A typology of languages with genderlects and grammatical gender

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9.1 Introduction

Grammatical gender is a well-known and common category (Corbett 1991). A much rarer and less studied phenomenon is indexical gender, whereby the gender of the speaker and/or the addressee is indexed in utterances that do not necessarily refer to the speech act participants (Bodine 1975; Dunn 2014; Fleming 2012). It can be indexed at several levels within the genderlects: phonological, morphological, and lexical. Grammatical gender and indexical gender are distinct and logically independent: there is no systematic interaction of indexical gender with grammatical gender. However, indexical gender at the morphological level most often occurs within the domain of (pro)nominal agreement (Rose 2013b, 2015b). Indexical gender may then interact with grammatical gender and lead to non-canonical gender systems. For instance, the Mojeño Trinitario pronominal paradigm shows two forms for third person human masculine singular: $\tilde{n}i$ in the female speech and ma in the male speech (see section 9.4 for more details). This chapter accounts for the twelve languages that have been found to show an interaction of indexical gender with grammatical gender within a cross-linguistic survey of gender indexicality (Rose and Bakker 2016).

This chapter also offers a canonical typology of interaction between indexical gender and grammatical gender (henceforth 'interacting IG&GG'). In a canonical interacting IG&GG system, the genderlect distinction applies to all grammatical gender values, both genderlects sharing these values but encoding them differently. This canonical type of interacting IG&GG is actually very rarely attested. Most of the twelve languages presented in this chapter show a less canonical interaction of indexical gender with grammatical gender. The attested types of interacting IG&GG differ in several respects: whether the grammatical gender values are the same across genderlects, whether the genderlect distinction applies uniformly to all

or only some grammatical gender values, and whether the gender values show some syncretism in the form of the markers across genderlects.

Section 9.2 introduces the terms 'grammatical gender' and 'indexical gender' and offers a canonical typology of the interacting IG&GG systems. Sections 9.3 to 9.8 present each type with a detailed description of the systems of particular languages. Section 9.9 discusses the results.

9.2 Interactions between grammatical gender and indexical gender (aka genderlects)

This section aims at distinguishing grammatical gender and indexical gender (9.2.1), highlighting their general lack of interaction (9.2.2), analysing the few cases in which they interact as instances of non-canonical gender (9.2.3), presenting them as a case of non-canonical gender systems (9.2.4), and then organizing these cases in a canonical typology (9.2.5).

9.2.1 Distinguishing grammatical gender and indexical gender

Grammatical gender is the categorization of the referents of nominals, encoded outside the nominals themselves, i.e. in an agreement system. The French examples in (1) show how the determiner (*la/le*) and the adjective (*grand/grande*) agree in gender with the nouns. It is a common category cross-linguistically: 112 out of a sample of 245 languages show gender (Corbett 2013a). It is also a well-known category with a solid typology (Corbett 1991).

(1) French

la (grande) fille le (grand) magicien la (grande) table le (grand) bureau 'the tall girl' 'the great magician' 'the large table' 'the large desk'

The central point of the canonical typology of gender is that 'in a canonical gender system, each noun has a single gender value' (Corbett and Fedden 2016; see also Corbett and Fedden this volume). Gender in this chapter is understood as covering not only typical European values like masculine, feminine, and neuter, but also absolute or relative features such as humanness, ethnicity, age, intimacy, and combinations of these features. It also covers systems that are elsewhere labelled as noun classes, with functional values such as 'insect, edible...', following Corbett (1991). The canonical approach to gender covers the cross-linguistically common situations in which gender distinctions cross-cut with number distinctions, as well as the systems in which gender applies only to pronominal targets, although they are far from the canonical ideal.

In contrast, indexical gender is the pragmatic indexing, within an utterance, of the gender of the speech act participants (the speaker and/or the addressee), regardless of whether or not they are participating in the situation referred to by the utterance.

For instance, in Cham, the same phoneme has two realizations in initial consonant clusters: [r] for males and [y] for females (2). Indexical gender does not participate in the denotational meaning of the utterance: it informs on the speech act situation rather than on the situation talked about. As Silverstein (1985: 223) puts it, 'particular language usages are said to belong to the realms of men's vs. women's speech, appropriate variations in saying otherwise "the same thing" indexing gender identities in the speech situation'. Indexical gender also differs from grammatical gender in that it does not involve agreement. This chapter deals with categorical rather than statistical indexical gender, i.e. with systems in which the genderlect distinction is obligatory and part of the grammar rather than a phenomenon of the usage in discourse. In the examples, the gender of the speaker is represented in the glosses and translations with \eth and \lozenge , not to be confused with M and F for grammatical gender.

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(2) Cham (Blood 1962)
hray hyay prah pyaw
'day &' 'day &' 'new &' 'new &'
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Indexical gender is cross-linguistically rare. I have been conducting a survey on genderlects with an initial focus on South America (Rose 2015b). Its scope is now worldwide, in collaboration with Peter Bakker (Bakker 2013; Rose and Bakker 2016). Data has been collected first-hand and also from grammars, areal studies, studies on language families, questionnaires sent through mailing lists, and consulting experts. Our main result is a list of about a hundred languages with categorical genderlects, i.e. less than 2% of the languages of the world. This is definitively a rare phenomenon, though less rare than previously posited (Bodine 1975). It is scattered and not confined to a language family or area.

The typology of categorical genderlects is emerging (Dunn 2014; Fleming 2012; Haas 1944; Rose 2015b). There is an effective typology of genderlects (Table 9.1), according to the speech act participant whose gender is indexed (Haas 1944). Type 1, indexicality of the gender of the speaker, accounts for most of the cases described in the literature. It is frequently labelled 'male/female speech'. Most of the languages that are dealt with in this chapter are of this type, with only one language indexing the gender of the addressee. Whatever the type, the genderlect distinction is binary

| Table 9.1 Typology of genderlects | | | | | |
|-----------------------------------|---|-----|--|--|--|
| Type 1 | Gender of the speaker | (2) | | | |
| Type 2 | Gender of the addressee | (3) | | | |
| Type 3 | Relational gender: gender of both the speaker and the addressee | (4) | | | |

¹ A questionnaire on genderlects is available in English, French, Spanish, and Portuguese at http://www.ddl.ish-lyon.cnrs.fr/ROSE. The English version is also published as an appendix to Rose (2015b).

| Table 9.2 Grammatical gender vs indexical gender | | | | |
|--|---|--|--|--|
| Grammatical gender | Indexical gender | | | |
| Gender of the referent Agreement M, F, (N) Common | Gender of speaker and/or addressee No agreement ♂/♀ Rare | | | |

in the twelve languages. It is based on the two social genders 'male/female' that are loosely connected to biological sex.

