

GENDER AND NOMINAL CLASSIFIERS: CONGRUENCES AND CONTRASTS BETWEEN BRAZILIAN PORTUGUESE AND YORUBA

*GÊNERO E CLASSIFICADORES NOMINAIS: CONGRUÊNCIAS E CONTRASTES ENTRE
O PORTUGUÊS BRASILEIRO E O IORUBÁ*

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ABSTRACT

This study investigates the mechanisms of gender marking and nominal classification in Brazilian Portuguese and Yoruba in Brazil. The main objectives of this study are to compare the morphosyntactic structures of both languages and to understand the sociocultural influences that emerge from the interrelation of both languages, especially in Afro-Brazilian religious contexts. The research inquiries center on the functioning of gender traits and nominal classifiers in each language, the similarities and differences between the systems, and the impact of language contact on these processes. The findings reveal significant disparities in gender marking, inflection, plural formation, and resemblances in morphosyntactic structure. Furthermore, the analyses emphasize the significance of semantic context in the Yoruba classification system and the rigidity of gender marking in BP. This interdisciplinary approach contributes to broader discussions on language use, contact, variation, change, nominal classification, linguistic structure, and typology by unraveling the intricate details of gender characteristics in lexical items of African origin introduced and adapted into the Brazilian vernacular.

KEYWORDS: Brazilian Portuguese. Yoruba. Comparative analysis. Gender features. Nominal classifiers.

RESUMO

Este estudo investiga os mecanismos de marcação de gênero e classificação nominal no português brasileiro (PB) e no iorubá. Os principais objetivos desse estudo são comparar as estruturas morfossintáticas dessas línguas e entender as influências socioculturais que emergem da inter-relação de ambas as línguas, especialmente em contextos religiosos afro-brasileiros. As questões da pesquisa se concentram no funcionamento dos traços de gênero e dos classificadores nominais em cada idioma, nas semelhanças e divergências entre os sistemas e no impacto do contato linguístico nesses processos. Os resultados revelam diferenças significativas na marca de gênero, na inflexão e formação de plural, bem como semelhanças na estrutura morfossintática e na integração linguística. Ademais, as análises enfatizam a importância do contexto semântico no sistema de classificação iorubá e a natureza rígida da marcação de gênero do PB. Esta abordagem interdisciplinar contribui para discussões mais amplas sobre o uso da linguagem, contato, variação, mudança, classificação nominal, estrutura e tipologia linguística ao desvendar as complexidades das características de gênero em itens lexicais de origem africana incorporadas e adaptadas ao vernáculo brasileiro.

PALAVRAS-CHAVE: Português brasileiro. Iorubá. Análise comparativa. Traços de gênero. Classificadores nominais.

1. Introduction

The aim of this paper is to discuss how gender features are placed in noun phrases in Brazilian Portuguese in contrast to Yoruba and how some lexical entries incorporated into the Brazilian

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vernacular, derived from the merging of both languages, apply such patterns to better understand gender marking behaviors cross-linguistically by means of comparative analysis. This proposal seeks to work in an interdisciplinary fashion by integrating empirical-methodological foundations from various linguistic frameworks to better interpret the behavior of certain linguistic phenomena such as gender features as a nominal category or classifier. In order to comprehend these linguistic mechanisms, it is essential to adopt a holistic theoretical-methodological perspective that integrates Distributed Morphology framework (Halle and Marantz, 1993), henceforth DM, focusing on the interaction between morphology and syntax, providing tools to analyze the structure of words and their components in intersection with language contact and change taken under the variationist sociolinguistics theory (Labov, 1973), investigating how languages influence each other through contact and vary leading to changes in their structure and usage, and how these elements evolve over time and across different linguistic environments; and lastly with typology linguistics on classification systems (Grinevald, 2000, 2004, 2015), offering a comprehensive framework for categorizing and comparing these systems across languages.

In this respect, it seeks a basis for hypothesizing whether gender marking is a formal, semantic, or arbitrary phenomenon, as well as an idiosyncratic feature of natural languages in their use, contact, variation, and change throughout the history and evolution of languages and societies. The empirical/analytical problem addressed in this study revolves around understanding and contrasting gender-marking behaviors in noun phrases, henceforth *nPs*, originating in the parlance of ethnic social groups, especially in the state of Bahia, in northeastern Brazil, as the epicenter of slavery in the Americas, as well as a multidimensional cultural product born of the African diaspora². With the entry of Africans into Brazil during the colonial period, a confluence of languages began in these lands, due to the linguistic differences between African ethnic groups, the Portuguese colonizers, and the multiple indigenous languages that already existed here. The presence of African languages and cultures in the process of building Brazilian society since the colonial period has had a definitive impact on the Portuguese language. Among the countless African linguistic groups that arrived here, the Yoruba were the ones that most influenced the language of the Portuguese colonizers from a terminological point of view (Rocha, 2011). Thus, this paper seeks to discern how these patterns manifest and evolve within the Brazilian vernacular lexicon, shedding light on the syntactic construction and semantic features of the syncretism of Afro-Brazilian religions interacting in both languages - Portuguese and Yoruba - linguistically at all levels.

