequent) departure from total lack of gender concord is the signaling of gender on the first element of the DP (usually a determiner) but not on post-nominal adjectives or predicate adjectives:

(13) a.   esa   casa [chico]
           that.F.s house small.M.s
      b.   [chica]
            small.F.s
           'that small house'

(14) a.   [había una   curva [ancho]
            had   DET.F.s curve broad.M.s
      b.   [ancha]
            broad.F.s
           'there was a broad curve'

(15) a.   esa   gente era [malo]
           that.F.s people was bad.M.s
      b.   [mala]
            bad.F.s
           'those people were bad'

(16) a.   una   jornada [completo]
           DET.F.s workday complete.M.s
      b.   [completa]
            complete.F.s
           'a full day's work'

In phrases containing more than one element potentially susceptible to gender concord, no instances have been observed of gender marking on postnominal adjectives or predicate adjectives but not on prenominal adjectives or determiners.

   The Afro-Bolivian corpus contains very few examples of other prenominal modifiers, and when such modifiers do occur in the traditional dialect (usually in the form of quantifiers, but occasionally one of the few Spanish adjectives that regularly occur prenominally), they are most often invariant for gender (derived from the Spanish masculine):

(17) a.   [único] foto
            only.M.s photograph
      b.   [la   única]
            DET.F.s only.F.s
           'the only photograph'

(18) a.   porque iba recibí [buen]   cuerá
          because go receive good.M.S spanking
     b.   [buena]
           good.F.S
          'because [I] would get a good spanking'

(19) a.   han quedao [hartos   viuda]
          have remained many.M.PL widow
     b.   [hartas   viudas]
           many.F.PL widow.PL
          'many widows have remained'

(20) a.   [todito eso   hierba mezclao]
          all.M.S that.M.S herb   mixed.M.S
     b.   [toditas esas   hierbas mezcladas]
          all.F.PL that.F.PL herb.PL mixed.F.PL
          'all those herbs, mixed [together]'

(21) a.   [toditos esos   cosa yo acorda]
          all-M.PL that.M.PL thing I   remember.3.S
     b.   [toditas esas   cosas   yo acuerdo]
          all.F.PL that.F.PL thing.PL I   remember.1.S
          'I remember all those things'

(22) a.   [tudu un]   semana
          all.M.S DET.M.S week
     b.   [toda una]
          all.F.S DET.F.S
          'a whole week'

Although gender concord appears to proceed linearly in a rightward fashion in the transition from the traditional Afro-Bolivian dialect to contemporary Spanish, when the determiner is preceded by a quantifier such as *todo* 'all', the quantifier normally shows no gender concord even when the following determiner demonstrates concord:[21]

(23) a.   [todo] esa   casa   ta cayindu
          all.M.S that.F.S house is falling

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21. Since Afro-Bolivian nouns sometimes appear with the corresponding Spanish masculine or feminine article, even in the absence of gender agreement, the combination of non-agreeing quantifier plus the Spanish feminine article *la* does not in itself demonstrate partial gender concord. On the other hand a case like *todo esa casa* does constitute a legitimate instance of a non-agreeing quantifier followed by a gender-inflected demonstrative.

b. [toda]
      all.F.S
    'that entire house is falling apart'

(24) a. de [todo]   las   hierbas
            of   all.M.S DET.F.PL herb.PL
      b. [todas]
            all.F.PL
          'of all the herbs'

(25) a. [todito esas   cosa] poníamos
            all.M.S that.F.PL thing put.1.PL
      b. [toditas esas   cosas]
            all.F.PL that.F.PL thing.PL
          'we put all those things'

(26) a. [todo las   letra]
            all.M.S DET.F.PL letter
      b. [todas las   letras]
            all.F.PL DET.F.PL letter.PL
          'all the letters'

This configuration is consistent with the behavior of Afro-Bolivian quantifiers in general, in showing considerably lower rates of gender concord than determiners, and coincides with proposals that quantifier phrases occupy a different syntactic position than determiners,[22] and suggests that gender and number inflection on quantifiers — and by extension other prenominal adjectives — represents a different syntactic process than the one accounting for head noun-determiner concord.

The final stage in the approximation of Afro-Bolivian speech to Spanish multiple gender corcord is the introduction of gender marking on postnominal adjectives and predicate adjectives. The successive marking of feminine gender can be summarized as follows:

(27) complete lack of gender agreement >>
      agreement between determiner and head noun >>
      agreement between all prenominal modifiers(except quanitifiers) and head noun >>
      agreement with all prenominal and postnominal modifiers and predicate adjectives

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22. For example Laenzlinger (2005: 668), Barbiers (1992), Cinque (1994). An even more radical position is taken by van Eynde (2006), who rejects altogether the notion of Determiner as the head of a separate functional projection.

Table 1 presents the quantitative results of the realization of DPs and predicate adjectives that are grammatically feminine in modern Spanish (the only configurations in which gender concord — or the lack thereof — can be observed). At the level of individual utterances, this pattern represents a robust implicational scale; of the 941 tokens of potential feminine gender marking extracted from the corpus, none presents deviations from the pattern sketched in (5), e.g. with a postnominal modifier marked for feminine gender while determiners or other prenominal modifiers are not inflected for feminine gender.

The tokens were analyzed by VARBRUL (using the GOLDVARB X version). In order to compare the results with studies of variable plural marking in the Spanish and Portuguese DP, several factor groups were coded, including grammatical category, position in the string (first, second, third), whether the head noun ended in the canonical Spanish feminine word marker -*a*, whether or not feminine gender was marked elsewhere in the phrase, and nature of the preceding string. For the latter factor group, the possible configurations were as follows: string initial; preceded by a single feminine gender marker -*a* (A___); preceded by two feminine gender markers -*a* (AA___); preceded by a word that could be marked for feminine gender but remains in the unmarked masculine form (Ø___); preceded by a noun or adjective that does not show the canonical -*o/-a* gender markers (e.g. *mujer* 'woman', *verde* 'green') (G___), as well as the combinations AØ___, ØA___, and ØØ___. The factor groups representing grammatical category, preceding markers, and position in string are not orthogonal and embody a high number of potential interactions, so ultimately each of these factor groups was analyzed in a separate VARBRUL run. The factor group 'grammatical category' was selected as highly significant, and the respective factor weights confirm the raw data. In the same multivariate analysis, head nouns ending in the canonical Spanish feminine marker -*a* show only a very slight positive correlation with feminine gender concord. At the same time, the marking of feminine gender elsewhere in the DP was selected as a significant variable, with a factor weight of .80 for the presence of another feminine gender marker, and .46 when there is no additional feminine gender marking. These figures indicate a threshold between single exponence of feminine gender (a quasi-stable mesolectal configuration), and contemporary Spanish multiple gender concord. The VARBRUL factor weights for preceding string show little consistent evidence of the effects of linear parallelism.[23]

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23. Linear parallelism effects in Spanish and Portuguese have been predicated on the assumption of the left-to-right accumulation of morphological markers as favoring successive appearances of the same marker (e.g. Scherre 1998a, 1998b, 1998c, 1998d, 2001). A JPCL reviewer points out that activation can also occur right-to-left, e.g. as shown by Dell (1986). I am aware of no instances in Spanish or Portuguese where this type of linear effect has been documented.

Table 1. Feminine gender agreement in traditional Afro-Bolivian Spanish (N = 941); overall rate of feminine gender agreement 22% (207/941).

Input: .213/.15		Log likelihood: −469.831/ −84.827
N = 941/ 214		Significance: .006/.000
Position + category		
non-head; 1st position	701 / 24%	.53
preposed non-head; 2nd position	53 / 32%	.63
postposed non-head, 2nd position	96 / 14.5%	.39
postposed non-head, 3rd position	84 / 9.5%	.28
RANGE:		.35
Input: .214		Log likelihood: −487.294
		Significance = .004

The presence of an immediately preceding element marked for feminine gender with *-a* does not favor feminine gender concord (.49) but is effectively neutral, as is string-initial position, and provides less of an effect than the slightly favoring string-initial position (.54). A preceding missing gender concord is similarly irrelevant to gender marking (.51), while a string of two preceding gender-marked elements appears to actually disfavor gender marking (.15), as does a preceding string of a missing gender marker followed by feminine *-a* (.37). The total number of tokens not representing string-initial position is small (N = 214) so these observations must be regarded as tentative, but the pattern is consistent across all the speakers in the corpus.

In the study of variable plural marking in vernacular Brazilian Portuguese, analyses based on linear position and preceding string have been expanded to include the interaction of grammatical category (head noun vs. non-head element) and position within the string (e.g. Scherre 1998c; summarized in Naro & Scherre 2007: 38–43). Since Spanish nouns do not inflect for grammatical gender (although some carry the canonical word markers *-o* masculine and *-a* feminine), only modifiers can be studied; Table 1 also includes the results for prenominal and postnominal modifiers in conjunction with linear position.

The data suggest that among adult Afro-Bolivian speakers, emergent feminine gender marking is not strongly conditioned by simple superficial parallelism, while the recognition of the *-a* ending as a trigger for feminine gender is not as important as what normally occurs during first language acquisition (e.g. Hernández Piña 1984, Pérez-Pereira 1990, 1991; Smith et al. 2003, Mariscal 2009). Rather, gender marking is more strongly correlated with grammatical category, with determiners receiving the highest rate of feminine gender marking and predicate adjectives (and quantifiers) the lowest.

Since quantifiers nearly always appear in first position in a DP, as do determiners (unless preceded by a quantifier), while predicate adjectives nearly always follow their antecedent DPs, these data reflect the generally rightward spread of gender concord (in the aggregate, prenominal adjectives group together with determiners).[24] That simple priming or parallelism (e.g. as suggested by Scherre 2001 for depleted plural marking in Brazilian Portuguese) is not the only source of apparent rightward spread of concordance is demonstrated by the extremely low rate of concordance on quantifiers, as well as the minimal effect of nouns ending in the canonical feminine desinence -a.

In order to provide a more fine-grained analysis of the emergence of Afro-Bolivian gender concord, data were extracted from the most fluent speakers of the traditional dialect who also provided enough tokens of potential feminine gender concord (at least fifty apiece) to facilitate a more detailed quantitative analysis. This provided a natural grouping of thirteen speakers, ranging from highly consistent use of all features of the traditional dialect to considerable overlap with contemporary Spanish. Table 2 presents data from these thirteen speakers, demonstrating the inter-speaker consistency with respect to the stepwise emergence of feminine gender concord as shown in (5).[25] For ease of presentation, only prenominal vs. postnominal position are distinguished, rather than all of the possible configurations (e.g. Det + N, Quantifier + Det + N, Adj + N, Det + Adj + Noun, etc.), but even this bare-bones display suffices to demonstrate the asymmetry between prenominal and postonominal gender concord (and the general patterning of predicate adjectives with postnominal modifiers). Figure 1 plots the rate of feminine gender concord for the thirteen speakers in Table 2, demonstrating the generally higher rate of concord for prenominal vs. postnominal modifiers. Even though a couple of speakers show higher rates of feminine gender concord for postnominal modifiers, none produced combinations that deviate from the pattern in (5).