- (3) Mandan (Mithun 1999)
 -o?re
 -o?s
 'indicative (ADD δ)'² 'indicative (ADD Q)'
- (4) Yana (Sapir 1963) $sika \cdot ka \qquad sika \cdot k^h A \qquad yuna \qquad yuh$ 'quail $\eth \to \eth$ ' 'quail $\eth \to Q$, $Q \to Q$ ' 'acorn $\eth \to \Phi$ ' 'acorn $\eth \to Q$, $Q \to Q$ '

Another parameter for genderlects is the domain of the grammar in which the gender of the speech act participants is indexed (Fleming 2012; Rose 2015b; Rose and Bakker 2016). Four major domains have been distinguished: phonetics/phonology (2), morphology (3), lexicon (4), and discourse markers including interjections and discourse particles (5). Table 9.2 summarizes the distinction between grammatical gender and indexical gender.

(5) Bolivian Guaraní (Giannecchini 1996: 306, 10; Ortiz and Caurey 2012: 20, 33) éé tà akaa achaa 'yes ♀''yes ♂''ouch ♀''ouch ♂'

9.2.2 The non-interaction of indexical gender with grammatical gender

Grammatical gender and indexical gender are logically two independent phenomena, and are not particularly expected to interact. This is most obvious when gender is indexed in the phonology, in the lexicon, or in discourse markers, since grammatical gender pertains to another domain, that of morphology. Four types of non-interaction have been observed.

First of all, there is a great number of languages with grammatical gender and no genderlects, such as French, illustrated in (1).

 $^{^2}$ The gender of the addressee is represented in the glosses and translations with ADD \eth and ADDՉ, and relational gender is indicated by two gender symbols separated by an arrow representing the direction of speech from speaker to addressee.

| | 1SG | 1EX | 1IN | 2SG | 2PL | 3SG | 3PL |
|--------------|------|------|-----|-----|------|-----|------|
| genderlect ♀ | etse | penu | ini | | 20.2 | ay | inu |
| genderlect ♂ | ta | tana | ini | ene | ере | uri | rana |

TABLE 9.3 The pronominal paradigm of Kokama (Vallejos 2010: 201)

Second, there is a rather small number of languages with indexical gender (around a hundred across the world), and we can estimate that about half of them do not have grammatical gender. This is the case with modern Kokama, a Tupí-Guaraní language. Modern Kokama shows a genderlect distinction in its pronominal paradigm, as well as in some deictics, connectors, interjections, and in a number marker and a hortative marker (Vallejos 2015). Nevertheless, it does not encode grammatical gender. In the pronominal paradigm of Kokama (Table 9.3), the different forms for some first and third persons vary depending on the gender of the speaker, not the gender of the referent.

Third, some languages have both grammatical gender and indexical gender, but these two systems coexist without overlapping. For example, Beja (a Cushitic language) has grammatical gender on determiners, demonstratives, non-dative independent pronouns, and subject affixes. It also shows suffixes indexing the gender of the addressee, which are added after object, possessive or dative pronominal enclitics. These last markers do not encode grammatical gender (Antonov 2015; Vanhove 2017). The two systems of grammatical and indexical gender do not therefore overlap in the locus of marking. In (6), grammatical gender shows in the nominal determiner and the verbal subject prefix i-, and indexical gender in the suffix -i added after the object enclitic.

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(6) Beja (cited in Antonov 2015; Vanhove 2012)

dyanta:j=i:b a-kati=je:t to:=na

jinn=LOC.sG 1sg-be.PFV=REL.F DEF.SG.F.ACC=thing

ki=i-kan=he:b-i

NEG.IPFV=3sG.M-know.PFV=1sG.ACC-ADD:F

'He doesn't know me as a jinn' (said the jinn to his sister)
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Fourth, there is a situation where grammatical gender and indexical gender are indistinguishable. This is the case when gender affects either first or second person pronominal markers separately, but not third person. There is no way to decide whether the best analysis is in terms of grammatical gender or indexical gender (Rose 2013b).³ The

³ In a system with a gender distinction affecting also third person, the gender of first or second person pronominal markers would be analysed as part of a more general system of indexical or grammatical gender, depending on the type of gender affecting third person.

Table 9.4 Iraqw long forms of singular personal pronouns (Mous 1993; cited in Siewierska 2011)

| | 1SG | 2SG | 3SG |
|-----------|-------|-------|------|
| M / ADD ♂ | | kúung | inós |
| F / ADD Q | aníng | kíing | เทอร |

Table 9.5 Types of non-interaction of indexical gender with grammatical gender

| Grammatical gender | Indexical gender | Example |
|-------------------------------------|------------------|---------------|
| yes | no | French |
| no | yes | Modern Kokama |
| yes (in domain x) yes (in domain y) | | Beja |
| yes (undistinguishable—refere | Iraqw | |

referent of the pronoun and the speech act participant are then one and the same person. This is called 'referential gender indexicality' (Fleming 2012) and is illustrated in Table 9.4 with the pronominal paradigm of Iraqw (Cushitic).

This section has given an overview of the types of non-interaction of indexical gender with grammatical gender, a situation that is almost universal. These types of non-interaction are summarized in Table 9.5. The next sections focus on the very rare situations with interacting IG&GG.

9.2.3 The interaction of indexical gender with grammatical gender: the survey

Though indexical gender is not logically linked to grammatical gender, they actually often interact when gender is indexed in the morphology. This is due to the fact that pronouns and gender/noun class markers are the primary morphological locus for indexical gender (Fleming 2012; Rose 2015b), and that pronouns are also a frequent target for grammatical gender agreement. This is shown in Table 9.6 where each subsequent row represents a subset of the languages in the row above. Given the small total number of languages with categorical indexical gender, the number of languages found with interacting IG&GG is low, with only twelve languages. The interaction of indexical gender with grammatical gender is a rare phenomenon.

Information on the twelve languages with interacting IG&GG is given in Table 9.7. The IG&GG types will be defined in section 9.2.5 (see Table 9.9) and detailed in sections 9.3 to 9.8. The twelve languages under study are genetically diverse, representing five families and three isolates. Two language groups are better represented,

Table 9.6 Results of the genderlects survey

| Languages with indexical gender | 102 |
|--|-----|
| Languages with indexical gender in the morphology | 46 |
| Languages with indexical gender in the (pro)nominal agreement system | 39 |
| Languages with indexical gender interacting with grammatical gender | 12 |