Specifically, it aims to investigate how gender features surface in *nPs* in Brazilian Portuguese, henceforth BP, and Yoruba, considering the consequences of the meeting of typologically distinct languages, and to analyze how these patterns have been/are integrated and adapted socio-historically, thus shaping the contemporary vernacular BP language. Furthermore, it aims to understand the

² DI-AS-PO-RA / n. a dispersion of a people, language, or culture that was formerly concentrated in one place, to scatter, to displace, to live in separated communities. The African Diaspora is the voluntary and involuntary movement of Africans and their descendants to various parts of the world during the modern and pre-modern periods.

complex relationship between language and the denotation of gender in morphosyntactic structures through a cross-linguistic analysis of two typologically different languages in contact, integrating a sociolinguistic and anthropological approach to the DM framework.

2. Comparative analysis: investigating nominal classifiers and gender marking

Yoruba is a West African language belonging to the Benue-Congo branch of the Niger-Congo language family. It is classified within the Defoid group and is predominantly spoken in Nigeria, with significant communities in neighboring countries and the diaspora. Yoruba features a rich system of noun classes, tonal distinctions, and agglutinative morphology, making it typologically distinct from many Indo-European languages. Portuguese, on the other hand, is a Western Romance language within the Indo-European language family. Typologically, it belongs to the group of Romance languages, it evolved from Latin and is primarily spoken in Portugal, Brazil, Angola, and several other countries across different continents. Portuguese has a relatively simple vowel system, complex verb conjugations, and a notable use of inflection, particularly in verb and noun morphology.

As a result, the study is significant and intriguing for several reasons. Research has shown that Yoruba far surpassed any other African language in the last two centuries of slavery in Bahia, Brazil (Santos, 2011). Firstly, this proposal defends that language is a heterogeneous system and variation is inherent to language, occurring at the phonetic, phonological, morphological, syntactic, semantic, and lexical levels in their interfaces (Câmara Jr., 1992). Therefore, Brazilian Portuguese - at all levels - as an Amefrican1F³ cultural product (Gonzalez, 1988b), merits a more holistic investigation. Although gender is marked in many languages, some do not classify nouns or pronouns in terms of gender. Yoruba is considered an example of such a language; it classifies pronouns in terms of person and number (Bamgbose, 1966; Awobuluyi, 1978), but not based on gender. Furthermore, there are no affixes that contrast nouns in terms of gender. Secondly, it delves into the intricate relationship between language structure and the placement of gender features within morphosyntactic structures. By conducting a cross-linguistic analysis of BP and Yoruba, two languages with distinct typological characteristics, this analysis aims to shed light on how gender features' behaviors vary and adapt across different linguistic frameworks, as well as how loanwords interference between these languages introduce semantic shifts and morphological adaptations when placing different linguistic features (Ajayi, 2003). Moreover, the investigation of *nPs* derived from the convergence of Portuguese and Yoruba presents a unique opportunity to explore how phrases that are apparently BP lexicon, end up being semantically loanwords from Yoruba. In other words, the linguistic constituents of the *nP* in its superficial interface are Portuguese, but they translate a Yoruba concept.

³ Amefricanidade: the term coined by Lélia Gonzalez indicates the construction of an ethnic identity with the incorporation of cultural dynamics, especially those that go against the system of domination called racism, which Gonzalez proposed as a key with which to think the specificity of the experience of Africans and African descendants as it was historically constituted in American soil. Beyond its purely geographic character, [Amefricanity] designates a historical process of intense cultural dynamics (resistance, accommodation, reinterpretation, creation of new forms) referenced in African models but referring to the construction of a whole ethnic identity (Lélia Gonzalez, 'Categoria político-cultural da amefricanidade', *Primavera Para as Rosas Negras*).

Considering an interdisciplinary approach, which intersects sociolinguistic perspectives with the theoretical framework of DM, not only enriches our understanding of language structure and variation but also offers valuable insights into the cultural and historical dynamics that shape language evolution. By unraveling the complexities of gender features in lexical entries of African origin introduced into the Brazilian vernacular, this study contributes to broader discussions surrounding language use, contact, variation, change, sociolinguistics, nominal classification, language structure and linguistic typology.

Because Yoruba is an agglutinative and tonal language while Portuguese is inflectional, therefore, the Yoruba language is not inflected to make gender agreements or plural formations, while Portuguese is. Empirical linguistic phenomena such as the absence of grammatical gender marking in Yoruba presents a stark contrast to languages like Portuguese, where gender plays a significant role in noun phrases. In Yoruba, nouns do not inherently carry gender distinctions as they do in languages with grammatical gender systems. Instead, gender distinctions are conveyed through contextual cues and specific lexical items (Ajayi, 2003). In addition, following the DM model concerning the morphosyntactic typology of classifiers, the proposal intends to shed light on how the interpretability of gender features and gender marking operates within the morphosyntactic structure (Armelin, 2015). Considering that the nominal classification system in Yoruba is not equivalent to that in Portuguese, it would be interesting to establish reliable and replicable criteria to determine whether we are really dealing with gender as a category or with a system of nominal classifiers.