Speakers 1 through 6 and speaker 8 are the most fluent speakers of Afro-Bolivian Spanish known to me. All are also capable of speaking modern Spanish with full gender concord. Speaker 3 (JA) now lives in La Paz, and speaks exclusively in

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24. Gender concord in determiners may conceivably be aided by the fact that the traditional dialect has largely retained the etymological Spanish definite articles *el* (masculine) and *la* (feminine), even in the absence of any gender concord. The relative tenacity of gender concord on the determiners (and to a lesser extent on other prenominal modifiers) tentatively points to the nexus between the determiner and the head noun, i.e. between D° and N, as the source of gender concord in extended DP structures.

25. Instances of Spanish singular definite articles were not tabulated, since Afro-Bolivian Spanish sometimes presents fossilized instances of the patrimonial Spanish definite articles *el* (masc.) and *la* (fem.).

Table 2. Rate (%) of (feminine) gender agreement in traditional Afro-Bolivian Spanish

Speaker	A	B	C	D	Community	Proficiency
1 FB	4	5.5	0	0	S. Joaquín	fluent
2 RB	8.5	7	13	0	Mururata	fluent
3 JA	9.5	10	5.5	0	Dorado Chico	fluent
4 JB	10	6.5	12.5	7	Chijchipa	fluent
5 JT	13.5	13.5	14	0	Mururata	fluent
6 AP	14	14	14.5	12	Mururata	fluent
7 FB2	14	22	4.5	0	Sta. Bárbara	vestigial
8 CP	18	23.5	6	0	Chijchipa	fluent
10 PR	20	22.5	10	0	Mururata	vestigial
9 MB	20.5	25	12.5	0	Tocaña	vestigial
11 IT	38.5	39	37.5	0	Dorado Chico	vestigial
12 AP2	44	57	12	0	Tocaña	vestigial
13 EM	49	57	23	0	Tocaña	vestigial
ENTIRE CORPUS	**207/941 (22%)**	**180/688 (26%)**	**27/253 (11%)**	**6/115 (5%)**		

A: total rate of gender concord
B: gender concord on prenominal modifiers, including quantifiers
C: gender concord on postnominal modifiers, incl. predicate adjectives
D: gender concord on predicate adjectives

modern Spanish except when visiting Afro-Bolivians in the Yungas communities. Speaker 8 (CP) now lives in Coroico and has only occasional contact with traditional Afro-Bolivian speakers. Speakers 7, 9, and 10 are elderly and according to other community members, once spoke the traditional dialect fluently; in the interviews that provided the data for Table 2 these speakers were attempting to 'dust off' the traditional dialect, but were unable to avoid at least some gender concord, always favoring the leftmost positions within the phrase. Speakers 11–13 also claimed to once have spoken the traditional dialect fluently, a claim supported by friends and neighbors, but had expressed some negative attitudes towards the traditional dialect, asserting themselves to be more 'civilized' nowadays. Even under gentle encouragement to speak in a fashion which they were reassured was an important component of Afro-Bolivian identity, they still produced considerable gender concord, strongly favoring prenominal positions. Taken together, the data in Tables 1–2 and Figure 1 confirm that gender concord is not a simple all-or-nothing affair, nor can it be fully accounted for by surface-level linear parallelism.
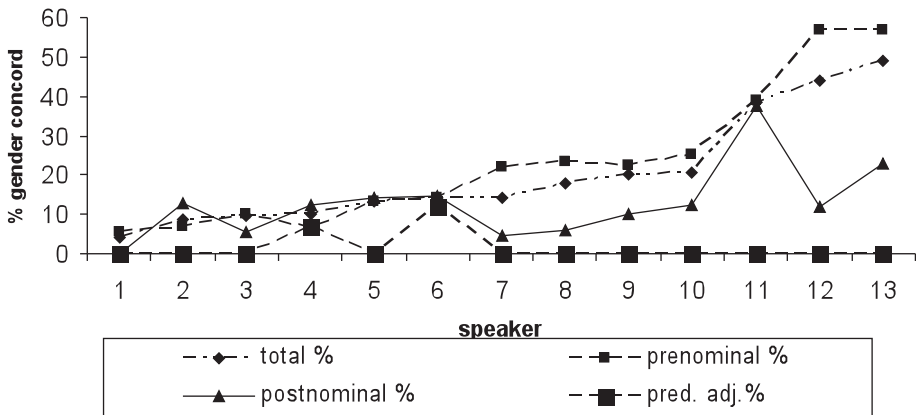
Figure 1. Feminine gender concord by position, traditional Afro-Bolivian Spanish

8.   Number concord (plural marking) in the Afro-Bolivian DP

As can be seen from some of the examples in the preceding section, morphological marking of plural is partially independent of gender concord in the Afro-Bolivian DP. Among all the Afro-Bolivians represented in the present corpus, plural marking appears before gender concord in the approximation to modern Spanish, i.e. there are speakers who produce at least some modern Spanish plural marking with final /-s/ but who exhibit little or no gender concord. The absence of the plural marker /-s/ is not equated with the lack of any plural marking, however, since nominal plural can be marked in the basilectal varieties by *lu* (from the Spanish masculine plural definite article *los*). *Lu* not only serves as a definite article, as in *lu mujé* 'the women', but (in the Mururata, Chijchipa and Tocaña sub-dialect) also combines with demonstratives and possessives to indicate plural, as in *eje lu mujé* 'those women' and *mi lu huahua* 'my children'. The transition from basilectal Afro-Bolivian Spanish to modern Spanish entails the gradual replacement of one plural-marking system (involving only *lu*) by another (marking all elements of the DP by final /-s/). First to disappear is the invariant marker *lu*. Together with *lu* disappear analytical plural demonstratives of the sort *eje lu* and possessives based on *mi lu, su lu*, etc. The absence of *lu* coincides with the beginnings of plural marking with final /-s/,[26] starting with determiners; the genderless hybrid definite article *lus* occurs frequently at this stage. The plural marker *lu* never co-occurs in the same phrase with plural marking with final /-s/; the entire corpus only contains a single example of this configuration, *lu primos* 'the cousins'.

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26. In the case of nouns and adjectives ending in a consonant (and for those very few items ending in a stressed vowel), the plural suffix is /-es/.

Once plural marking by final /-s/ begins to appear, Afro-Bolivian Spanish ex-hibits an apparent rightward movement of plural marking: the plural marker /-s/ first appears on the initial element of plural DPs (usually a determiner), then on prenominal adjectives, and finally on postnominal adjectives and predicate ad-jectives, substantially duplicating the rightward spread of gender concord in the Afro-Bolivian DP. An exception to this tendency is the behavior of quantifiers such as *todo* 'all', almost always occurring in first position, and which rarely exhibit plural marking with /-s/ in any variety of the traditional dialect. Never found in the corpus are examples where a zero plural marker is followed in the same DP by an overt plural marker: examples like {*Det- Ø … N-S} or {*Det-Ø … N-Ø … Adj-S} do not occur:[27] there are no observed configurations such as **esa hierbas* for *esas hierbas* 'those herbs' or *mucho hombre altos* for *muchos hombres altos* 'many tall men'.[28] Examples of Afro-Bolivian stripped plural DPs are:

(28) a.   en idioma   antigo di mis   [abuelo]
           in language old.M.S of my.PL   grandfather
      b.   [abuelos]
            grandfather.PL
           'in the old language of my grandparents'

(29) a.   los   [huahua joven]
           DET.M.PL child   young.s
      b.   [huahuas jóvenes'
            child.PL   young.PL
           'the young children'

(30) a.   con personas [mayó]
           with person.PL older.s

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27. Epiphenomenally these 'stripped plurals' are similar to those found in vernacular Brazilian Portuguese, where stripped plurals and other forms of variable plural marking are widespread and have been extensively studied (e.g. Scherre 1998a, 1998b, 1998c, 1998d, 2001), Guy (1981). Vernacular Angolan Portuguese exhibits similar stripped and variable plural marking, although the details are not as well known; Lipski (2008b) offers some preliminary observations. Simi-lar configurations are found in the restructured Portuguese of the Tongas, on São Tomé (Bax-ter 2004).The Afro-Ecuadoran dialects of the Chota Valley also show a consistent pattern of stripped plural marking (Lipski 2010).

28. A JPCL reviewer points out that Cape Verde Crioulo can exhibit combinations such as *nhas mininu* and *nha mininus* 'my children'. This would suggest that a structural solution such as proposed in the present study for Afro-Bolivian Spanish will not account for the Crioulo data, which while also demonstrating single exponence of plural marking, evidently embodies differ-ent options.

    b.   [mayores]
       older.PL
      'with older people'

(31) a.   Los   [invitao]   tiene   que i
         DET.M.PL invited.M.s have.3.s COMP go
    b.   [invitados]
       invited.M.PL
      'the guests have to go'

(32) a.   sus   [mujé]   lloraba
         their.PL woman.s cried.3.s
    b.   [mujeres]
       woman.PL
      'their women cried'

(33) a.   era unus   [granitu chiquititu] cumu ojito
         was DET.M.PL grain.s small.M.s like eye.DIM
    b.   [granitos chiquititos]
       grain.PL small.M.PL
      'they were some little bumps like little eyes' (Angola Maconde 2008a: 72)

The next step towards full plural marking occurs when other prenominal modi-
fiers also carry the plural marker, while the head noun remains invariant:

(38) a.   disi qui   mi mamá tenía huahuita, hartos   [hijito]
         say COMP my mother had child.s   many.M.PL child.DIM.s
    b.   hijitos]
       child.DIM.PL
      'they say that my mother had kids, many children'

(39) a.   lindos   [matrimonio]
         beautiful.M.PL wedding.s
    b.   [matrimonios]
       wedding.PL
      'beautiful weddings'

In the next approximation to full plural marking, prenominal modifiers and head
nouns carry the plural marker, but postnominal adjectives and predicate adjec-
tives remain in the unmarked (singular) form:

(40) a.   con personas [mayó] pueh
         with person.PL older.s then
    b.   [mayores]
       older.PL
      'with older people, then'

(41) a.   Había que   llevá personas [responsable]
           had   comp take person.pl responsible.s
      b.   [responsables]
            responsible.pl
           'It was necessary to take responsible people'

As in the case of gender concord, the emergence of plural marking with /-s/ in the Afro-Bolivian DP follows a basic step-wise pattern:

(42)   complete lack of plural marking >>
       plural marking only on determiners (except quantifiers) >>
       plural marking on all prenominal modifiers (except quantifiers) >>
       plural marking on all prenominal modifiers and on head noun >>
       plural marking on all pronominal and postnominal modifiers, and on head
       noun (as well as on predicate adjectives)

Table 3 provides data on 1850 tokens representing plural DPs and predicate nominatives and adjective, taken from the same corpus used in the study of gender agreement. As with feminine gender marking, the relationships in (42) hold strictly across individual utterances; of the 1850 tokens, only the aforementioned *lu primos* 'the cousins' deviates from the pattern of successive plural marking in (42). The table includes the results of several VARBRUL analyses on the plural tokens.