Table 9.7 Languages with grammatical gender and indexical gender interacting

| Language | Family | Country | Indexing the gender of | IG&GG interaction | Main source for this chapter |
|----------------------------|------------------|--|------------------------------|----------------------|---|
| Cheke Holo | Oceanic | Solomon Islands | speaker | Type F' | White, Kokhonigita, and Pulomana 1988 |
| Chiquitano | isolate | Bolivia | speaker | Type F' | Sans 2013 |
| Diuxi Mixtec | Oto- Manguean | Mexico | speaker | Туре Н | Kuiper and Pickett |
| Garifuna | Arawak | Belize, Honduras, United States of America | speaker | Type F" | de Pury 2003; Munro 2013; Haurholm-Larsen 2016 |
| Guelavía Zapotec | Oto- Manguean | Mexico | speaker | Туре Н | Jones and Church |
| Kayabí | Tupí | Brazil | speaker | Type A | Dobson 1997 |
| 1930s Kokama | Tupí | Peru | speaker | Type F' | Espinosa 1935 |
| Mojeño | Arawak | Bolivia | speaker | Type C | Rose 2013a |
| Pumé | isolate | Venezuela | addressee | Type A | García 2000 |
| Texmelupa Zapotec | Oto- Manguean | Mexico | speaker | Туре Н | Marlett 1993 |
| Yanyuwa | Pama- Nyungan | Australia | speaker | Type G ~ H | Kirton 1988 |
| 1920s Yuchi 1990s Yuchi | isolate | United States of America | speaker | Type C Type D ~ H | Linn 2001 Wagner 1933–8; Wolff 1948 |

with three Oto-Manguean languages and two Tupí-Guaraní languages. Most of these twelve languages are spoken in the Americas and all but one show indexicality of the gender of the speaker (Type 1 in Haas's 1944 typology). These asymmetries in the areal distribution and the type of the genderlects accounted for in this chapter are also found in the genderlect surveys (Rose 2015b; Rose and Bakker 2016).

Note that several types of interacting IG&GG can be instantiated within an individual language. This is the case between two historical stages of Yuchi (1920s and 1990s Yuchi), that will be treated as two separate case studies. This is also the case within a single system, as with the realization of Yanyuwa gender on different targets and two different analyses of the 1920s Yuchi gender system.

9.2.4 The interaction of indexical gender with grammatical gender: non-canonical gender systems

This chapter lies within the framework of Canonical Typology (Brown and Chumakina 2013).

Adopting a canonical approach means that we take definitions to their logical end point, and this enables us to build theoretical spaces of possibilities. Only then do we investigate how fully this space of possibilities is populated with real instances. (Corbett and Fedden 2016: 497)

The core principle of the canonical typology of gender is that 'in a canonical gender system, each noun has a single gender value' (Corbett and Fedden 2016: 503). The interaction of indexical gender with grammatical gender is not discussed as such in the existing canonical typology of gender (Corbett and Fedden 2016). The canonicity of the gender systems presented in this chapter is dependent on whether they are observed at the genderlect level or at the language level.

At the genderlect level, each of the twenty-four genderlects presented in this chapter shows a rather canonical gender system, respecting the principle that each noun has a single gender value. They are also canonical in that assignment is strictly semantic, with no impact of phonology or morphology. Nevertheless, some of the systems presented here diverge from the canon because gender is encoded in the pronominal paradigms only, rather than on various targets.

At the language level, i.e. taking into account both genderlects, the thirteen gender systems presented in this chapter are all non-canonical. The gender of the speech act participants is not encoded in morphemes which primarily function to index the gender of the speech act participants: the gender-indexing function (on the pragmatic level) is in fact added to the basic function of the morphemes (on the

⁴ None of the languages where grammatical gender interacts with indexical gender has genderlects encoding combinations of the gender of the speaker and the gender of the addressee. Therefore, all the systems presented in this chapter involve only two genderlects: male and female (the gender being that of the speaker, except in Pumé where it is that of the addressee).

morphosemantic level). This pragmatic indexing is covered within the canonical typology of gender under the notion of 'context' and 'conditions': 'In the canonical situation, gender is not context-dependent' (Corbett and Fedden 2016: 519).⁵ The gender systems presented here are therefore not canonical because they differ depending on the gender of the speech act participants and are consequently not used in the same context or pragmatic conditions. The gender of the speech act participants is a 'condition' that shapes grammatical gender (both in its values and its encoding). Indexical gender makes grammatical gender less canonical by contradicting a principle of canonical morphosyntactic features, according to which 'features and their values are clearly distinguished by formal means (and the clearer the formal means by which a feature or value is distinguished, the more canonical that feature or value)' (Corbett and Fedden 2016: 6).

9.2.5 The interaction of indexical gender with grammatical gender: A canonical typology

In the languages of the survey, the interaction of indexical gender with grammatical gender is actually very diverse and complex. This chapter offers to organize the thirteen cases into a canonical typology of interacting IG&GG systems. The canon is a system where all grammatical gender values are encoded by two formally distinct means, depending on the pragmatic condition of the gender of a speech act participant. Table 9.8 schematizes this canon. It is illustrated in section 9.3.

In this chapter, tables are used to schematize each type of interaction, on the model of Table 9.8. The rows represent the two genderlects arbitrarily labelled 1 and 2, and the three columns the maximal number of values existing in at least one genderlect (arbitrarily labelled gender x, y, and z). Each type of column could be replicated in a particular language. In the tables representing types of interacting IG&GG, cells are filled by a letter representing a form. Two identical letters in the same table represent a form with several (grammatical and/or indexical) functions. Similar tables are also

| grammatical genuci | | | | | |
|--------------------|----------|----------|----------|--|--|
| | gender x | gender y | gender z | | |
| genderlect 1 | a | С | e | | |
| genderlect 2 | ь | d | f | | |

Table 9.8 Canonical interaction of indexical gender with grammatical gender

⁵ And also: 'The basic idea of the definition [of agreement classes] is that nouns are in the same agreement class provided that given the same conditions they will control the same agreement form' (Corbett and Fedden 2016).

used to present the data of the twelve languages under study. Values are generally organized from left to right in the following sequences: human/non-human, masculine/feminine, familiar/honorific, singular/plural.

Non-canonical types diverge from the canon according to three binary parameters that correspond to deviations from the three features of the canon repeated below:

- i. same grammatical gender categorization across genderlects;
- ii. total application of the genderlect distinction over the grammatical gender values:
- iii. absence of syncretism for different grammatical gender values across genderlects.

The first parameter is cross-genderlect similarity in grammatical gender categorization: it determines whether the grammatical gender values are the same in both genderlects. This boils down to comparing the alignment of columns between the two rows in the tables. Grammatical gender categorization is considered to be the same across genderlects if the number of values is the same and if these values have the same semantic extension. This entails the exact same gender assignment in both genderlects. Grammatical gender categorization is considered to be different across genderlects if the semantic extension of the values differs across genderlects. This is the case when the genderlects show a different number of values. This happens when one genderlect neutralizes a distinction that the other genderlect makes in some part of the system. Note that in the tables, the cells sharing a marker within one genderlect are merged: this is horizontal or intra-genderlect value syncretism. The other case of different categorization across genderlects is when the genderlects show the same number of values, but with a different extension. Deviations along the first parameter contradict two principles of canonical gender. First, if gender assignment is different between genderlects, i.e. if the same gender value is assigned to a different group of nouns, then this violates the basic principle that each noun should have just one gender value (Corbett and Fedden 2016). Since IG&GG are seen as one overall system, some nouns in this scenario would end up with two genders (one in the male speech, one in the female speech). Second, when one genderlect neutralizes a gender distinction that the other makes, it contradicts the expectation that 'in the canonical situation the number of controller and target genders is the same' (Corbett and Fedden 2016: 510). Interacting IG&GG systems with a different categorization of grammatical gender are non-canonical, because gender assignment is variable rather than fixed, and depends on the gender of a speech act participant.