Furthermore, it is considered relevant to raise hypotheses about how gender assignment occurs in some lexical blendings between these languages and how they are used in contemporary speech in the situated use of the languages in contact. Detailed descriptions of how morphosyntactic features in both languages, including affixation, borrowing, calquing, compounding, and reduplication should be provided on further research to better understand how both languages intersect and impact themselves, as well as to broaden empirical knowledge about how gender features are embedded in morphosyntactic structure. Considering the semantic-pragmatic aspect of language, special attention should be given to gender-neutral nouns and special cases where gender assignment is context-dependent or fluid. In general terms, borrowing is the introduction of vocabularies, phrases or syntactic construction from a foreign idiom into a given language. Borrowing can be defined as a language change mechanism in which the reproduction of a model, for example syntax, is incorporated into the borrowing language through the influence of a basic model found in the language in contact (Ajayi, 2002).

The ways in which one vocabulary can interfere with another are various. Given two languages, A and B, morphemes may be transferred from A into B, or B morphemes may be used in new designative functions on the model of A. Thus, consider Yoruba (Language A) and Brazilian Portuguese (Language B), where the transfer of morphemes and functional adaptation can be observed due to historical and cultural contact, particularly through the Afro-Brazilian communities. For instance, the Yoruba noun “*oba*” refers to a king or traditional ruler and it is directly borrowed into BP as “*oba*”, particularly

in Afro-Brazilian religious contexts (e.g., Candomblé⁴), “*oba*” is used to refer to leaders or priests within the religious hierarchy. Given that the stresses of these two languages differ, a phonological adaptation occurs, the tonal aspect of Yoruba is not transferred but the phonetic form is retained. Furthermore, there is a semantic consistency since the meaning remains largely consistent, reflecting a high-status individual.

Drawing on the DM framework, words and *nPs* are formed through the same syntactic mechanisms ruled by Generative grammar. It posits that morphological structures are generated through the interaction of different modules of grammar, including syntax, morphology, phonology, semantics, and psycholinguistics. Thus, this paper explores how gender marking emerges from these intricate linguistic processes. This alternative analytical approach to lexicon allows for a fine-grained investigation of how gender features distribution are encoded, assigned, and realized across different linguistic contexts. By considering factors such as language contact, cultural assimilation, and power dynamics, the analysis seeks to uncover the underlying socio-historical forces that have shaped the development and evolution of gender behaviors in *nPs* originating from the Brazilian social ethnic group put on focus in this proposal. Language borrowing is a common and usual sociolinguistic phenomenon. It results from situations of language contact. During this contact, there is usually a bilateral exchange between speakers who use different languages. In addition to providing a descriptive account of gender assignment phenomena, this comparative analysis also aims to raise hypotheses and investigate the mechanisms that drive these linguistic patterns in different languages, exploring whether gender features project their own phrase “*GenP*” or manifest themselves through nominal classifiers (Kramer, 2016).

Given Yoruba’s lack of a mandatory nominal class system, the hypothesis is that Yoruba’s nominals classification would not equate to the gender system in BP. Instead, it would be more flexible and context dependent. In BP, gender features are rigidly assigned and realized post-syntactically, whereas in Yoruba, the classification is more fluid. The inherent grammatical gender system in BP requires explicit marking and agreement across *nPs*, while Yoruba’s system allows for more fluid and situationally determined classifications. Overall, this comparison endeavor aspires to offer a nuanced and multifaceted exploration of gender features in blended lexical entries, bridging the gap between theoretical linguistics, sociolinguistics, and linguistic typology. Analysis of the morphophonological dimension in BP and its properties in terms of gender and class might show the arbitrariness of gender marking in most (but not all) Portuguese nouns, and the difference in interpretation of semantic gender and grammatical gender alongside the similarity in the way these two types of gender are expressed morphophonologically through both languages. Therefore, it’s worth investigating gender as a nominalizing feature, as well as an extralinguistic phenomenon. Considering the influence of Yoruba on Brazilian Portuguese, especially within the context of Afro-Brazilian religions such as Candomblé, it is possible to observe how Yoruba nominal structures have merged with Portuguese

⁴ Candomblé (meaning “dance in honor of the gods”) is a religion that combines elements from African cultures including the Yoruba, Bantu, and Fon, as well as some elements of Catholicism and indigenous South American beliefs.

gender marking systems. This fusion has led to the incorporation of Yoruba terms into BP, often adapting to the grammatical rules of the latter while retaining aspects of their original classification.

Notable contributions to the examination of linguistics of classifiers have been done by Colette Grinevald (2000, 2004, 2015). Her research includes in-depth analyses of the morphosyntactic structures of lesser-studied languages, and often intersects with anthropology and ethnolinguistics, providing a holistic understanding of classifiers. She has contributed to understanding how these languages organize and express grammatical relationships. Grinevald's work often involves comparative studies across languages to identify typological patterns and understand the range of linguistic diversity. Therefore, applying Grinevald's framework to understand the dynamic functioning of nominal classifiers is relevant for further linguistics research. According to Grinevald (2004), particularly in Niger-Congo languages such as Yoruba, it is challenging to separate noun affixes encoding number from those expressing gender-like distinctions. Semantically, the most obvious function of noun class markers (but not the only one) is to encode number (singular vs. plural). An important feature of Niger-Congo classification systems is the impossibility of dissociating noun affixes encoding number from noun affixes expressing gender-like distinctions (Grinevald, 2004). Additionally, the author points out that many descriptions of these systems do not focus on dividing noun lexemes into genders but rather classify noun forms based on their behavior in agreement mechanisms. Thus, gender may be defined as a pair of classes that correspond with each other in the expression of number. However, due to variations and idiosyncrasies in singular-plural correspondences, it can be difficult to establish the exact number of genders in these languages.