Table 3. Plural marking with /-s/ in traditional Afro-Bolivian DP

Grammatical category	% plural marking with /-s/ / total N	VARBRUL factor weight for plural marking with /-s/
Determiner	78% / 824	.67
Quantifier	15.5% /45	.03
Prenominal adjective	85.5% / 41	.77
Head noun	24% / 853	.40
Postnominal adjective	16% / 57	.18
Predicate adjective	16.5% / 30	.11
Range		.74
Plural marked elsewhere		
none	70.5% / 717	.35
once	35% / 851	.61
twice	54.5% /55	.87
numeral	33.5% / 172	.46
/-s/ + numeral	22.5% /55	.48
Range		.52

Table 3. (continued)

Grammatical category	% plural marking with /-s/ / total N	VARBRUL factor weight for plural marking with /-s/
Position in string		
first	75.5% / 903	.77
second	23.5% / 822	.24
third	22.5% / 125	.25
RANGE		.52
Input: .492		Log likelihood: −927.82
N = 1850		Significance = .000
Preceding string		
string initial	75.5% / 903	not calculated
S___	23% / 635	.50
N___	13.5% / 127	.34
Ø___	53% / 51	.79
SS___	43.5% / 23	.72
SØ___	0% / 25	knockout
SN___	14.5% / 49	.36
ØS___	38.5% / 31	.68
ØØ___	33.5% / 6	.62
RANGE		.45
Input: .232		Log likelihood: −489.19
N = 922		Significance: .000
Position + category		
non-head; 1st position	75% / 871	.76
preposed non-head; 2nd position	59% / 56	.61
head noun, 1st position	86.5% / 30	.87
head noun, 2nd position	21% / 742	.22
head noun, 3rd + positions	27% / 81	.29
postposed non-head, 2nd position	12.5% / 24	.13
postposed non-head, 3rd + positions	15% / 40	.16
RANGE:		.74
Input: .483		Log likelihood: −998.12
N = 1847		Significance = .000

Coded factors included grammatical category, position in the string, preceding string, whether and how plural was marked elsewhere in the phrase, and the combination of grammatical category and position. These data confirm the relative prominence of leftmost positions (except for quantifiers) for plural marking with /-s/, as well as the low probability that postnominal modifiers and predicate nominatives/adjectives will be marked with plural /-s/. As with vernacular Brazilian Portuguese, there is a strong tendency to mark plural /-s/ only once in a plural DP, and in first position; quantifiers behave exceptionally in this regard, since they nearly always occur as the first element of DPs, and yet rarely show plural marking.[29] The overall rate of Afro-Bolivian plural marking with /s-/ is 49%, and the rate of plural marking with /-s/ not including string-initial position is 23.5%, considerably lower than the 53% rate of plural marking with /-s/ (excluding initial position) in vernacular Brazilian Portuguese (Scherre 2001:96), and consistent with the most extreme VBP idiolects. Despite the small token set (inevitable due to the very small number of fluent speakers of the traditional dialect), the principal patterns of plural marking can be observed. The Afro-Bolivian relative factor weights coincide with the VBP data in terms of the proportionately increasing contribution of the environments SS___, S___, and SØ___ to plural marking.

Determiners in first position show a 79% rate of plural marking with /-s/, while quantifiers show a 16% rate in first position, and fronted predicate nominatives/adjectives mark plural /-s/ at a rate of only 17%. That the behavior of predicate nominatives is effectively independent of position is suggested by the fact that plural /-s/ is marked 14% of the time when predicate nominatives occur in second position, and 20% in third position. The only other environment favoring retention of plural /-s/ is for nouns in initial position (N = 30), with a plural marking rate of 87%. Even in this small sample, there is a difference between plural marking with /-s/ in first-position nouns when plural is marked elsewhere in the DP (67%) and when there is no other plural marking in the DP (88%).

Although linear syntagmatic patterns do not always correlate with marking plural /-s/, once plural is marked once or more, the likelihood of subsequent plural marking increases, as shown by the respective factor weights. This signals the threshold between the traditional dialect, with minimally marked plural, and contemporary Spanish, with multiple plural concord. The apparent rightward spread of plural marking with /-s/ (excluding quantifiers) is therefore not simply the result of linear parallelism, i.e. the gradual accumulation of plural markers tipping the balance in favor of plural marking on following elements. Nor does the emergence

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29. Poplack (1980a, 1980b) found somewhat similar patterns in Puerto Rican Spanish, with the complication that PRS exhibits weakening and deletion of /-s/ in coda position. Scherre (2001) compares the Brazilian Portuguese and Puerto Rican Spanish data.

of plural marking with /-s/ in Afro-Bolivian Spanish parallel first-language ac-
quisition. Spanish plural marking with /-s/ is fully acquired well before the age
of three years (e.g. Lleó 2006; Marrero & Aguirre 2003), with no evidence of an
intermediate stage in which only articles but not head nouns are marked with /-s/.
Marrero & Aguirre (2003) observed a tendency for plural /-s/ to be marked only
once in multi-word DPs, but not necessarily on the determiner: 'sometimes the
relevant morpheme is on the noun, and sometimes on the determiner' (Marrero &
Aguirre 2003: 286). Lleó (2006) was unable to replicate this particular observation,
but found only the gradual emergence of plural marking. All the researchers con-
firm that plural marking on adjectives and other constituents emerges after plural
marking on nouns and articles. This in turn suggests a grammatical motivation for
the rightward spread of plural marking.

Table 4. Rate (%) of plural marking with /-s/ in Afro-Bolivian Spanish

Speaker	A	B	C	D	E	F	Community	Proficiency
2 RB	17	25	21.7	6.5	0	0	Mururata	fluent
6 AP	24	23	75	23	0	0	Mururata	fluent
7 CP	33	88.5	0	20.5	0	0	Chijchipa	fluent
16 JZ	34.5	50	100	33	0	0	Chijchipa	fluent
4 JB	37	75	9	0	0	0	Chijchipa	fluent
10 PR	40.5	87	75	11	40	0	Mururata	vestigial
5 JT	43.5	82	67	2.5	0	0	Mururata	fluent
17 PB	44.5	83	0	16	0	33	Chijchipa	young learner
3 JA	46.5	92	33	6	20	25	Dorado Chico	fluent
8 FB2	47.5	95.5	0	16	0	0	Sta. Bárbara	vestigial
11 IT	51.5	100	100	18	0	0	Dorado Chico	vestigial
1 FB	52	98	93	12	0	0	S. Joaquín	fluent
14 VM	54.5	94	100	14	75	0	Dorado Chico	vestigial
12 AP2	59.5	100	87.5	28	0	0	Tocaña	vestigial
9 MB	66	100	0	48	0	0	Tocaña	vestigial
13 EM	70	97	39	65	17	20	Tocaña	vestigial
15 ML	76.5	100	100	61	0	0	Coscoma	vestigial
Entire corpus	**49%**	**78%**	**49%**	**24%**	**16%**	**17%**		

A: Total plural marking
B: plural marking on determiners
C: plural marking on all prenominal modifiers
D: plural marking on head noun
E: plural marking on postnominal modifiers
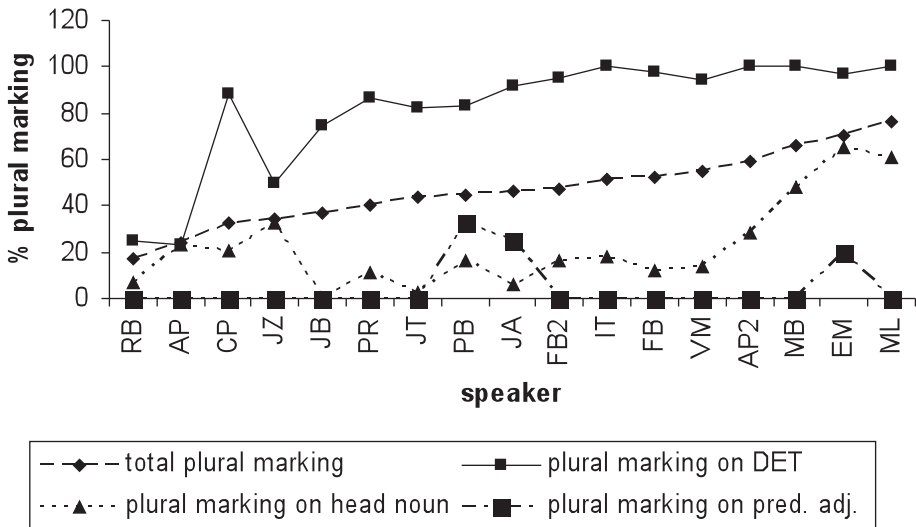F: plural marking on predicate adjective

Figure 2. Afro-Bolivian plural marking by category

Table 4 provides data on plural marking for the same speakers of tradition-
al Afro-Bolivian Spanish represented in Table 2, with the addition of four more
speakers for whom sufficient tokens were available for plural marking.[30] The
speakers are identified with the same designations as in Table 2, but are ranked
according to overall rate of plural marking with /-s/. The expanded group includes
the only younger speaker determined to be proficient in the traditional dialect
(speaker 17, PB). Speakers 14–16 are older speakers, who according to their own
assertions and comments by neighbors also once spoke the traditional dialect on a
regular basis, and presumably with greater consistency. Figure 2 demonstrates the
consistent differences in plural marking across grammatical categories for these
seventeen speakers, essentially replicating the pattern for feminine gender con-
cord in Figure 1. Only the young speaker, number 17 (PB), and the speaker who
lives in La Paz (JA, number 3) deviate from the pattern in (42) by plural marking
predicate adjectives at a higher rate than on head nouns.