The second parameter for a canonical typology of interacting IG&GG is the scope (total vs partial) of the genderlect distinction over the grammatical gender values. This parameter distinguishes the interacting IG&GG systems in which the genderlect distinction affects all values from those in which it affects only some values (the remaining values being shared and encoded identically across genderlects). In the

tables, when the same marker is used for the same value across genderlects, then the cells sharing the marker are merged: this is vertical syncretism for the same value. There is no genderlect distinction for this value. The second parameter can be visualized as whether or not the dividing line between the two genderlects goes across the whole table. It results in less canonical types of interacting IG&GG, because the gender of a speech act participant as a condition to gender marking applies to a subset of the values only.

The third parameter for a canonical typology of interacting IG&GG is the absence vs presence of cross-genderlect syncretism. This parameter distinguishes the types of interacting IG&GG where each marker is specialized for a value (no cross-genderlect syncretism) with those where a form (or several forms) covers different values across genderlects (cross-genderlect syncretism). This is observable in the tables as diagonal syncretism of forms for different columns in the two rows. When the same marker is used for two different values across genderlects, then the cells with the syncretic marker are shaded in the tables. Cross-genderlect syncretism diverges from a principle of canonical morphosyntactic features, according to which 'canonical features and their values are uniquely distinguished' (Corbett and Fedden 2016: 514). When two values are syncretic across genderlects, they are less canonically distinguished. The resulting interacting IG&GG systems are then less canonical.

These three parameters result in eight logical types of interaction of indexical gender with grammatical gender, presented in Table 9.9. Each type is defined as a combination of a {+} or {-} value for the three parameters, each {-} value being a symbol for non-canonicity. Type A is the canon {+same; +total; +absent}, and Type H is the least canonical type {-same; -total; -absent}.

Table 9.9 Typology of interaction of indexical gender with grammatical gender

| Туре | Same categorization | Total application of genderlect | Absence of cross-genderlect syncretism |
|-------------|---------------------|---------------------------------|--|
| A the canon | + | + | + |
| В | + | + | _ |
| С | + | _ | + |
| D | + | _ | _ |
| Е | _ | + | + |
| F | _ | + | _ |
| G | _ | _ | + |
| Н | _ | _ | _ |

TABLE 9.10 Type B

| | gender x | gender y | gender z |
|--------------|----------|----------|----------|
| genderlect 1 | a | С | d |
| genderlect 2 | b | a | e |

Table 9.11 Type E

| | gender x | gender y | gender z |
|--------------|----------|----------|----------|
| genderlect 1 | a | | d |
| genderlect 2 | ь | с | e |

Two of the eight types are not attested, though they are logically possible: Type B {+same; +total; -absent} illustrated in Table 9.10, and Type E {-same; +total; +absent} illustrated in Table 9.11.

For ease of exposition, I will use the terms 'cis-' and 'trans-' to characterize forms or values that encode, respectively, a referent and a speaker/addressee of the same gender or of different genders. 'cis-' is used for forms or values that refer to a masculine referent and index a male speech act participant, or that refer to a feminine referent and index a female speech act participant. 'trans-' is used for forms or values that refer to a masculine referent and index a female speech act participant, or that refer to a feminine referent and index a male speech act participant.

9.3 Type A {+same; +total; +absent}: The canon

The languages with Type A interaction of indexical gender with grammatical gender are those in which both genderlects show the same grammatical gender categorization, and encode each value differently, with no cross-genderlect syncretism (Table 9.12). This type corresponds to the most simple and most expected type of interaction: the grammatical gender systems of each genderlect are both comparable and independent. It is the canonical instance of interacting IG&GG.

Table 9.12 Type A

| | gender x | gender y | gender z |
|--------------|----------|----------|----------|
| genderlect 1 | a | С | e |
| genderlect 2 | b | d | f |

TABLE 9.13 Kayabí third person pronouns

TABLE 9.14 Kayabí as an instance of Type A

| | 3SG.M | 3SG.F | 3PL |
|--------------|-------|-------|-----|
| genderlect Q | a | с | e |
| genderlect ♂ | ь | d | f |

This type is illustrated in Table 9.13 with the part of the pronominal paradigm of Kayabí (Tupí-Guaraní) that is affected by grammatical gender. Kayabí shows three values for third person pronominals (Dobson 1997).⁶ Both genderlects share these values but encode them differently, without any syncretism. Example (7) is a short dialogue where the same (masculine) referent is referred to by different markers depending on the gender of the speaker.

(7) Kayabí (Dobson 1997)

- a. Ma'a-pe te 'ga oì?

 INT-to INT 3M.SGØ 3.go

 'Where does he go? Ø'
- b. ko pe kãã oì. field to 3M.SGQ 3.go 'He goes to the field. Q'

Table 9.14 summarizes how Kayabí instantiates Type A, with the same categorization across genderlects, different markers for each value, and no cross-genderlect syncretism. Both the grammatical gender and the genderlect distinctions must have been innovated in Kayabí, since they are not reconstructed in Proto-Tupí-Guaraní (Dietrich 1990; Jensen 1998; Schleicher 1998).

Type A has also been found in another language, Pumé (an isolate also known as Yaruro). The gender of the addressee is indexed within more than 100 forms expressing the person, number, and grammatical gender of the subject, the object, and the possessor, as well as mode (Mosonyi 1966).⁷ Grammatical and indexical

⁶ The two genderlects neutralize the masculine/feminine distinction in the plural.

Mosonyi's data was kindly made accessible to me by José Alvarez as a Toolbox database.

gender interact in the third person pronominals, which are categorized as masculine or feminine, and additionally index the gender of the addressee (García 2000). In (8), the person clitic for the third person feminine singular subject differs depending on the gender of the addressee. There is no hint as to the origin of this system, Pumé being an isolate, and the system being symmetrical.

(8) Pumé (García 2000)

- a. iaí jĩní jara **ní** woman the drink 3F.SG.ADDQ 'The woman drinks (female addressee).'
- b. iaí jĩní jara **nế**woman the drink 3F.SG.ADD♂
 'The woman drinks (male addressee).'

Type A represents the canonical interacting IG&GG system. The following types all differ from this type with respect to at least one of the parameters described in 9.2.5.

9.4 Type C {+same; -total; +absent}

In Type C, the same values for grammatical gender are found across genderlects, but the genderlect distinction applies only to some of the values. This results in a system where some grammatical gender values have a common marker across genderlects, and others have different markers depending on the genderlect. There is no cross-genderlect syncretism. This is summarized in Table 9.15.