In most Niger-Congo languages, class is not always explicitly indicated in the noun morphology. This situation occurs in two cases: cases of zero-class markers and cases of non-obligatory use of the marker. In some languages of this family, noun classes are only marked with overt affixes under certain conditions. Furthermore, the presence of class markers in specific contexts may be subject to discourse conditions. There exist languages in which agreement is mandatory, even when the class to which the noun belongs is not explicitly indicated on the noun itself. There are also languages in which some modifiers do not agree with the noun they modify, while others do (Grinevald, 2004). Therefore, we are dealing more with a system of nominal classifiers rather than gender as a category. Specifically in Yoruba, classifiers are a subtype of nominal classification systems, distinct from noun classes and gender systems, which are characterized by agreement systems. Classifiers in Yoruba and similar languages are identified based on their loci, such as genitive classifiers in possessive constructions and numeral classifiers in numeral phrases. In Yoruba, the system of nominal classification is not equivalent to the gender system seen in languages like Brazilian Portuguese or the noun class systems in languages like Swahili. For instance, in Swahili, nouns are obligatorily assigned to a noun class, which is evident in agreement patterns across adjectives, verbs, and other parts of speech. This system is integral to the grammar of the language.

Similarly, in Brazilian Portuguese, every noun is obligatorily assigned a gender (masculine or feminine), and this information influences agreement patterns with adjectives, articles, and pronouns. In contrast, Yoruba does not have an obligatory system of assigning nouns to classes in a way that influences agreement across the sentence. Instead, Yoruba employs nominal classifiers in specific contexts (e.g., possessive constructions, numeral phrases), but these are not as pervasive or obligatory as gender or noun classes in Swahili and Brazilian Portuguese. This means that the nominal classification system in Yoruba functions differently from the gender system in Brazilian Portuguese. In Yoruba, classifiers are used contextually and are not a mandatory feature of every noun. Thus, while Yoruba has a system of nominal classification, it does not parallel the obligatory nature of gender in Brazilian Portuguese or noun classes in Swahili.

Ruth Kramer (2016) argues that gender features can project their own phrase (*GenP*) and that this projection is essential for understanding how gender agreement operates within different languages. Kramer also acknowledges the variation in how different languages handle gender features. Some languages may project *GenP*, while others may utilize alternative mechanisms for gender classification and agreement. Following Armelin's proposal, gender features can be either interpretable or uninterpretable in different syntactic environments. Interpretable features contribute to the semantic meaning, while uninterpretable features do not affect meaning directly but are crucial for syntactic agreement and grammatical coherence. In BP, the syntactic derivation of *nPs* involves strict gender agreement rules, reflecting uninterpretable gender features on modifiers that must agree with the interpretable gender feature on the noun. For Yoruba, the lack of a fixed gender marking system suggests that gender features, if present, are more contextually interpreted. This indicates that gender features might be more situationally interpretable rather than syntactically fixed, contrasting with BP's rigid structure.

Based on the hypothesis that Yoruba employs nominal classifiers instead of gender categories, the following questions arise: (i) how do Yoruba nominal classifiers function in noun phrases, and what role do they play in indicating specificity, animacy, and other semantic features?; (ii) what evidence exists to show the flexibility and optionality of nominal classifiers in Yoruba as opposed to obligatory gender marking in languages like Portuguese?; (iii) how do borrowed Yoruba nouns integrate into Brazilian Portuguese, and what morphological adaptations occur regarding gender and classifiers? Moreover, assuming that gender in Yoruba is contextually determined and not morphologically marked, it is worth questioning: (iv) how do Yoruba classifiers categorize nouns, and what semantic properties do they encode?; (v) how do Yoruba nominal classifiers compare to Portuguese gender markers in terms of syntactic position, agreement, distribution, and morphological marking?; and (vi) in what ways does the contextual determination of gender in Yoruba influence the borrowing and adaptation of Yoruba nouns in Brazilian Portuguese?

In most noun class languages of the Niger-Congo family, the only semantic distinction which is obviously reflected in noun classes is [$\pm$ human] with a relatively high number of genders towards two gender systems transparently based on the [$\pm$ human] or [$\pm$ animate] distinctions. It is challenging to

determine the roles that classifiers play in grammar. According to Grinevald (2000), classifiers are an integral part of the morphosyntactic structure of languages, they are not just peripheral grammatical features but central to understanding how languages categorize and structure information. Classifier systems vary widely across languages, making it difficult to create a universal typology. Differences in how languages utilize classifiers for nouns, verbs, and numerals add to the complexity. Moreover, classifiers can carry multiple meanings and functions, leading to ambiguities in their classification, and they often overlap in function with other grammatical elements, such as determiners and quantifiers. For instance, East Asian languages like Chinese and Japanese use numeral classifiers extensively to categorize nouns but do not inherently mark gender within the noun itself. Gender distinctions are made contextually or through additional descriptive words. Mainly, they employ classifiers in combination with numerals to specify noun categories based on shape, size, or other inherent properties.