9. The greater tenacity of number marking over gender marking

In the traditional Afro-Bolivian dialect — and, judging by published examples,
also in Helvécia Portuguese — gender agreement is suspended more frequently

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30. These speakers were not included in the tabulation of feminine gender concord because
they did not produce enough tokens of potential feminine gender marking to yield a meaninfgul
quantitative analysis.

than number agreement, and in an implicational fashion: whereas an Afro-Bolivian speaker may produce combinations such as *esos hierba [esas hierbas]* 'those herbs', *algunos enfermedá [algunas enfermedades]* 'some illnesses', *luh persona mayó [las personas mayores]* 'the adults', in which number is marked at least once but in which there is no gender marking, there are no observed configurations such as *esa hierba 'that herb' for plural *esas hierbas* 'those herbs'. In the corpus of feminine gender concord tokens, there are 193 instances of feminine plural DPs or predicate adjectives marked with plural /-s/; of these 50 (26%) also exhibit feminine gender concord. There are 10 tokens of feminine plural DPs or predicate adjectives not marked with plural /-s/, and none shows feminine gender concord. Since this would produce a knockout, VARBRUL cannot be applied to demonstrate the correlation between the appearance of plural marking with /-s/ and feminine gender concord. In the corpus of plural tokens, there are 530 tokens in which feminine gender concord could occur. Of the 188 tokens in which some feminine gender concord occurs, 136 (72%) occur in the presence of plurals marked with /-s/; of the 342 plural tokens in which feminine gender concord has been suspended, 198 (58%) coincide with the lack of plural marking with /-s/. Some instances of Afro-Bolivian DPs that show at least some number agreement, but no gender concord are:

(43) a. [esos   fiesta]
          that.M.PL party.s
      b. [esas   fiestas]
          that.F.PL party.PL
          'those parties'

(44) a. Huahua iba recogiendo [esus   moneda]
          child.s go picking-up that.M.PL coin.s
      b. [esas   monedas]
          that.F.PL coin.PL
          'The kids would pick up those coins'

(45) a. Siempre contaba [algunos   cosa]
          always told.3.s some.M.PL thing.s
      b. [algunas   cosas]
          some.F.PL thing.PL
          '[He] always told some things'

(46) a. [Algunus   mujé]   siempre sacaban sus   coplia
          some.M.PL woman.s always   took.3.PL their.PL verse.s
      b. [algunas   mujeres]
          some.F.PL woman.PL
          'Some women would recite verses'

(47) a. Yo también tengo   algunos   foto
          I   also   have.1.s some.M.PL photograph.s
      b. [algunas   fotos]
           some.F.PL photograph.PL
          'I also have some photographs'

The Afro-Bolivian data indicate that plural marking is proportionally more fre-
quent than gender marking, and also suggest that feminine gender concord
emerges after plural marking with /-s/ on the determiner. The corpus contains 77
tokens of determiners in feminine plural DPs that exhibit gender concord; all of
the determiners are marked for plural /-s/. There are also 165 tokens of feminine
plural DPs in which gender concord is not present; only 96 tokens (56%) show
plural marking with /-s/. The Afro-Bolivian corpus exhibits no examples of gender
concord in plural DPs in which plural marking is only on the determiner and not
on the head noun. The emergence of plural marking with /-s/ on the determiner
evidently signals the threshold between the inflectionless traditional Afro-Bolivi-
an DP and the full Spanish DP, with gender and number concord. This threshold
is not crossed in a single step, since there remain instances of full plural marking
across the DP but only partial gender concord:

(48) a. las   mujeres   [altos]
          DET.F.PL woman.PL   tall.M.PL
      b. [altas]
           tall.F.PL
          'the tall women'

(49) a. esos   son las   medicinas   [caseros]
          that.M.PL are DET.F.PL medicine.PL   homemade.M.PL
      b. [caseras]
           homemade.F.PL
          'those are the home remedies'

As an additional demonstration of the correlation between feminine gender con-
cord and plural marking with /-s/, the plural tokens were coded for the factor
of concomitant feminine gender concord. The possible factors were no possible
feminine gender concord; feminine gender concord possible but not realized; and
feminine gender concord realized. Table 5 shows the results for those plural DPs
for which feminine gender concord was possible.[31] VARBRUL selected presence/

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31. When VARBRUL was run on all plural tokens irrespective of the possibility of feminine gen-
der concord, the factor 'no feminine gender concord possible' yielded a factor weight of .49, i.e.
essentially irrelevant to plural marking, while the factor weights for present or missing feminine
gender concord were identical to those reported in Table 5.

Table 5. Afro-Bolivian Spanish; correlation between feminine gender concord and plural marking with /-s/

Factor	% plural marking with /-s/ / total N	VARBRUL factor weight for plural marking with /-s/
Feminine gender concord possible but missing	42% (342)	.36
Feminine gender concord realized	73% (188)	.74
RANGE		.38
Input: .54		Log likelihood: −286.054
N = 530		Significance = .000
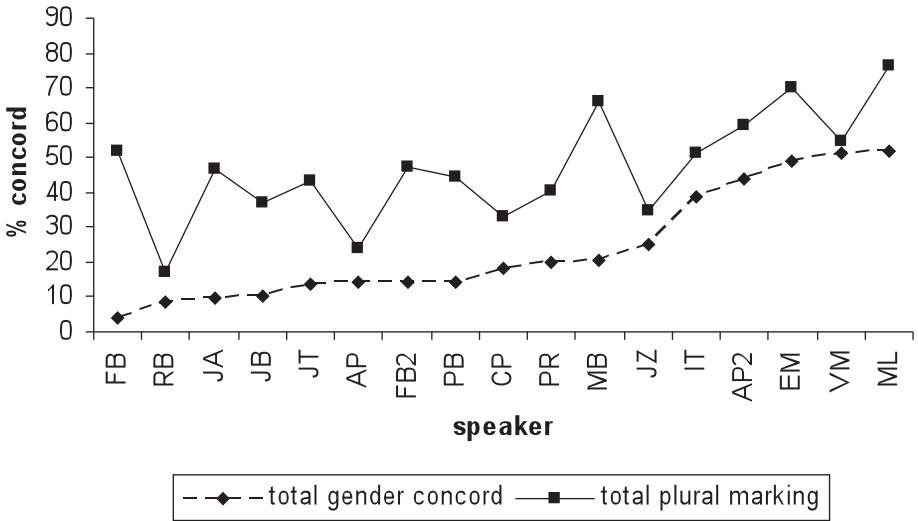
Figure 3. Afro-Bolivian gender concord vs. plural marking, ranked by rate of gender concord

absence of feminine gender concord as significant in correlating plural marking with /-s/ and feminine gender concord ($p = .000$), with a factor weight of .74 for feminine gender concord and .36 when gender concord does not co-occur with plural marking.[32] The correlation between feminine gender concord and plural marking with /-s/ is further supported by comparing the respective rates of

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32. The tokens of feminine gender concord were also coded for whether or not plural marking with /-s/ co-occurred in the same DP; the factors were singular DP, plural DP with no plural /-s/, plural DP with plural /-s/. VARBRUL did not select the factor of concomitant plural marking with /-s/ as significant, possibly because of the small total N (228), as well as the fact that 89% (202) of the tokens representing plural DPs were marked with plural /-s/, while only 26 tokens of plural DPs lacked plural /-s/. However, the rate of feminine gender concord in plural
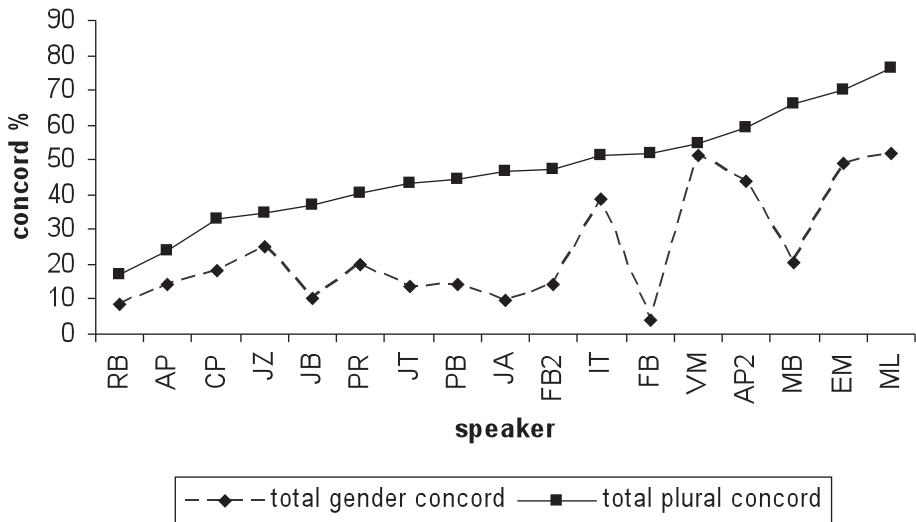
Figure 4. Afro-Bolivian gender concord vs. plural marking, ranked by rate of plural marking

feminine gender concord and plural marking with /-s/ for the same speakers, as shown in Figure 3 and Figure 4.[33]

From the perspective of decreolization, this implies that number features emerge before gender features, and that in decreolization number features spread to extended projections before gender features. This is not surprising in view of the fact that grammatical number marks a semantically prominent distinction (one versus many), whereas Ibero-Romance gender concordance is almost always semantically empty. Even with semantically feminine nouns such as *mujer* 'women', *yegua* 'mare', *gallina* 'hen', the feminine gender markers attached to determiners and adjectives in the DP serve no semantic function.[34]

Experimental studies (e.g. Vigliocco & Franck 1999) demonstrate that processing of grammatical gender in the absence of conceptual/biological information

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DPs marked with plural /-s/ is 24.5%, slightly higher than the 22% total rate of Afro-Bolivian feminine gender marking.

33. Although the four additional speakers presented in Table 4 did not produce enough tokens of feminine gender concord to provide a meaningful breakdown by grammatical category, overall rates of feminine gender concord were calculated for these speakers and included in Figures 3 and 4.

34. Only in cases of epicene gender — very rare in Spanish and even less frequent in the daily discourse of the Bolivian Yungas and almost always identifiable through other discourse markers — does grammatical gender marking on determiners and adjectives serve to distinguish the gender of the noun: *el/la agente* 'the agent (m./f.), *el/la estudiante* 'the student (m./f.).

about the sex of the object is more costly: the processing of gender in *la casa* 'the house' requires more processing time than for *la mujer* 'the woman'.[35] Evidence from impaired speech (e.g. Badecker et al. 1995) confirms that grammatical gender information is stored and retrieved separately from the lexical entries for the corresponding nouns. The increased robustness of number marking over gender marking has been documented cross-linguistically in first- and second-language acquisition as well as in language impairments (e.g. Antón-Méndez et al. 2002; Carminati 2005, De Vincenzi 1999; Di Domenico & De Vincenzi 1999; Eberhard 1997; Igoa et al. 1999), and the Afro-Bolivian data bear out this hierarchy. There is also cross-linguistic experimental evidence that production of grammatical gender in bare nouns requires additional processing time (e.g. Cubelli et al. 2005 for Italian; also Schriefers & Jescheniak 1999, 2002). Grammatical gender information is selected by the speaker whether or not 'needed' for the utterance about to be produced. This occurs independently of the phonological form of the word, i.e. whether or not one of the canonical *-o/-a* endings found in Spanish, Portuguese, and Italian is present. Cubelli et al. (2005:52) analyze this result as 'reflecting a competitive lexical selection due to an abstract grammatical gender feature rather than to the morphological or phonological similarity of [the relevant nouns]'. In addition (p. 53) '[…] to produce a given noun, the corresponding lexical-semantic and lexical-syntactic representations, specifying meaning and grammatical properties respectively, have to be selected before accessing its phonological form […] the selection of semantic and grammatical features is conducted independently and […] the selection of the lexical form of a given noun is achieved only when competition at both semantic and syntactic levels has been resolved'. They postulate that the semantic information is selected before the syntactic information.