This type is illustrated by both the Ignaciano and Trinitario dialects of Mojeño, an Arawak language of Bolivia (Rose 2013a). In that language, gender indexicality applies to part of the pronominal paradigm: some pronominal forms depend on the gender of the speaker. The forms given in Table 9.16 are used as person prefixes

| Table 9.15 | Type C |
|-------------------|--------|
|-------------------|--------|

| | gender x | gender y | gender z |
|--------------|----------|----------|----------|
| genderlect 1 | a | | J |
| genderlect 2 | b | C | a |

Table 9.16 Mojeño third person forms

| | 3H.SG.M | 3H.SG.F | 3H.PL | 3NH |
|--------------|---------|---------|-------|-----|
| genderlect Q | ñi | | | 4- |
| genderlect 3 | ma | su | no | to |

on nouns (for possessor) and verbs (for subjects), as formatives of free personal pronouns and demonstratives, and as free words (articles). There are thus pervasive in the grammar and discourse (Rose 2013a). Within this small paradigm referring to third persons, three semantic features interact: humanness, masculine/feminine, and number (Rose 2015a). This gives four values: human singular masculine, human singular feminine, human plural, and non-human. The non-human value neutralizes the number and gender distinction. The human plural value neutralizes the gender distinction. A pragmatically based genderlect distinction additionally applies to the human singular masculine value only, with two forms depending on the gender of the speaker.

The pair of forms $\tilde{n}i$ / ma for third person human singular masculine is exemplified with the free personal pronouns eñi /ema in (9), a small dialogue referring to one masculine individual.

(9) Mojeño

- a. Mu-em-itko-pu-iji napoleón guaribana. ema Napoleón Guaribana 3M.SG♂-CAUS-know-PFV-REP 3M.sg 'He, Napoleón Guaribana, he taught her (our language). & (Text20.10)
- b. Eñi napoleón-ri'i, ñ(i)-itko 3M.SGQ ART.M.SGQ Napoleón-IPFV 3M.SGQ 3M.SGQ-know ART.NH v-echjiriiwo? 1PL-language

'He, Napoleón, does he know our language? Ω' (Text20.12)

To sum up, Mojeño is an instance of Type C of interacting IG&GG in that the genderlect distinction applies only to part of the grammatical gender values (Table 9.17). It actually applies only to one value, third human singular masculine. The two markers for this value do not show any syncretism. I have argued elsewhere (Rose 2015a) that between these two forms, the male speech masculine ma is very likely to be an innovation: it is the cis-form that would have been added to the previous system.

Type C is also visible in the gender system of 1990s Yuchi (or Euchee) as described by Linn (2001). Two accounts of an older stage of the Yuchi gender systems as described by Wolff (1948) will be presented in sections 9.5 and 9.8 (see Table 9.21

| | | • - | | |
|--------------|---------|-----|-------|---------|
| | 3H.SG.M | 3NH | 3H.PL | 3H.SG.F |
| genderlect Q | a | | 4 | |
| genderlect ♂ | b | C | a | e |

TABLE 9.17 Mojeño as an instance of Type C

and Table 9.38). These older data and analyses instantiate other types of interacting IG&GG. In this isolate language, gender (called 'noun class' by Linn) is marked on each noun, as well as by third person markers. 'Third person markers [...] are prefixed to V stems; when prefixed to N stems, they mark possession; when suffixed to N stems, they mark relationship to the speaker or tribal affiliation' (Wolff 1948: 242-3). Third person markers also vary according to the argument encoded and the verb type. The 1990s Yuchi paradigm presented in Table 9.18 and in sections 9.5 and 9.8 are the third person patient prefixes found on verbs. They show distinctions in person, number, humanness, gender of speaker, and honorifics. The 'honorific' class, as labelled by Linn and given under the column Yuchi.F.HONORIFIC, is restricted to grandmothers and does not vary across genderlects. Plural forms, which vary across genderlects, are also used for an honorific reference to a singular person who is older and/or unrelated to the speaker, other than the grandmother. The system presented in Table 9.18 shows six values, and all are shared cross-genderlect. The forms for two of these values nevertheless differ across genderlects, without showing any crossgenderlect syncretism.

Table 9.19 shows that 1990s Yuchi instantiates Type C interaction of indexical gender with grammatical gender. The categorization is the same throughout the system. The genderlect distinction applies to some values only, without crossgenderlect syncretism.

In contrast, sections 9.5 and 9.8 will show that at an earlier stage, the language exhibited cross-genderlect syncretism and could be described as either having the same categorization or not. The system reported by Linn obviously results from a

| TABLE 9.18 1990s Yuchi third | l person pronominals | (patient forms) according to |
|------------------------------|----------------------|------------------------------|
| Linn (2001) | | |

| | Yuchi.м | Yuchi. _F | Yuchi.F honorific | Yuchi.pl + sg.honorific | non-Yuchi | inanimate |
|--------------|---------|---------------------|----------------------|----------------------------|-----------|-----------|
| genderlect Q | s?e | | ?ē | ?i | | hi |
| genderlect ♂ | hẽ ~ hõ | se | re | hõ | we | nı |

Table 9.19 1990s Yuchi as an instance of Type C

| | Yuchi_м | Yuchi.F | Yuchi.F honorific | Yuchi_PL + sg_honorific | non-Yuchi | inanimate |
|--------------|---------|---------|----------------------|----------------------------|-----------|-----------|
| genderlect Q | a | | J | e | ~ | L |
| genderlect ♂ | ь | С | u | f | g | h |

simplification of the system described in the first half of the twentieth century, as was already suspected earlier (Wagner 1933–8).⁸ The major simplification lies in the neutralization (besides the 'grandmother honorific' form) of the grammatical gender in the honorifics/older forms. Moreover, the 'grandmother honorific' form nowadays shows no genderlect distinction. Therefore, the Type C system observed in modern Yuchi is the result of loss or reanalysis rather than of innovation.

To summarize, Type C {+same; -total; +absent} is less canonical than Type A because the genderlect distinction applies to only a subset of the targets (i.e. the masculine in Mojeño, the Yuchi masculine and plural/singular honorific). In both systems, the genderlect distinction applies precisely to referents that are naturally gendered: humans.

9.5 Type D {+same; -total; -absent}

Type D of interacting IG&GG is similar to Type C in showing the same gender categorization across genderlects, and having a genderlect distinction that applies only to some gender values. It differs by allowing cross-genderlect syncretism. Type D is summarized in Table 9.20, where shaded cells highlight cross-genderlect syncretic forms.

Type D is illustrated by an account of the 1920s Yuchi gender system by Wolff (1948). This system differs from the more recent system described by Linn in the values, the distribution of the markers, and the forms of some markers (see Table 9.18). It has already been mentioned that in this language, gender is expressed with third person markers and that the genderlect distinction applies only to some values within this third person paradigm (Linn 2001; Wolff 1948). Wolff (1948) presents two alternative analyses of the 1920s Yuchi gender system, in which 'both men and women employ one morpheme in referring to their own sex, but two morphemes in making reference to the opposite sex' (Wolff 1948: 243). In one account, the three super-values 'cis-gender' ('female referent for a female speaker'

| | gender x | gender y | gender z |
|--------------|----------|----------|----------|
| genderlect Q | a | С | d |
| genderlect ♂ | b | a | u |

TABLE 9.20 Type D

⁸ Some complexity remains in the variation observed among dialects and families, not accounted for here.