As previously discussed, the features of the Yoruba language in Brazil will be most clearly seen in the language used in the religious universe of the terreiros. The names of the deities have remained in the spelling of the African language to this very day, although in certain circumstances some names have been Portugueseized. From the point of view of morphology and syntax, in Yoruba language, the plural of nouns is formed by the inflection of the articles that precede them. While in Portuguese the plural is constructed by inflecting the nouns, in the structure of the Yoruba language this is done only with the articles. For instance, in Portuguese, the plural construction of: “*a casa*” (the house) becomes “*as casas*” (the houses). In the Yoruba language, this construction only occurs by inflecting the article: “*a*”, resulting in “*as casa*”. Interestingly, non-standard agreement, both nominal and verbal, has historically been absorbed into the colloquial speech of most Brazilians, and has even been stigmatized as an unprestigious variation used mainly by the poorest, least educated, marginalized and suburban population, whose ancestry is predominantly Afro-Brazilian.

The work of Harris (1999), dedicated to the morphophonological derivation of Spanish non-verbal classes, admits that both class features and gender features are inherent to roots. However, many works since Ritter (1993), which are dedicated to explaining syntactic and semantic aspects of gender, admit that gender features are carried by functional heads that are above the root. Portuguese nouns have inherent gender features, often reflected in their morphological form. Gender is an intrinsic property of the noun root, and this intrinsic gender is evident in the agreement with articles, adjectives, and pronouns. Gender features are carried by functional heads, such as articles and adjectives, which must agree with the gender of the noun. E.g.

- (1) Portuguese
 - a. ***O livro***
‘the book’
 - b. ***A casa***
‘the house’

As shown in (1), the articles “o” and “a” precedes the noun and show gender agreement with “*livro*” (masculine) and “*casa*” (feminine), respectively.

(2) Portuguese

- a. ***O livro velho***
‘the old book’
- b. ***A casa velha***
‘the old house’

In addition to the articles, the adjectives “*velho*” (2a) and “*velha*” (2b) are also inflected in order to agree with the gender of the nouns. In summary, a comparative analysis shows that in Portuguese, gender is an intrinsic property of the noun root. Functional elements like articles and adjectives must agree with the noun’s gender, making gender agreement widespread and systematic throughout the sentence structure. These functional elements reflect and enforce the noun’s inherent gender, they can be seen as abstract morphemes that are realized after syntactic operations. The gender assignment in BP nouns and *nPs* is derived syntactically, where the structure of words, including gender agreement, follows specific syntactic rules. For instance, the requirement for gender agreement across (nouns, adjectives, articles, and pronouns) reflects a hierarchical syntactic structure where gender features are assigned and checked.

Conversely, in Yoruba, gender is not an inherent feature of the noun root. There is no morphological agreement with functional elements because gender is not marked. Instead, gender distinctions are made through context or additional descriptive words. Therefore, gender specification in Yoruba is context-dependent, relying on additional lexical items rather than inherent root features or functional projections. Contextual usage and lexical specificity are essential for conveying gender information. Yoruba nouns do not have inherent gender features; gender distinctions are not morphologically marked. For instance, “*omo*” (child) can refer to a child of any gender without changing form. The absence of gender inflection means that Yoruba relies on context or additional lexical items to specify gender if necessary. Gender or specific characteristics are often conveyed through context or additional words. E.g.

(3) Yoruba

- a. ***Omokùnrin***
‘boy’
- b. ***Omobìnrin***
‘girl’

As shown in (3a) “*omokùnrin*” refers to a male child, i.e., (boy) and in (3b) “*omobìnrin*” refers to a female child, i.e., (girl). It explicitly specifies gender by adding “*kùnrin*” (male) and “*bìnrin*” (female) to the neutral root “*omo*” (child). Note that no articles are needed to indicate gender. In

Yoruba language there is no use of the article, therefore words are not changed to give gender and number. If necessary, in line with Portuguese, which use the article, the demonstratives “*ǹnkan kan*, *èyí*, or *ìyẹn*” - “*esse, isso*” respectively (this, that); and the numerals “*kan*” - “*um, uma*” (a, an) - can be used. Yoruba does not use articles in the same way as Portuguese since words do not inflect to indicate gender or number, thus demonstratives and numerals are used for specificity and quantity. In these cases, they are placed after the noun. These distinctions highlight the variability in how languages encode and express gender, with Portuguese aligning more with Harris (1999) and Ritter (1993)’s theories, while Yoruba demonstrates an alternative approach relying on contextual specification rather than inherent or functional gender features. E.g.

- (4) Yoruba
- a. ***Olùkọ́ kan***
‘A teacher’
 - b. ***Olùkọ́ yìí***
‘This teacher’
 - c. ***Àwọn olùkọ́ kan***
‘Some teachers’
 - d. ***Àwọn olùkọ́ yìí***
‘These teachers’

As shown in (4), specificity and quantity are indicated using numerals like “*kan*” (one) and demonstratives like “*yìí*” (this) and “*yẹn*” (that), which are placed after the noun. The word “*àwọn*” is used to indicate the plural form of nouns without inflectional changes. On the other hand, Portuguese uses definite and indefinite articles that agree in gender and number with the noun. They inflect to indicate gender and number, and adjectives and articles must agree with these features. E.g.