By extension of the increased processing required for grammatical gender, the absence of the grammatical category {gender} produces a more efficient ('faster') processing strategy. De Vincenzi (1999) provides Italian experimental data indicating that 'number information is used in an earlier stage of antecedents identification (where syntactic information is used), while gender information is used at a later stage (where lexical and semantic information are used)' (p. 551). She also suggests that while {number} heads an autonomous syntactic projection, {gender} never does so, not even in the case of variable gender. Caramazza et al. (2001:223) provide cross-linguistic evidence that production and processing of determiners is complicated by the necessity to retrieve gender and number information:

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35. There are dissenting viewpoints, however. For example Domínguez et al. (1999) report experimental findings that suggest that in Spanish 'gender information is accessed more straightforwardly than number in an inflected word' (p. 495). See also De Vicenzi 1999, Di Domenico & De Vicenzi 1999).

'determiner selection in a given language occurs at the same point for *all* determiners, even though some of them could be selected earlier. In the case of Spanish, even though masculine determiners could be selected early, they are nevertheless selected at the same late point as feminine determiners'. Much of the data on the acquisition of grammatical gender in L2 Italian presented in Chini (1995) reinforces these observations. Basilectal Afro-Yungueño speech reduces this complexity by effectively containing no gender marking.[36]

The processing of grammatical number is not symmetric; there is experimental evidence suggesting that whereas plural is a semantically and syntactically marked category, words lacking a plural affix are not semantically singular but rather UN-MARKED for number (e.g. Berent et al. 2005). This hypothesis is supported by the Afro-Yungueño preference for invariant plurals of the sort *(lu) mujé* 'the women*',* *(lu) peón* 'the peasants' even in the least basilectal forms of the dialect. Rather than representing a mismatch between semantic and syntactic features — a configuration that should augment rather than reduce production and processing difficulty — the bare plural is an unmarked form, whose plural reference can easily be extracted from the preceding plural determiner or from the surrounding discourse.

Although the Afro-Bolivian data reflect native or near-native competence among adult speakers, the asymmetry between the fully inflected (for gender and number concord) modern Spanish DP and the inflectionless Afro-Bolivian DP shows parallels with first-language developmental pathways. Liceras et al. (2005) propose the 'grammatical features spellout hypothesis', according to which during bilingual language acquisition, the functional category DET will be projected from the language which has the broadest array of uninterpretable features. If both languages have a similar distribution of uninterpretable features, neither of the languages will emerge as the primary choice. The authors illustrate their hypothesis with data from the speech of several young children who were simultaneously acquiring Spanish and English. In Spanish determiners the features {gender} and {number} are uninterpretable, whereas in English nouns only the feature {number} is found; English determiners do not inflect for either number or gender. Therefore the authors predict that the combination of SPANISH DETERMINER + ENGLISH NOUN will be strongly preferred over the opposite combination of ENGLISH

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36. In Spanish child language, however, grammatical gender usually emerges before grammatical number (plural marking), although this does not imply that gender marking has been acquired, much less multiple concord, which does not emerge until later. By age three, however, normal Spanish-speaking children have acquired a fairly robust system of gender and number concord (e.g. Aparici et al. 1996, Brisk 1974, 1976; Clark 1985; Lleó 2006; Marrero & Aguirre 2003; Pérez Pereira 1989, 1990, 1991). Thus the behavior of gender and number marking in Afro-Bolivian Spanish cannot be convincingly derived from an arrested developmental stage during normal language acquisition.

DETERMINER + SPANISH NOUN. In their data this prediction was confirmed at the rate of 98%; *la house* as opposed to *the casa*.[37]

According to the 'grammatical features spellout hypothesis', in a bilingual standoff between the traditional Afro-Bolivian dialect (with invariant determiners and adjectives) and non-creole Spanish (with both gender and number inflection), the latter language would be predicted to prevail among children who simultaneously acquire both languages and who switch between them. This prediction cannot be verified directly, since Afro-Bolivian children are no longer acquiring the traditional dialect as an L1, but it is consistent with the behavior of vestigial speakers of the dialect. The basilectal dialect has no gender inflection, but nouns in the singular are sometimes accompanied by the etymologically correct Spanish articles *el* and *la* (although the historically feminine *la* is somewhat overextended). This indicates that the functional head DET is present, although the feature {gender} is not yet activated. There is also no inflection for {number} at the basilectal level, but the plural article *lu* (when it occurs) is distinguished from the singular articles *el/la*; plural possessive combinations like *mi lu* 'my (pl.), *nustru lu* 'our (pl.), etc. (found only in the Mururata/Chijchipa subdialect) also provide for an overt singular-plural distinction. In other words, both gender and number marking exist in embryonic form in the basilect, although not instantiated on determiners (other than the fossilized definite articles), adjectives, and nouns, i.e. through a feature-checking mechanism. When juxtaposed with the modern Spanish DP, in which full gender and number marking is present, the 'grammatical features spellout hypothesis' predicts that the more fully inflected Spanish determiners and adjectives will carry the day, and with the exception of a few individuals who are completely proficient in both the traditional Afro-Bolivian dialect and contemporary Spanish and who can totally suppress one while speaking the other, this is the case. To the extent that the 'grammatical features spellout hypothesis' is valid for adult bilingualism and not only for child bilingual acquisition, the preference for the broader array of features in the Spanish DP over the Afro-Bolivian DP even during attempts to speak only the basilect acquires a more robust explanation. While gender and number marking are subliminally present in the basilectal Afro-Bolivian determiners, the same does not hold for pre- or postnominal adjectives, which in the traditional dialect always take the etymologically masculine singular form.

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37. Powers (1999, cited in Cantone 2007:49) postulates the 'no functional projection hypothesis', which predicts that as soon as functional elements appear, the relevant phrase structure can be postulated, but not beforehand. This follows from the minimalist viewpoint that syntactic structures are projected from lexical items.

10. The syntactic basis for 'creeping' number and gender concord: An overview of proposals

The systematic progression — or regression — of gender and number concord in essentially linear rightward fashion across the Afro-Bolivian DP represents a challenge to most syntactic theories. Similar left-to-right effects for plural marking have been observed for vernacular Brazilian Portuguese, e.g. by Scherre (1998a, 1998b, 1998c, 1998d, 2001); left-to-right gender concord has only been observed, and minimally, in Helvécia restructured Portuguese. While variationist studies have verified the successive rightward expansion of plural marking, no systematic explanation other than the cumulative effect of repetition has been offered. The morphological marking of plural only once in a DP is common to many languages. Still to be accounted for is the attachment of the plural /-s/ on the leftmost available anchoring point in the DP, a phenomenon that is logically independent of the single exponence of plurality.[38]

The variationist analysis of Afro-Bolivian gender and number marking show that whereas some linear parallelism effects may be present, presence or absence of gender and number marking is most highly correlated with grammatical function. Moreover, gender and number marking present essentially the same hierarchy of grammatical categories, with determiners having the highest rate of overt morphological marking, and quantifiers and predicate adjectives the lowest. Position within the string has little effect on overt morphological marking, as shown in Tables 6 and 7; the only case in which linear position is strongly correlated with overt marking is in the case of plural marking on head nouns, which is strongly favored in first position. This points to a fundamentally syntactic basis for variable gender and plural marking, i.e. an approach based on underlying grammatical structures.[39]

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38. The same holds for single vs. multiple exponence of gender in Afro-Bolivian Spanish. From a discourse perspective, front-loading of semantic features is a common strategy, and one that can be readily grasped by speakers of a wide variety of languages. The single exponence of plural can be handled within optimality theory by the constraint **SinglyExpressed (plural)** (in the spirit of Stemberger 2001), which in the case of stripped plural DPs would be ranked above the general constraint **NoFeat**, which disallows morphological inflection. Lipski (2006) offers an initial attempt to explore this approach.

39. The Afro-Bolivian data do not support the possibility that rate of overt morphological marking is associated directly with grammatical function, e.g. that determiners, adjectives, etc. have a fixed rate of agreement for any given speaker. This is shown in the variable behavior of head nouns with respect to plural marking, and the fact that the same adjectives can appear prenominally, postnominally, or as predicate adjectives (the latter in more than one position within the string), and rates of overt morphological marking vary consistently according to the grammatical function assigned to the adjective in each instance.

Table 6. Rate (%) of Afro-Bolivian feminine gender marking (N = 941)

	1st position	2nd position	3rd position
determiner	26	29	–
quantifier	6	0	–
prenominal adj.	33	50	–
postnominal adj	–	18	13
predicate adj	7	0	3

Table 7. Rate (%) of Afro-Bolivian plural marking with /-s/ (n = 1850)

	1st position	2nd position	3rd position
determiner	79	59	–
quantifier	16	0	–
prenominal adj.	94	67	–
head noun	87	21	27
postnominal adj.	–	13	12
predicate adj.	17	14	20

The Afro-Bolivian data demonstrate that number and gender concord within the DP is not a simple all-or-nothing affair. DP-internal agreement in Ibero-Romance, under the traditional term *concord*, involves multiple manifestations of a morpheme on every available element. Among the proposals that have been put forward, there is little consensus; more often than not multiple concord is simply assumed to 'happen' as an automatic consequence of whatever model of single-exponence agreement is adopted, with little attention to the exact mechanism of feature spreading. Theories of DP-internal concord cluster around two models. The first, grounded in the principles and parameters framework, is based on the analogy with subject-verb agreement, and involves a combination of spec-head agreement and head-to-head movement (e.g. Mallén 2001). The second approach, couched in the minimalist paradigm, characterizes agreement in purely configurational terms, without requirements of movement. All generative models assume a DP-internal phrase structure in which one or more Agreement nodes are postulated.[40]

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40. A number of other researchers have made similar proposals regarding the internal structure of the Ibero-Romance DP, too numerous and diverse to be reviewed here. Ouhalla (1991) and Di Domenico & De Vincenzi (1995), among others, postulate a single AGREEMENTPHRASE AgrP between the NP and the DP. Picallo (1991) posits a GENDERPHRASE GenP between the NP and NumP, since gender is expressed directly on the noun stem and plural markers are attached

Gender and number agreement between adjectives and head nouns is another feature of the Ibero-Romance DP, but is infrequently fitted into syntactic theories. Among movement-based theories, Valois (1991: 376) follows the notion that APs are generated in the [Spec, NP] position, and N-movement of the head noun to an agreement head results in the ultimate NOUN+ADJECTIVE order common to the Romance languages (Cinque 1994 and references therein). Sleeman (2002) adopts the notion that APs are generated in [Spec, NP], but postulates that agreement between attributive adjectives and head nouns comes about through theta-identification and theta-binding, a mechanism similar to the minimalist Agree but allowing for agreement into a Spec position. Knittel (2005) accepts noun movement, but proposes that the entire NP moves from within the AgrP to the Spec of a dominating FP;[41] this is based on the premise that postnominal adjectives act as predicates, with the NP as their subject. Laenzlinger (2005) makes a somewhat similar proposal for the Romance DP. Menuzzi (1994), in another N-movement analysis, analyzes postnominal adjectives as suggested by Bernstein (1991), where postnominal APs originally appear in [Spec NP]. Shlonsky (2004) proposes that the functional head containing the relevant semantic features associated with the AP moves and projects its own AgrP. None of these approaches deals with partial agreement of the sort found in Afro-Bolivian Spanish, nor with the preference for leftmost positions when gender and number marking do appear.