Table 9.21 1920s Yuchi third person pronouns (actor forms not included) according to Wolff (1948), organized by super-value

| | Yuchi_cis- gender | Yuchi_trans- gender not older | Yuchi_trans- gender | Yuchi.pl | non-Yuchi | non- Yuchi.pl |
|--------------|----------------------|-------------------------------------|------------------------|----------|-----------|------------------|
| genderlect ♀ | se | s?e | o: | he: | we | we: |
| genderlect ♂ | hõ | se | \tilde{e} | 116. | W C | WC. |

Table 9.22 1920s Yuchi as an instance of Type D

| | Yuchi_cis- gender | Yuchi_trans- gender not older | Yuchi_trans- gender | Yuchi.pl | non-Yuchi | non- Yuchi.pl |
|--------------|----------------------|-------------------------------------|------------------------|----------|-----------|------------------|
| genderlect Q | a | С | d | f | a | h |
| genderlect ♂ | b | a | е | 1 | g | 11 |

and 'male referent for a male speaker'), 'trans-gender', and 'trans-gender not older' have different forms across genderlects (Table 9.21). In Wolff's other account of the same system, the categorization differs from one genderlect to the other (see Table 9.38 in section 9.8 on Type H).

The account of the system presented in Table 9.21 is considered as Type D (Table 9.22) on the basis of showing the same categorization across genderlects, and the genderlect distinction applying to a part of the system only, with partial cross-genderlect syncretism. It differs from Linn's account of modern Yuchi which is a Type C (see section 9.4) because it shows cross-genderlect syncretism: the 'cisgender' in the female speech (more explicitly 'female referent for female speaker') is syncretic with the 'trans-gender not older' in the male speech (more explicitly 'female referent not older for male speaker'), as highlighted with the shaded cells. ¹⁰ There are no hypotheses on the genesis of the Yuchi gender system.

Type D is even less canonical than Type C, since cross-genderlect syncretism blurs the identifiability of the values at the language level: it is both {-total} and {-absent}.

 $^{^9}$ Wagner (1933–8: 326) in fact analyses the 'older/not older' distinction not in terms of relative age, but in terms of generation.

 $^{^{10}\,}$ In Wolff's (1948) other account of the data (see Table 9.44), this same form se is presented as the single form for the value 'feminine not older' across genderlects. It also covers 'feminine older' in the female speech.

9.6 Type F {-same; +total; -absent}

Type F comprises systems with a different categorization across genderlects in which the genderlect distinction applies to the whole system with some cross-genderlect syncretic forms. The two attested subtypes of interaction are extreme cases among the logically possible instantiations of this type. In subtype F', the difference in categorization is such that one genderlect shows grammatical gender while the other does not. In subtype F'', the number and labels of the values are the same, but gender assignment differs for a class of controllers. Other possible subtypes are not attested, such as systems with genderlects differing in more than two values.

Type F' is attested in three languages and summarized in Table 9.23. The number of columns (representing two gender values) is illustrative of the three cases found in the literature. One of the genderlects shows no grammatical gender.¹¹

The first illustration of Type F' is Chiquitano (also known as Chiquito or Bésiro), a language of Bolivia arguably part of the Macro-Jê stock (Adelaar 2008; Sans 2011). The Chiquitano genderlect distinction shows in the expression of grammatical gender, in free pronouns, to some extent in nominal class markers on nouns (see Rose 2015b for more details), but more pervasively in the pronominals used for marking possession on nouns and argument encoding on verbs. The male speech shows two gender values, masculine and feminine, with only masculine being marked. The female speech neutralizes this gender distinction, with no marker. This unmarked form is syncretic with the male form for feminine. Table 9.24

TABLE 9.23 Type F'

| | gender x | gender y | |
|--------------|----------|----------|--|
| genderlect 1 | a | | |
| genderlect 2 | a | b | |

Table 9.24 Chiquitano third person pronominals on nouns (based on Galeote Tormo 1993; Sans 2013)

| | 3sg.f | 3sg.m | 3PL.F | ЗРЬ.М |
|--------------|-------|-------|-------|-------|
| genderlect Q | i- | | iyV- | |
| genderlect ♂ | i- | i=ti | iyV- | i=ma |

¹¹ A reviewer had a different view: that grammatical gender is present in both genderlects, but with syncretism for the two values in one genderlect.

illustrates this system with the third person pronominals that express the possessors on nouns. The genderlect distinction is essentially expressed by enclitics on the nouns, though in the plural the third person prefixes also differ for masculine gender. The enclitics are specific to male speech and express masculine gender, while feminine gender is a covert value. I argue elsewhere that male speech is therefore very probably an innovation in Chiquitano (Rose 2015a).

Example (10) shows that male speakers encode masculine gender by adding a masculine clitic (=ti in the singular and =ma in the plural) to refer to a third person male subject or possessor (Sans 2013). In contrast, female speakers never encode grammatical gender.

```
(10) Chiquitano (Macro-Jê, Sans' fieldnotes)
```

```
a. ba-páche-ro=ti n-i-kisé-s
3-look_for-tam=3sg.m♂ n-3-knife-det
'He looks for her knife. ♂'
```

```
b. ba-páche-ro n-i-kise-s=tí
3-look_for-tam n-3-knife-det=3sg.mð
'She looks for his knife. ð'
```

```
c. ba-páche-ro=ti n-i-kise-s=tí 3-look_for-tam=3sg.mð n-3-knife-det=3sg.mð 'He looks for his knife. ð'
```

d. ba-páche-ro n-i-kisé-s
 3-look_for-TAM n-3-knife-DET
 'She looks for her knife. δ' or 'She looks for her knife. / She looks for his knife. / He looks for her knife. / He looks for his knife. Q'

Table 9.25 summarizes how Chiquitano shows a Type F' IG&GG interaction. Syncretism occurs between the default form of the female speech and the feminine form of male speech. The interaction of indexical gender with grammatical gender is extreme in that one genderlect shows grammatical gender while the other does not.