- (5) Portuguese
- a. ***Um professor***
‘A teacher’ (masculine, singular)
 - b. ***Uma professora***
‘A teacher’ (feminine, singular)
 - c. ***Esse professor***
‘This teacher’ (masculine, singular)
 - d. ***Essa professora***
‘This teacher’ (feminine, singular)
 - e. ***Esses professores***
‘These teachers’ (masculine, plural)
 - f. ***Essas professoras***
‘These teachers’ (feminine, plural)

As shown in (5), nouns inflect for gender and number, and articles “*um/uma, o/a*” and demonstratives “*esse/essa*” must agree in gender and number with the noun. From this perspective, we can relate that BP projects a distinct GenP within its morphosyntactic structure. This projection ensures that gender features are syntactically derived and influence agreement across various elements within the *nPs* such as nouns, adjectives, articles, and pronouns.

In most noun class languages of the Niger-Congo family, the only semantic distinction which is obviously reflected in noun classes is $[\pm\text{human}]$ with a relatively high number of genders towards two gender systems transparently based on the $[\pm\text{human}]$ or $[\pm\text{animate}]$ distinctions. Grinevald’s criteria provide a comprehensive approach for analyzing classifiers, which can be applied here to better understand the interplay between Brazilian Portuguese (BP) and Yoruba, particularly in the context of gender marking in noun phrases borrowed from the latter. Classifiers are not just grammatical markers but are embedded in cultural and cognitive frameworks, an aspect Grinevald’s interdisciplinary approach could illuminate.

The first criterion to be considered is ***Classificatory function***. Yoruba nouns borrowed into Brazilian Portuguese often carry significant cultural and religious meanings. These nouns, while retaining their Yoruba roots, meanings and semantic features are incorporated into BP with potentially new grammatical and classificatory functions. For instance, Yoruba nouns like “*orixá*⁵” (Orisha) refers to a deity or spirit with no grammatical gender marking, and maintain their inherent classification based on religious or cultural significance. In BP, “*orixá*” is borrowed with its original meaning intact, primarily used in Afro-Brazilian religious practices like Candomblé and Umbanda. The term retains its spiritual and cultural significance but now operates within the BP’s gendered and numbered system. For example: “*o orixá*” (the Orisha - masculine) vs. “*A orixá*” (the Orisha - feminine). E.g.

- (6) Portuguese
 - a. ***O poderoso orixá***
‘The powerful Orisha’ (masculine and singular)
 - b. ***Os poderosos orixás***
‘The powerful Orishas’ (masculine and plural)
 - c. ***A orixá poderosa***
‘The powerful Orisha’ (feminine and singular)
 - d. ***As orixás poderosas***
‘The powerful Orishas’ (feminine and plural)

Despite the noun being inherently gender-neutral in Yoruba, BP imposes gender through its article system. It also reveals syntactic adaptation since “*Orixá*” *requires* agreement with articles, adjectives, and other modifiers. A second criterion is ***Agreement***. Yoruba uses classifiers more flexibly without obligatory gender marking, whereas BP requires gender agreement across noun

⁵ any of the minor gods or spirits of traditional Yoruba religion and its South American and Caribbean offshoots such as Santeria and Candomblé.

phrases. As shown in (6), Portuguese nouns and adjectives are inflected to indicate gender (masculine or feminine) and number (singular or plural). In Yoruba, the phrase “the powerful Orisha” does not change based on gender or number. Instead, Yoruba uses the plural marker “àwọn” for plurality and descriptive words for emphasis or clarification. E.g.

- (7) Yoruba
- a. *Orisha alágbára*
‘the powerful Orisha’ (singular)
 - b. *Àwọn Orisha alágbára*
‘the powerful Orishas’ (plural)

The third criterion focuses on the *syntactic position* of classifiers and how they interact with the rest of the noun phrase. In BP, the syntactic position of gender markers is fixed, while Yoruba classifiers can vary in position. Clearly, such a difference impacts how borrowed Yoruba nouns are integrated into BP. Thus, a flexibility in the classifier position occurs in the Yoruba language. Interestingly, a detail regarding the syntactic position of the linguistic elements is that the plural marker “àwọn” is placed before the noun to indicate plurality. Adjectives in Yoruba generally come after the noun they describe. Here’s how it contrasts with Portuguese, where adjectives can be placed either before or after the noun as shown in (6a-d). Such examples demonstrate how borrowed nouns from Yoruba language integrate into BP’s grammatical structure, requiring modifications to adhere to gender and number agreement rules, and highlights the contrast between Yoruba’s flexible classification system and BP’s rigid agreement requirements.

A fourth criterion proposed by Grinevald focuses on the *distribution* of classifiers and how their use is either obligatory or optional within the language. Yoruba classifiers can be either obligatory or optional depending on the context whilst Brazilian Portuguese has obligatory gender marking in *nPs*. E.g.

- (8) Yoruba
- Ìwé kan*
‘One book’ (literally “book one”)

In (8), the classifier “*kan*” (one) is optional since the sentence is still grammatically correct and complete without it. It can be used to specify “one” book, but its absence does not grammatically affect the sentence. However, it may be imperative to employ the classifier for reasons of specificity and plurality.

- (9) Yoruba
- a. *Iwé nla*
‘the big book’ (literally “book big”, singular)
 - b. *Àwọn iwé nla*
‘the big books’ (plural)

In this case, the classifier “*nla*” (big) is obligatory and must precede the noun “*iwé*” (book) to indicate “big book.” The plural marker “*àwon*” is obligatory to indicate that “*iwé*” is plural. In comparison, once again, both languages show their contrasts when placing classifiers. In the Yoruba language, their use is flexible and context-dependent, allowing for optional use in some cases and obligatory use in others whilst BP agreements are strictly obligatory, with no flexibility in their distribution.