Within the minimalist paradigm, Chomsky (2001: 42, fn.6), mentions *Concord* as a relation similar to Agree, although 'involving Merge alone'. Sigurðsson (2002: 102) proposes, contra Chomsky's mention of Concord, that Agree reduces to Merge, and that two elements can be merged only if the relation of Agree holds between them. Multiple concord is then 'just an ordinary instance of agreement under repeated application of Merge/Agree' (2002: 146–7).[42] Carstens (2000) argues that the feature-checking mechanism proposed by Chomsky (1995) can also

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outside of gender markers. Alexiadou (2004) argues against a separate Gender Phrase in some languages. Such models assume agreement by head-movement of the N to the relevant agreement head(s). According to Grimshaw (1997, 2005: 17–23), in the DP features percolate up from the noun to the determiner. Bernstein (1993) offered the alternative suggestion of a WordMarkerPhrase, using 'word markers' in the sense of Harris (1983, 1991). Ritter (1993) in turn argues that in Romance languages, gender features reside in the functional head Num, together with the noun's number specification.

41. FP refers to a nominal agreement projection dominating the agreement projection AgrP, responsible for the strong agreement relationship between French nouns and adjectives (as used by Knittel 2005: 219; Laenzlinger 2005).

42. Similarly sketchy is the suggestion in Chomsky (2001: 42, fn. 6) that in addition to Agree 'there is presumably a similar but distinct agreement relation, Concord, involving Merge alone'.

account for multiple concord (see also Hawkins & Franceschina 2004). She also indicates that the probe-goal non-movement model of Chomsky (1998) encounters problems with DP-internal multiple concord. Carstens (2001) offers a revised definition of Agree, which allows for multiple DP-internal concord to be handled by the probe-goal relation. Agree will not delete the goal's Case feature unless the probe has an intrinsic value for structural Case, in the traditional sense. Multiple concord in *las casas rojas* 'the red houses' then operates with two applications of Agree. Like the previously described proposals, this approach provides no ready account of the sort of partial concord found in Afro-Bolivian Spanish. It would have to be stipulated, e.g. that postnominal adjectives have no interpretable features at all, as in *noticias **antiguo** [antiguas]* 'old stories', while prenominal adjectives (including some of the same adjectives than can occur postnominally) can have interpretable features. Nor is it clear how a prenominal adjective can exhibit concord for number but not for gender, as in *hartos viuda [hartas viudas]* 'many widows'. None of the minimalist approaches surveyed here can account in non-stipulative fashion for stripped plural and gender DPs, in which determiners and possibly prenominal adjectives are marked for gender and number, but in which the head noun remains invariant, as in *lindos matrimonio[s]* 'beautiful weddings', *hartos viuda [hartas viudas]* 'many widows'.

In their analysis of vernacular Brazilian Portuguese stripped plurals, Costa & Silva (2006) adopt the distributed morphology paradigm of Halle & Marantz (1993), the assertion first proposed by Enç (1991) that the determiner D links the DP to its interpretation at LF, and the belief that 'the effects of visible agreement must be interpreted as a non-unitary phenomenon' (p. 27). The fact that in vernacular Brazilian Portuguese only the D receives number marking results from the fact that in these varieties {number} is a *singleton* morpheme (in the sense of Embick & Noyer 2001), which can be instantiated at most once in the syntax. Kester & Schmitt (2007:136) similarly claim that in Brazilian Portuguese, the plural morpheme has no D-features, so that 'a different relation will obtain in order for the definite determiner to have a copy of features in Num'. In European Portuguese and nearly all varieties of Spanish, {number} is a *dissociated* morpheme, which according to Embick & Noyer (2001) is inserted following Spell-Out. Plural /-s/ is attached to the first element of the DP (usually a determiner, but sometimes a possessive, quantifier, or other prenominal adjective)[43] rather than, e.g. to

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43. The authors assert (p. 39) that in Brazilian Portuguese, in combinations involving a definite article + possessive, it is the latter that takes the single plural morpheme, resulting in combinations such as *a minhas casa* 'my houses'. Such combinations do in fact occur, but the presence of prepositions appears to have an influence, since most such combinations occur as complements of a preposition: *na minhas coisa* 'in my things' (Scherre 2001:93). Such combinations are not

the head noun itself, because the plural morpheme 'must be attached to the head responsible for establishing the link with semantic interpretation' (Costa & Silva (2006: 39).[44] While handling the canonical dichotomy between full plural marking (European Portuguese) and plural marking only on the determiner (vernacular Brazilian Portuguese), this model cannot directly account for the progressive rightward spread of pluralization (at times within a single idiolect), or the fact that multiple plural marking can occur in prenominal position while still excluding plural marking in postnominal adjectives.

11. Afro-Bolivian decreolization: Agreement spread as successive activation of functional heads

The preceding synopses reveal that partial agreement such as Afro-Bolivian stripped plurals, gender marking only on the determiner, and the progressive rightward spread of concord pose challenges to both movement-based and feature-checking analyses. It is not the goal of the present article to offer a detailed syntactic model of gender and number concord, but the Afro-Bolivian data suggest that some relatively minor modifications of the proposals synthesized above will adequately account for patterns of variable concord, in a fashion that presents decreolization of gender and number marking as the successive instantiation of ever more complex grammatical systems. In proposing a model that allows for the sort of stepwise gender and number concord found in traditional Afro-Bolivian Spanish, the following assumptions will be made:[45]

1. It is assumed that a full DP is projected in basilectal Afro-Bolivian Spanish, although during the formative period of this dialect (several centuries ago) the original L2 Spanish-based pidgin spoken by Africans may not have contained functional projections. The non-creole Spanish DP is assumed to contain both a NumP and a GenP. However, not all DP-internal functional heads

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possible in Afro-Bolivian Spanish, since modern Spanish does not permit determiner + possessive combinations (which were possible in old Spanish).

44. The authors do note (pp. 38–9) that previous observations, such as DiSciullo & Williams (1987) suggest that prenominal elements exhibit head-like properties, including resistance to modification and complements, while post-nominal elements are similar to phrases.

45. It is also assumed that processing of free (e.g. determiners) and bound (e.g. Spanish feminine -*a*) gender markers represents a single mechanism, as suggested by the research reported in Lemhöfer & Schriefers (2006), among others.

are yet projected or activated in the basilect, i.e. the stage in which no gender or number concord is exhibited in the DP.[46]

2. In the non-creole Spanish DP number and gender features percolate from the head N to the D° (Grimshaw 1997; 2005: 17–23). The determiner (null or overt) is the crucial element assuring semantic interpretation of the DP at LF (Enç 1991).

3. Gender and Number nodes providing agreement with the Adjective Phrase are assumed (following Cinque 1994). However, instead of postulating the presence of these agreement nodes above the functional projection that contains the NP, it is proposed that the relevant gender and number agreement projections are INTERNAL to the extended AP, roughly as in (50), which sketches out the proposed structure of *(las) casas blancas* 'the white houses'.[47] These nodes supply the relevant features to the head Adj either through head movement or via Agree.[48]

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46. Alario & Caramazza (2002) provide French experimental data that do not fully support either the 'unitized activation hypothesis' (individual features of a determiner do not contribute to its selection) or the 'feature activation hypothesis' (retrieval of determiners is driven by each of its individual features). They propose the hybrid 'primed unitized activation hypothesis' by means of which determiners are selected as a single chunk but individual features send activation cues that prime a specific form over alternative members of a given determiner paradigm. Their data were obtained through response-latency experiments, and therefore cannot be directly compared with the Afro-Bolivian data. However, the slight preference for feminine gender marking on Afro-Bolivian determiners that accompany nouns ending in the canonical Spanish feminine word-marker *-a* is consistent with priming, as is the fact that whereas there are many instances of determiners marked with plural /-s/ accompanying head nouns unmarked for plural, there are no instances of plural-marked nouns or adjectives combined with determiners lacking plural /-s/. Thus it may be that the transition between the basilectal system lacking gender or number marking and contemporary Spanish with full gender and number concord follows the same activation pathways that have been detected in monolingual Spanish speakers.

47. The structure in (50) is proposed only for those Afro-Bolivian DPs whose constituent order is identical to modern Spanish. In constructions such as *mi lu amigo* 'my friends', with separate possessive and plural markers, but with no gender or number concord, some type of double-DP construction must be postulated, i.e. containing two D° heads but no DP-internal agreement projections.

48. Although in morphologically complete modern Spanish, AP-internal GenP and NumP may seem redundant, evidence from child language acquisition and second-language acquisition supports the claim that agreement with postnominal adjectives is less robust than noun-determiner agreement, and therefore possibly the result of a different although related syntactic process.

(50)   AdjAgrP
        NumP
        Num′
   Num   GenP
    s   Gen′
          Gen   AP
           a   blanc-
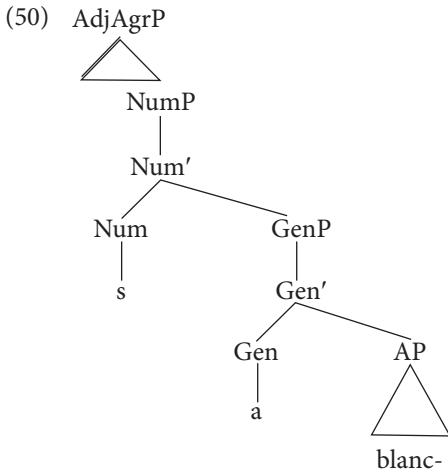
The proposed revision of the extended AP structure provides the last piece in the syntactic model of stepwise rightward spread of gender and number concord in the Afro-Bolivian DP. The successive appearance of number and gender marking proceeds as follows:

1.   In the basilectal stage (no gender or number concord at all), no agreement nodes such as NumP and GenP are projected, either in the DP proper or within any accompanying extended AP; {gender}and {number} features on both the D and the head N (and any adjectives) are uninterpretable.[49] In basilectal Afro-Bolivian Spanish, DP is projected, since all varieties of the language contain at least some articles and other determiners (although the distribution and behavior differ from contemporary Spanish), but there is no evidence of any agreement projections at all.