A second language illustrating Type F' is Cheke Holo, an Oceanic language (White et al. 1988). Grammatical gender and indexical gender in Cheke Holo are found only within the third person of the pronominal system (used for S, O, and possessor). In a

| TABLE 9.25 | Chiquitano | as | an | instance | of |
|--------------|--------------|----|-----|----------|----|
| Type F' (sin | ngular forms | on | ly) | | |

| | 3sg.f | 3sg.м |
|--------------|-------|-------|
| genderlect Q | a | |
| genderlect ♂ | a | b |

| | 3sg.f | 3sg.m | 3DU.F | Зри.м | 3tr ai l.f | 3tr ai l.m | 3PL.F | ЗРЬ.М |
|--------------|-------|-------|-------|--------------|-----------------------|-----------------------|------------------------------|----------------|
| genderlect 9 | n | a'a | re | ра | rei | tilo | rehat o , | re'e |
| genderlect & | na'a | mana | гера | phia mare | retilo | tilo mare | rehat o , re'e | (hati) mare |

Table 9.26 Cheke Holo third person subject pronouns

TABLE 9.27 Cheke Holo as an instance of Type F' (singular forms only)

| | 3sg.f | 3sg.м |
|--------------|-------|-------|
| genderlect 9 | a | |
| genderlect ♂ | a | b |

very similar way to Chiquitano, only male speakers have masculine forms, and their feminine forms are syncretic with the gender-neutralizing pronominals of the female speakers. Table 9.26 illustrates this with the third person subject pronouns.

I suggest that there is internal evidence that the masculine markers of male speech are more recent, and therefore that male speech has been innovated. The non-singular third person forms of the female speech are the results of grammaticalization of the numerals *phia* 'two', *tilo* 'three', and *fati* 'four' as suffixes on the non-singular marker *re*. The corresponding non-singular third person forms in the male speech only show juxtaposition of the numerals before the male speech non-singular third person marker *mare*, in the regular position of quantifiers in the language (White et al. 1988: xxiii). This less-integrated structure must be more recent than the grammaticalized forms of the female speech. The male speech *mare* is itself based on the non-singular marker *re*, with the additional formative *ma*. This latter is also found in the male speech singular third person form *mana*, based on the singular third person *na*, and seems specific to the male speech. These facts converge to show that the Cheke Holo male speech must be an innovation.

Table 9.27 summarizes Cheke Holo as a Type F' language. It is exactly identical with Table 9.25 on Chiquitano: while one genderlect does not make a grammatical gender distinction, the other does, with one marked form and the unmarked form being syncretic with the gender-neutralizing form of the other genderlect. Additional common features are that the marked form is very likely an innovation, and is a cis-form ('masculine in male speech' in both languages).

A third language putatively showing Type F' of IG&GG interaction is Kokama as spoken in the 1930s and described by Espinosa (1935). Remember that Kokama has

been described in section 9.2.2 as a language showing indexical gender but no grammatical gender distinction, on the basis of a detailed work on that topic in modern Kokama (Vallejos 2015). There could be reasons to suspect that Espinosa's description could be erroneous: authors working on second-hand data on the complex topic of interacting IG&GG often get confused (such cases are discussed in Rose 2015b). However, Espinosa's description, based on first-hand data, is in general considered to be quite reliable (O'Hagan 2011: 57).

Espinosa (1935: 32–5) points to a genderlect distinction within the Kokama pronominal system, active in personal pronouns, possessive pronouns, adjectives, and in demonstratives (something already observed in section 9.2.2). The genderlect distinction would have interacted with grammatical gender in second person plural and third person singular and plural, as in Table 9.28. These persons show a grammatical gender distinction in the female speech only, with feminine forms specific to that speech, and masculine forms similar to the default forms of male speech. To sum up, only female speakers have feminine forms.

The system described by Espinosa (1935) is a Type F' because the gender categorization differs across genderlects, with only one genderlect displaying a grammatical gender distinction. One of the gender values is syncretic with the gender-neutralizing marker of the other genderlect. This is summarized in Table 9.29 with the third person singular forms. In the Kokama system, only female speakers have feminine forms, in a mirror image of Chiquitano and Cheke Holo systems where only male speakers have masculine forms (as summarized in Table 9.25 and Table 9.27). Interestingly, the diachronic accounts of these systems differ. While in Chiquitano and Cheke Holo the marked cis-forms are very likely recent innovations, in Kokama the

TABLE 9.28 Third person free pronouns in 1930s Kokama according to Espinosa (1935)

| | 2PL.F | 2рг.м | 3sg.f | 3sg.m | 3PL.F | ЗРЬ.М |
|--------------|-------|-------|-------|-------|-------|-------|
| genderlect ♀ | pinu | ė́рі | ain | uri | inu | rạnạ |
| genderlect ♂ | ėpi į | | uri | | rạnạ | |

TABLE 9.29 Kokama as an instance of Type F' (third person singular only)

| | 3sg.f | 3sg.m |
|--------------|-------|-------|
| genderlect ♀ | a | b |
| genderlect ♂ | b | |

genderlect \mathcal{C} a class y of controllers gender z genderlect \mathcal{C} a b

TABLE 9.30 Type F"

marked cis-forms ('feminine in female speech') are inherited, while the unmarked forms (the ones used in the male speech) are not (O'Hagan 2011: 57). 12

Type F' {-same; +total; -absent} is a non-canonical type of interacting IG&GG, and the consequences of the pragmatic condition for variation (the genderlect distinction) are drastic: only one genderlect has a gender system.

Type F" is the other attested subtype of Type F. In Type F", both genderlects show the same number of values and the same markers for these values. However, a class of ambigeneric controllers shows different gender assignment in each genderlect, as summarized in Table 9.30.

Garifuna is the only example of Type F". It is an exceptional system, in that the way gender is assigned to the ambigeneric class of controllers is truly unexpected. In traditional Garifuna, ¹³ gender of the speaker is indexed in the lexicon, within first and second person free pronouns, particles for 'yes' and 'no', and some gender agreement markers (11).

- (11) Garifuna (de Pury 2003)
 - a. würinauga / gúñaru 'yesterday ♀ / yesterday ♂'
 - b. buguya / amürü 'you ♀ / you ♂'
 - c. uá / inó 'no ♀ / no ♂'

Garifuna also shows grammatical gender with a formal distinction between masculine and feminine. Gender is marked by the third person pronominal agreement markers on nouns, modifiers, demonstratives, and verbs. Nouns referring to animates, as well as concrete entities like flora, fauna, rivers, and manufactured items, are assigned the same gender, either masculine or feminine, by all speakers (see Taylor 1951 for details, 1959).

O'Hagan's (2011: 57) hypothesis is the following: 'I posit that women may have acquired the male person-markers in addition to maintaining native Tupí-Guaraní pronominal forms. Forms inherited from male speakers were subsequently reanalyzed as actually referring to males. Men, on the other hand, did not acquire the female forms.'

¹³ According to Munro (2013) and Haurholm-Larsen (2016), male speech is rarely used nowadays.

Example (12) shows that both genderlects share the assignment of the masculine and feminine values to gendered nouns, both for masculine and feminine markers.

- (12) Garifuna (de Pury 2003)
 - a. wáirit-i aunli l-é. big-3M dog 3M-DEM 'This male dog is big.' ♀ / ♂
 - b. wáirit-un aunli t-ó big-3F dog 3F-DEM 'This female dog is big.' ♀ / ♂

The interaction of grammatical gender and indexical gender in Garifuna lies first in the assignment of grammatical gender to abstract nouns, second in the gender assignment to expletive and impersonal pronominal markers in some syntactic constructions, and third in the agreement with plural inanimate nouns.