The fifth criterion focuses on the requirement that classifiers must be *semantically compatible* with the nouns they classify. This criterion is also crucial in BP’s gender system. Semantic features such as animacy, cultural significance, and inherent properties of nouns in Yoruba influence how they align with BP’s gender categories. As discussed, in Yoruba, “*òrìsà*” is a deity or spirit, carrying significant cultural and religious connotations. There is no inherent gender, and classifiers are used based on context. Nominal classification can therefore take the following forms.

(10) Yoruba

a. ***Omólú náá je oba òrìsà***

‘Omólú is the king of Orishas’ (example without classifier)

b. ***Omólú je òrìsà kan***

‘Omólú is a (one) Orisha’

In (10b), the classifier “*kan*” is used for specifying one entity. Semantic compatibility with animacy may occur. In Portuguese, as in many gendered languages, nouns like “*orixá*” (Orisha) are assigned a gender (masculine or feminine), which may not directly correlate with animacy but reflects cultural and historical contexts.

(11) Portuguese

Oxalá é um orixá poderoso

‘Oxalá is a powerful Orisha’

In (11), “*Orixá*” is assigned a masculine gender in BP, reflecting the grammatical gender and the dominance of masculinity in the culture of many colonized countries, rather than animacy directly. This assignment aligns with cultural and socio-historical contexts where “*orixá*” is perceived through a masculine lens. In conclusion, classifiers must be semantically compatible with the nouns they classify and both languages ensure that classifiers or gender markers are semantically compatible with the nouns they modify. Although they differ because Yoruba allows flexible use of classifiers based on semantic properties such as animacy and cultural significance whilst BP only allows rigid and obligatory marking systems requiring semantic compatibility with gender categories. When Yoruba nouns are borrowed into BP, they need to adapt to the obligatory gender marking system of the latter, resulting in interlingual adaptations that reflect the semantic properties of both languages.

Grinevald's sixth criterion addresses the *morphological marking* of classifiers. It allows us to compare the flexibility in Yoruba with the rigid inflectional system in BP. Classifiers are morphologically marked but exhibit flexibility and context-dependence in Yoruba while it is rigidly morphologically marked and obligatory in BP, affecting all associated words. E.g.

(12) Yoruba

- a. *Òun ra èso kan*
'she bought a/one fruit'
- b. *Òun ra àwon èso kan*
'she bought some fruits'

In (12a), the classifier “*kan*” (one) is used for specificity. It is morphologically marked but optional depending on context. In (12b), the plural marker “*àwon*” is morphologically marked and necessary for indicating plurality.

(13) Portuguese

- a. *Ela comprou uma fruta*
'she bought a fruit'
- b. *Ela comprou algumas frutas*
'she bought some fruits'

The article “*uma*” (feminine) and noun “*fruta*” (feminine) are morphologically marked for gender, and agreement is obligatory. “*Algumas*” is used with plural feminine nouns, such as “*frutas*” (fruits), to indicate “some” in the context of quantity or indefinite amount. It agrees with the noun “*frutas*” in both gender (feminine) and number (plural), following the grammatical rule of agreement in Portuguese. Additionally, inflectional endings are mandatory in this language. E.g.

(14) Portuguese

- Ela comprou uma fruta deliciosa*
'She bought a delicious fruit'

The adjective “*deliciosa*” agrees in gender and number with “*fruta*” (feminine singular), showing rigid morphological marking.

(15) Yoruba

- Òun ra èso kan tó dún*
'She bought a delicious fruit'

The word “*èso*” (fruit) is singular. The word “*kan*” (one) specifies that it is a single fruit. If the sentence were referring to multiple fruits, a different structure or plural marker would be used, such as

“àwon èso” (fruits). “T’ó dùn” (that is delicious/that is sweet) is a relative clause describing the noun with no gender or plurality marking. In conclusion, Yoruba does not project a distinct *GenP* in the same way as BP since gender distinctions and classifications in Yoruba are influenced by situational and pragmatic factors rather than rigid syntactic projections.

Productivity highlights the ability of a language’s system (classifiers in Yoruba, gender in Brazilian Portuguese) to adapt and expand to accommodate new words and expressions. This criterion allows us to explore how BP incorporates Yoruba-derived nouns and whether this leads to increased productivity in BP’s gender marking system. Because Yoruba classifiers are flexible and context-dependent, they can be easily adapted to accommodate new nouns, whether borrowed or newly created, without strict morphological constraints.

(16) Yoruba

- a. **Òrìsà Oxalá alágbára**
‘the powerful Orisha Oxalá’
- b. **Iemanjá je òrìsà alágbára**
‘Iemanjá is a powerful Orisha’

As shown in (16a), “Òrìsà” remains gender-neutral, and “alágbára” (powerful) adds descriptive context. Again, in (16b), “òrìsà” does not change form, and “alágbára” is used to describe Iemanjá. As previously discussed, the noun “òrìsà” is inherently gender-neutral, and the same form is used regardless of the gender of the deity. Thus, the context is provided by other words in the sentence. Yoruba uses descriptive words to provide additional context. These words can indicate characteristics such as power, beauty, etc., but do not change based on gender.