2.   In the first stage of approximation to contemporary Spanish, characterized by number and gender marking only on the D, {number} and {gender}features on D are interpretable, while the same features on the head N remain uninterpretable.[50] This is the configuration of stripped plurals as found in vernacular Brazilian and Angolan Portuguese, and of stripped gender marking as found vestigially in Helvécia Portuguese and robustly in Afro-Bolivian Spanish. The appearance of gender and number inflection on the determiner in conjunction

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49. It has been proposed, e.g. by Munn & Schmitt (2001, 2005), Schmitt & Munn (1999, 2002), Deprez (2005), that in the Romance DP, the agreement projections for grammatical number and gender are separate, and one or the other may be missing, for example in Brazilian Portuguese and Haitian Creole bare singular nouns. The Afro-Bolivian data are consistent with these proposals.

50. Magalhães (2002) offers a similar proposal for Portuguese.

with the absence of any inflection on the head noun is due to the fact that the D must link to LF, as in Costa & Silva (2006). As a result, both {gender} and {number} are realized as singleton morphemes.[51] At this stage the functional heads Num° and Gen° — and consequently NumP and GenP — are not projected or activated; the relevant gender and number features percolate to the D directly from the head N.[52] The probe-goal mechanism of feature checking is not yet available, since the features on the head noun are not interpretable; as a result, the head noun remains uninflected for {plural}.

3.   The next stage is characterized by number or gender marking on the determiner and on the head noun, but not on postnominal adjectives or predicate adjectives.[53] Agreement thus does not extend beyond the X' structure containing the head noun (the DP) to the extended projection (in the sense of Grimshaw 2005). This configuration provides motivation for GenP and NumP within the AP itself: a combination such as *las casas blanco [las casas blancas]* 'the white houses' can be possible because no AP-internal agreement nodes have yet been projected.[54] Following, e.g. Cinque (1994), it is assumed that adjectives appearing prenominally (e.g. quantifiers and some attributive adjectives)

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51. It is not fruitful at this juncture to enter into the 'chicken and egg' inquiry as to whether the existence of a singleton morpheme and the interpretability of features on the D and the head N are implicationally related.

52. This is not the same route as followed in first-language acquisition of stripped plurals in Brazilian Portuguese. Lopes (2004, 2006) presents evidence from Brazilian child language that the first stage is non-marking of plural anywhere in the DP (no earlier stage is documented in which only the NP but not the DP is projected); next the plural /-s/ is attached to the head noun, not the determiner: *o patinhos* 'the ducks', *a hienas* 'the hyenas', etc. (Lopes 2004: 166; 2006: 259). This occurs roughly between 2:1 and 2:8. This stage is rapidly replaced by the adult Brazilian Portuguese configurations, both the stripped plural with /-s/ marked only on the determiner and fully agreeing plural DPs. Lopes (2004: 167) notes that the acquisition of adult plural marking is abrupt, in that there is no intermediate stage in which children oscilate between marking /-s/ only on the head noun and marking /-s/ on the determiner; once the latter stage is in place, there is no 'turning back'. Corrêa et al. (2003) report on an experiment in which Brazilian children between the critical ages of 1:8 and 2:4 were presented with the three options (fully marked plural DP, plural marked only on the determiner, plural marked only on the head noun). The results were nearly at the level of chance, although the incorrect marking of plural only on the head noun was slightly preferred over the other two variants. Similar results occurred with the development of gender marking in the DP.

53. There are no probative examples from Afro-Bolivian Spanish with prenominal adjectives.

54. Samek-Lodovici (2002) has documented numerous instances of depleted number and gender agreement (albeit in the VP) across the extended projection when only c-command is involved, in comparison with Spec-head agreement.

are generated within the DP in a position superior to postnominal adjectives, which are generated in [Spec NP]. The data presented in Tables 2 and 5 show that prenominal adjectives group with determiners as regards feminine gender and plural marking in Afro-Bolivian Spanish. There are combinations in which the quantifier does not agree in gender with the head noun, even in the presence of a (partially agreeing) determiner, such as in *toditos esos cosa [toditas esas cosas]* 'all those things' which shows multiple number concord on prenominal elements but not on the head noun itself. This is a very uncommon configuration; more frequent is the combination of plural-marked prenominal adjective plus uninflected head noun, as in *hartos viuda [hartas viudas]* 'many widows', *hartos hijito[s]* 'many children', *lindos matrimonio[s]* 'beautiful weddings'. Since the head noun's φ-features are not spelled out, they are presumably non-interpretable, so the head noun cannot serve as a goal for feature-checking. Rather, the prenominal adjective behaves like a determiner in receiving the head noun's features directly by percolation. Unlike the Italian examples handled by Cinque (1994) and Carstens (2000, 2001), and the Portuguese examples of Costa and Silva (2006), Afro-Bolivian Spanish contains no combinations of DETERMINER+PRENOMINAL ADJECTIVE+HEAD NOUN. It is therefore possible to postulate that the (very small and nearly closed subset of) prenominal attributive adjectives are behaving as determiners in the sense of linking to LF.[55] The inflected determiner could also serve as a goal in the case of inflected DETERMINER + INFLECTED PRENOMINAL ADJECTIVE + INVARIANT HEAD NOUN, but such combinations are vanishingly rare in Afro-Bolivian Spanish.

4. Predicate adjectives (and in the case of plural marking, also predicate nominatives) lie outside of the subject DP with which they agree, and concord takes place by feature-checking mechanisms similar to those proposed for DP-internal agreement. In particular, one or more agreement phrases dominate the predicate adjective/nominative.[56] The Afro-Bolivian data show very low rates of gender and number marking on predicate adjectives/nominatives, which suggests that projection of the agreement phrases responsible for concord in

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55. There are a very few instances of partially agreeing QUANTIFIER + DETERMINER followed by an uninflected head noun, as in **toditos esos** *cosa [toditas esas cosas]* 'all those things'. In this case, since the φ-features of the head noun are still not interpretable, the quantifier must check its features against those of the inflected determiner, after quantifier raising.

56. This is essentially the analysis of Chomsky (1995:283), although subsequently Chomsky (1995:353) proposes to dispense with the agreement phrase and instead project an Adjective Phrase with two Spec positions. Sleeman (2002:302–3) discuss some of the ramifications of this proposal.

the predicate are the last to emerge in the transitioin from the agreement-less traditional Afro-Bolivian dialect and contemporary Spanish. Psycholinguistic research on speakers of contemporary Spanish (Antón-Méndez et al. 2002) has demonstrated that a unitary process underies subject-verb number agreement and subject–predicate adjective number agreement. In other words, number errors of subject-verb agreement should coincide with number errors in subject-predicate adjective agreement and vice versa. In decreolizing Afro-Bolivian Spanish, however, there are numerous cases of plural-marked subject DPs combined with plural-marked verbs but predicate adjectives that remain unmarked for plural, another indication of the gradual emergence of agreement projections in the decreolization process (as well as the tendency for subject-verb agreement to be more robust than noun-adjective agreement). Some examples are given in (51)–(54); in each case the verb is marked for 3rd person plural

(51)   a.   los que son [jóven]
             DET.M.PL COMP be.3.PL young.s
       b.   [jóvenes]
             young.PL
             'those who are young'

(52)   a.   algunos eran muy [torpe]
             some.M.PL were.3.PL very clumsy.s
       b.   [torpes]
             clumsy.PL
             'some were very clumsy'

(53)   a.   las piedras están [retirado]
             DET.F.PL rock.PL be.3.PL remove.M.s
       b.   [retiradas]
             remove.F.PL
             'the rocks are removed'

(54)   a.   lus qui tan bien [borracho]
             DET.M.PL COMP be.3.PL well drunk.M.s
       b.   [borrachos]
             drunk.M.PL
             'those who are very drunk'

5.   The final stage coincides with non-creole Spanish: full gender and number concord in the DP and with predicate adjectives. If gender and number concord within the DP is indeed configurational, with the features percolating from the head N to the D, then by Grimshaw's definition of extended projection these

same features should also be passed down to the AP complement of the head noun, which is what occurs in non-creolized Spanish and Portuguese. That the same extension of concord to the postnominal AP (and predicate adjective) does not occur in partial-agreement varieties of Afro-Bolivian Spanish is therefore taken to be a developmental stage in the phrase structure of the AP itself. In the basilect, the AP has no agreement projections at all (or has inactivated agreement heads); these projections emerge during decreolization, typically with plural marking appearing before gender concord. Once the agreement projections have emerged, the fully agreeing DP is a stable result; speakers do not 'slip back' into lack of concord across the extended projection, except for those individuals who can consciously switch between contemporary Spanish and the basilectal Afro-Bolivian dialect.[57]

The successive stages of decreolization of Afro-Bolivian Spanish correlate neatly with the appearance and activation of the various agreement projections assumed for the DP and the AP. In the basilectal stage, characterized by no gender or number agreement (e.g. *lu mujé viejo* [*las mujeres viejas*] 'the old women'), no agreement projections are operative, either because they have not yet been projected within the DP or because they contain no interpretable features. The first type of marking to appear is usually plural, and only on the determiner. This provides evidence for the separation of NumP and GenP. At this point NumP is not yet activated; the number features on D result from percolation from the head N, not from movement, agreement, or affix-hopping. The next stage is the marking of plural on both the determiner and the head noun, which represents the activation of NumP and either the movement of the head noun to Num° or feature-checking between Num° and N. The NumP immediately dominating the AP is not yet present/activated, which accounts for combinations such as *lus personas viejo* 'the old people'. Finally, the NumP dominating the AP becomes activated, and number agreement across the entire extended projection of the D occurs. A similar process involves the gradual appearance and rightward spread of gender marking.[58]

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57. Once the functional projections responsible for agreement have been activated, the variable rate of overt morphological marking found among most Afro-Bolivian speakers is assumed to be a function of mapping difficulties, e.g. as suggested by Schwartz & Sprouse (1996) and Lardiere (1998a, 1998b).

58. Despite the widespread acceptance of N-movement in the Romance DP, leading to postposed adjectives, it is not clear that movement is the best way to characterize the Spanish DP. Willis (2006) points out problems for other languages with varying adjective placement, in this case Welsh. Even the earliest Spanish child language, at the two-word stage, shows proper noun+adjective word order. If one assumes, e.g. as does Radford (1988), that early child language lacks functional projections, then it is not clear what sort of phrase structure might underly

It is probably the case that during the earliest stages of acquisition of Spanish and Portuguese by African-born *bozales*, when only the barest rudiments of the noun phrase had been learned and when functional categories such as DET — and consequently functional projections such as DP — had not yet been fully acquired, linear processing strategies such as alignment were the foremost motivators for marking of gender and number on the leftmost available position. This would hold even for speech communities such as the Afro-Yungueños in which a dialect containing the restructured DP was until recently spoken natively but not in contact with modern Spanish. In subsequent environments providing contact with the full Spanish DP, a grammatically-based choice between local or extended agreement of morphosyntactic features is a more appropriate model.