(17) Portuguese

- a. **O poderoso orixá Oxalá**
‘The powerful Orisha Oxalá’ (typically male)
- b. **Iemanjá é uma orixá poderosa**
‘Iemanjá is a powerful Orisha’ (typically female)

On the other hand, in BP, the noun “orixá” is assigned a gender (masculine or feminine) based on the specific deity, and all related words must agree on gender. This creates two distinct forms for male and female deities. The system requires fixed agreement in gender for nouns and related words. This means that any borrowed noun from Yoruba must fit into the existing binary gender system of BP, leading to potentially new gendered forms.

The last criterion analyzes how borrowed terms can become integrated and fixed within the receiving language’s lexicon over time. **Lexicalization** can lead to the development of new forms and meanings, including gendered forms in languages with grammatical gender systems. Yoruba nouns borrowed into BP often retain their original semantic properties but adapt to BP’s grammatical

structures, including its gender system. As Yoruba nouns become lexicalized in BP, they are typically assigned a gender (masculine or feminine) based on BP's grammatical rules. This assignment might not align with the original Yoruba semantics but rather with BP's gender norms. Over time, these borrowed nouns can develop more specific gendered meanings in BP. For instance, a noun that originally had no inherent gender in Yoruba might become distinctly masculine or feminine in BP. For instance, "*orixá*" might take on more gender-specific roles, such as "*o orixá Oxalá*" (the Orisha Oxalá, with Oxalá being typically viewed as male) or "*a orixá Iemanjá*" (the Orisha Iemanjá, often seen as female), reflecting both traditional Yoruba attributes and BP's gender norms.

3. Conclusions and further directions

The initial hypothesis assumed that Yoruba's nominal classification would not equate to the gender system in BP. Instead, it would be more flexible and context dependent. It was hypothesized that the Yoruba language, which lacks a mandatory nominal class system, would show differences in the way gender distinctions are conveyed compared to BP. Another hypothesis suggested that gender assignment in lexical blendings between Yoruba and BP would be context-dependent or fluid, raising the question of whether the observed classifications are truly gender categories or nominal classifiers.

In conclusion, Brazilian Portuguese and Yoruba exhibit distinct mechanisms for marking and expressing gender. Portuguese reveals gender as an inherent feature of the noun root, demanding agreement with functional elements like articles and adjectives throughout the sentence structure. This gender agreement is pervasive and systematic. In contrast, Yoruba does not mark gender morphologically on nouns, relying instead on contextual cues and additional descriptive words to convey gender distinctions. This system functions more as a context-dependent specification, utilizing additional lexical items rather than inherent root features or functional projections. The study confirms that Yoruba's nominal classification system is indeed more flexible and context-dependent compared to the rigid gender system in BP. This supports the hypothesis and aligns with the theoretical positions that emphasize the syntactic rigidity of BP and the contextual flexibility of Yoruba.

The study found that while BP requires explicit marking and agreement across *nPs*, Yoruba allows for more fluid and situationally determined classifications. The analysis revealed that Yoruba nominal structures have merged with Portuguese gender marking systems, particularly in Afro-Brazilian religious contexts. This fusion has led to the incorporation of Yoruba items into BP, adapting to its grammatical rules while retaining original classification aspects. The analysis showed the arbitrariness of gender marking in many Portuguese nouns and highlighted differences in the interpretation of semantic gender and grammatical gender. It also noted the similarity in how these two types of gender are expressed morphophonologically in both languages.

As to CONGRUENCES, the Portuguese systems and the Yoruba systems share a morphosyntactic structure to organize their *nPs*. This structure, although implemented differently, provides a basis for comparison in how gender and classification are managed in each language. The languages exhibit similarities in how Yoruba lexical items are integrated into Brazilian

Portuguese. Such an integration often retains the semantic properties of the original Yoruba terms while adapting to Portuguese grammatical rules, particularly in religious contexts where Yoruba has had a significant influence.

As to CONTRASTS, a clear one is that Portuguese obligatorily assigns gender (masculine or feminine) to every noun, influencing agreement patterns with adjectives, articles, and pronouns. In contrast, Yoruba does not have a mandatory system of assigning nouns to gender categories. Instead, Yoruba employs nominal classifiers contextually and does not enforce gender agreement across sentences. Another divergence is seen in how plurals are formed. Portuguese inflects nouns to indicate plurality, whereas Yoruba forms plurals by embedding a classifier which works as a specifier that precedes the nouns, not by inflecting the nouns themselves. Lastly, while Portuguese nouns inherently carry gender distinctions that affect their morphosyntactic behavior, Yoruba relies on contextual cues and specific lexical items to convey gender distinctions. This makes the Yoruba system more flexible and less rigid compared to the grammatical gender system of Portuguese.

Gender assignment in lexical blendings between Yoruba and BP is context-dependent or fluid, indicating that the observed classifications are not strictly gender categories but can function as nominal classifiers. This comparative analysis is not intended to limit the findings on the subject and is just a gateway to comparative studies between typologically different languages in contact. Future research is welcome and should provide a more detailed description of morphosyntactic features in both languages, including affixation, borrowing, calquing, compounding, and reduplication.

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