The syntactic structure proposed for the DP in (50) contains AP-internal GenP and NumP projections, required to account for the stepwise appearance of overt morphological marking on adjectives. However, in adult monolingual Spanish, there are virtually no errors in gender concord, and plural marking is equally error-free (although sometimes partially effaced by dialect-specific phonological processes that weaken coda /-s/). It is possible that some Afro-Bolivians have achieved this configuration, i.e. have syntactic representations of DP in which all gender and number projections are external to the adjective phrase. This would be the final stage in the successive manifestation of distinct DP structures that is proposed as a model for Afro-Bolivian decreolization. However most older Afro-Bolivians who live in the traditional communities (and who have therefore been exposed to the traditional dialect throughout their lives, whether or not they ever acquired full active fluency) continue to present occasional lapses of DP-internal gender and number concord when speaking contemporary Spanish, distributed in the same implicational fashion. The examples in (55)–(59) represent the speech of elderly uneducated Afro-Bolivians who asserted that they spoke only 'proper' Spanish and who were obviously attempting to do so during the interviews in which these phrases were produced:

(55) a. una   jornada [completo]
          DET.F.S workday complete.M.S
      b. [completa]
           complete.F.S
          'a full day's work'

NOUN+ADJECTIVE combinations at this developmental stage, perhaps simple sister-adjunction of the N and the Adj. In the case of creolization, there is no known Afro-Hispanic variety that does not incorporate the usual Spanish/Portuguese NOUN+ADJECTIVE order for attributive adjectives; this includes even the most basilectal varieties of Afro-Bolivian Spanish.

(56) a.   esa   casa [chico]
        that.F.S house small.M.S

    b.   [chica]
         small.F.S
        'that small house'

(57) a.   los   [negro] han   vendío a los   [indio]
        DET.M.PL black.s have.3.PL sold   to DET.M.PL Indian.s

    b.   [negros]   [indios]
        black.PL   Indian.PL
        'The black people have sold to the Indians'

(58) a.   había   grandes [cañaveral]
        had.3.s big.PL   canefield.s

    b.   [cañaverales]
         canefield.PL
        'There were large canefields'.

(59) a.   era para [los]   mujeres
        was for   DET.M.PL woman.PL

    b.   [las]
         DET.F.PL
        'It was for the women'.

For these Afro-Bolivians, a DP structure such as (50) appears to be the end-state configuration, rather than the full concord system of contemporary monolingual Spanish.

12. Decreolization as the successive instantiation of grammars

With the arrival of schooling in Spanish, Afro-Bolivians in the Yungas were exposed to national varieties of the language, as well as to written Spanish. The process of hearing and studying more normative 'outside' Spanish, as well as snickers and even outright jeers produced when their speech was heard outside of their communities, implicitly encouraged Afro-Yungueños to avoid the traditional dialect, and to assume that their local speech was inferior. In the Afro-Bolivian communities, most residents not only do not regard traditional Afro-Bolivian speech as a cohesive language rather than simply a deficient form of Spanish, but also feel that to be 'civilized' [their own term] one must speak modern Spanish. A few individuals have tenaciously maintained the ancestral language, but most have willingly abandoned the Afro-Hispanic dialect. Such abandonment did not occur

as an abrupt shift to another language, but rather took place in a gradual fashion following the implicational pathways sketched in previous sections. Numerous oral testimonies indicate that essentially monolingual speakers of the traditional dialect prevailed in the 'heartland' settlements such as Mururata, Chijchipa, and Dorado Chico until little more than half a century ago. Any decreolization evidently happened very quickly, in little more than a generation, yielding today's Afro-Bolivians with limited competence in the traditional dialect and few occasions to use it.[59]

Despite the stigma frequently associated with ABS, some Afro-Bolivians are re-assessing their own attitudes and are losing their reluctance to admit knowledge of the traditional dialect. In the instances observed by the present researcher, however, these 'born-again' ABS speakers are unable to consistently produce the requisite lack of gender and number marking in DPs DESPITE THEIR EFFORTS AND DESIRE TO DO SO. For speakers of contemporary Spanish, number agreement is more tenacious (more difficult to 'get rid of') when switching to the inflectionless basilect than gender agreement; while determiners and other prenominal modifiers continue to exhibit at least some agreement with the head noun nearly 'until the end', i.e. attainment of the full basilect.[60] This gives the lie to oft-repeated facile statements to the effect that creole languages are 'easier' to learn than their respective lexifiers, due to having no grammatical inflection. This mirror-image symmetry between Afro-Bolivian decreolization and incomplete attainment of the basilectal dialect by contemporary speakers lends additional confirmation of decreolization as a structured process. Although there are many other systematic differences between the traditional Afro-Bolivian dialect and contemporary Spanish, from the perspective of DP-internal agreement, modern Spanish represents a developmentally more mature version of the former language, in which all agreement projections are activated and consequently in which all syntactic structures are fully formed. If the emergence and the suppression of syntactic projections were completely symmetrical, one would expect that native speakers of Spanish who are learning the creole dialect, or who speak it only vestigially, would abandon agreement with ease, reverting to a 'simpler' syntactic configuration. The fact that this rarely occurs suggests that once the relevant functional projections are

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59. Judging by the speech of some very elderly individuals who are not fully proficient in contemporary Bolivian Spanish and who by all accounts have always spoken a traditional Afro-Bolivian variety, some decreolization may have already begun before the major social reforms of 1952.

60. Lipski (2011) observed a similar tenacity of residual feminine gender marking in the attempts at speaking the (gender-less) Palenquero language by young people in San Basilio de Palenque, Colombia .

acquired in a given language, the option to dismantle them is no longer freely available.

Afro-Bolivians are explicitly aware of avoiding ethnically-marked items such as the interjections *jay* and *cho* and words like *awicha* 'grandmother, older woman' and the use of *tío* 'uncle' and *tía* 'aunt' as respectful terms of address to adults. Although no Afro-Bolivian speaker specifically mentioned lack of subject-verb agreement as a distinctive trait of the traditional dialect, the fact that verb conjugation for person and number is the most robust decreolizing manifestation, found even in the speech of some individuals who exhibit little gender and number agreement in the DP, suggests the Afro-Bolivians may (un?)consciously adopt conjugated verbs as necessary components of modern Spanish. However, the total lack of explicit commentary on gender and number concord, and the absence of non-agreeing DPs in Afro-Bolivians' stereotypical imitations of the traditional dialect, point to the possibility that the decreolization represented by increasing gender and number concord 'comes along for the ride' as speakers abandon the traditional dialect in favor of modern Spanish.

Regardless of whether Afro-Bolivians regard number and gender marking as signposts on the road to modern Spanish, the systematic behavior described in the preceding sections is not consistent with models of creole continua as embodying seamless transitions within a single system. Nor can the data be fully accounted for by postulating only the interaction of grammars at either end of the Afro-Bolivian continuum. If all exemplars of partial concord resulted from the existence of a single pair of NumP and GenP projections, as has been proposed for modern Spanish, the expected result of decreolization (and 're-creolization' among semi-fluent speakers of the traditional dialect) would be an all-or-nothing dichotomy: full concord or no concord (possibly separating out number and gender for individual treatment). Finally, the Afro-Bolivian data cannot be explained exclusively by usage-based or emergentist models, since the expected result of such proposals is lexical diffusion, rather than the syntactically grounded expansion of agreement found in ABS.[61] Decreolization manifested as the appearance of gender and number concord across ever-widening syntactic domains in ABS is best described as a successive series of quasi-stable intermediate grammars, each of which properly contains the preceding grammars. This configuration of nested grammars is possible largely due to the fact that the Afro-Bolivian DP is from a morphosyntactic perspective a proper subset of the modern Spanish DP, in terms of both syntactic

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61. The effects of frequency cannot be totally dismissed; for example in Spanish, instances of plural marking with /-s/ outnumber exemplars of feminine gender marking, and determiners occur more frequently than quantifiers. However, frequency alone cannot explain the correlations between syntactic structure and the appearance of gender and number concord in ABS.

structure and lexical shape. This unusual stage of affairs represents an extreme case of the conditions necessary for *congruent lexicalization* as defined by Muysken (2000: chap. 5), namely not only very similar syntactic structures, but an extraordinarily high number of 'homophonous diamorphs', i.e. all the words with identical lexical shape in ABS and modern Spanish. In Muysken's model, congruent lexicalization is tantamount to code-switching between closely related languages that is not bound by structural constraints but rather 'words from both languages *a* and *b* are inserted more or less randomly' (Muysken 2000: 8). Decreolization of gender and number concord in ABS is not code-switching as usually construed (for example, speakers do not acknowledge two separate codes in their speech), but as Muysken (2000: 122) asserts, 'code-mixing is not different, in principle, from variation'. Not found in ABS is 'more or less random' appearance of gender and plural markers; although congruent lexicalization would in principle permit such behavior, the transition between traditional ABS and modern Spanish is in reality more orderly, although not without an element of possibly random fluctuation.

Not all creole languages share such a high degree of structural and lexical congruence with their lexifier languages, so that the nested-grammars model of decreolization proposed for ABS is not offered as panacea for all other cases where a creole is in contact with its historical lexifier. The present analysis does point to the feasibility of successive intermediate grammars as the basis for a (post-) creole continuum, whether or not the special case of proper containment obtains.

13. Conclusions

According to the analysis presented in this study, decreolization of Afro-Bolivian adjective-noun agreement occurs as the result of a stepwise elaboration of syntactic structures, the successive activation of agreement heads and the subsequent processes of feature-checking that manifest themselves superficially as morphological inflection and concord. In the case of agreement systems, 'decreolization' is as much a syntactic developmental process as an imitation of a more prestigious set of variants.[62] Grammar alone cannot account for the full panorama of

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62. This conclusion is in principle similar to Bickerton (1980: 110), who describes the results of decreolization as 'a series of grammars each of which differs by only one rule (or perhaps, by small clusters of necessarily linked rules) from its neighbours. Together these grammars fill the linguistic space between a creole and its related superstrate […]' Bickerton, however, attributes this incremental series of grammars to limitations on possible changes to a given grammar. The present study makes no such assumptions about possible changes to grammars, nor does Bickerton's other proposed precondition for decreolization, namely speakers' inaccurate perception of the target, figure in the discussion.

Afro-Bolivian speech, but grammatical structures provide the backbone for the continuum characteristic of the Afro-Bolivian DP, tempered by the social, pragmatic, and idiosyncratic factors present in all speech communities.

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