First, abstract nouns are ambigeneric (de Pury 2003; Taylor 1951, 1959). Both masculine and feminine can be assigned to them, and this assignment differs depending on the gender of the speaker. Surprisingly, the gender that is assigned is the opposite gender to that of the speaker.

All nouns having abstract referents (such as those meaning 'dance', 'night', 'jealousy', and all verbal nouns) are treated as masculine by the women and as feminine by the men; and this also applies to such impersonal reference as is indicated by the 'it' of Eng. it is late, it is raining, it is good to see you, etc. (Taylor 1977: 60)

Interestingly, this unexpected gender system is canonical at the genderlect level. Each genderlect has only two gender values, which are assigned to partially different items. This system is exemplified in (13), showing that Garifuna female speakers use masculine agreement and traditional male speakers use feminine agreement with the abstract noun *idemual* 'help'.

- (13) Garifuna (de Pury 2003:159)
 - a. Gúndan-tina t-au idemual t-ó. happy-1sg 3F-with help 3F-DEM 'I am happy with this help. ♂'
 - b. Gúndan-tina l-au idemual l-é. happy-1sG 3м-with help 3м-дем 'I am happy with this help. Q'

Second, gender is also assigned to expletive or impersonal pronominal markers in some specific syntactic constructions in this unexpected manner, i.e. depending on the gender of the speaker. Munro (2013) gives examples of an oblique-subject construction, which has an expletive/impersonal subject agreement marker (14).

This marker is systematically masculine in female speech and feminine in male speech. Therefore, this cannot be considered a case of non-canonical agreement on specific targets, since gender assignment is regular within a genderlect, whatever the gender of the nouns in the sentence.

```
(14) Garifuna (Munro 2013)
```

```
a. Chú-ti t-áu Zanaira.
Smart-3M 3F-INSTR Zanaira(F)
'Zanaira is smart. Q'
```

b. Chú-tu t-áu Zanaira. Smart-3F 3F-INSTR Zanaira(F) 'Zanaira is smart. ♂'

Third, in the male speech, number marking of inanimate referents is also realized by recruiting the gender value opposite to the gender of the speaker (Haurholm-Larsen 2016: 292–3; Munro 2013).

```
(15) Garifuna (Haurholm-Larsen 2016: 292)
```

```
a. agányeha n-á-l-i muréy
buy 1sG-PERF-TAM-3M nance(M)
'I bought the nance (fruit sp.). ♂
```

```
b. agányeha n-á-r-u muréy
buy 1sG-PERF-TAM-3F nance(M)
'I bought the nances (fruit sp.). &'
```

Table 9.31 summarizes the first two quirks in the system. There are three types of controllers at the language level (masculine, feminine, and ambigeneric), but only two gender values are implemented in each genderlect. The ambigeneric controllers behave as masculine and feminine, depending on the gender of the speaker.

Since the two Garifuna genderlects share the number and labels of the values, but differ in the gender assignment for a class of controllers, Garifuna is an instance of Type F" (Table 9.30). It shows syncretism of ambigeneric controllers with the feminine in one genderlect and with the masculine in another. The fact that the gender assigned to this category of trigger is opposite to the gender of the speaker is an oddity of that particular instance of Type F" rather than a fundamental characteristics

| 7 0 | 1 | O | 1 |
|--------------|-----------|-------------|----------|
| | masculine | ambigeneric | feminine |
| genderlect Q | l- | | t- |
| genderlect ♂ | l- t- | | |

Table 9.31 Garifuna third person agreement prefixes

of this type. Though not attested, I posit the possibility of having an instance of Type F" with an ambigeneric category consisting of elements that are assigned to one gender or the other on semantic grounds or in an arbitrary fashion, rather than on pragmatic grounds such as the gender of the speaker.

The Garifuna gender system is an innovation, most Arawak languages having a simpler feminine/non-feminine distinction (Aikhenvald 1999; Taylor 1951, 1959). The genderlect system is also an innovation, due to the contact history of Island Carib, of which Garifuna is an offspring (Taylor and Hoff 1980). There is no exact knowledge of how this third gender category came into existence, nor when genderlects started to play a role in gender marking, since earlier documentation of Island Carib already shows this interaction (Breton 1999).

Type F" is a highly non-canonical type of interacting IG&GG because gender assignment is variable for a subset of controllers, and depends on a pragmatic condition (the gender of the speaker) in a non-arbitrary fashion.

9.7 Type G {-same; -total; +absent}

Type G is the type of interacting IG&GG that shows a different gender categorization across genderlects without cross-genderlect syncretism. The genderlect distinction applies only to some values. Type G is summarized in Table 9.32.

Type G is only found in Yanyuwa, an Australian language with noun classes. Noun classes are essentially marked in personal and demonstrative pronouns—by pronominal prefixes on nouns and verbs; by pronominal suffixes found on a few items; and by special prefixes on nouns and noun modifiers. The Yanyuwa noun class system consists of six values in the male speech, and seven in the female speech (Kirton 1988). Five of the noun classes are common to the two genderlects, and are identically marked across genderlects: these are the female, feminine, food, arboreal, and abstract classes. Male speech additionally shows a male–masculine class, while female speech shows two additional classes: male and masculine. 14

| 7.1 | | | | | |
|--------------|----------|----------|----------|--|--|
| | gender x | gender y | gender z | | |
| genderlect 1 | a | a | | | |
| genderlect 2 | b | с | a | | |

Table 9.32 Type G

¹⁴ The male class comprises male humans and other male entities that are included in the kinship system or are in close association with people. The masculine class comprises male members of species for which sex is distinguished, and most other nominal items in the language (Kirton 1988: 115). It functions as a default class. Men fuse these two classes into a single class.

malemasculinegenderlect Qnya-, nya-, nyu-, nyu-O-, ji-, ji-, ji-genderlect OO-, ki-, ki-, ki-

TABLE 9.33 Some Yanyuwa class prefixes

Note: Each value is encoded by a set of class-marker prefixes that depend on the case of the noun: nominative, dative, ergative-allative, and ablative.

The super-value 'male-masculine' of male speech is distinguished from the two sub-values in female speech by means of class prefixes (Table 9.33), ¹⁵ functioning essentially as possessive prefixes on nouns, subject marking on intransitive verbs, and object marking on transitive verbs. The next section shows that on other targets, the agreement system exhibits cross-genderlect syncretism.

This distinct categorization across genderlects is exemplified with dative noun phrases in example (16). Women use different class prefixes on *rduwarra* 'initiated man' and *buyuka* 'fire', while men use the same class prefix on these two nouns.

- (16) Yanyuwa (Kirton 1988: 115)

 - b. ji-buyuka-wu

 MALE+MQ-fire-DAT

 'for the fire Q'
 - c. ki-rduwarra-wu

 MALE o-initiated_man-DAT

 'for the initiated man o'
 - d. ki-buyuka-wu

 MALE+M♂-fire-DAT

 'for the fire ♂'

Table 9.34 illustrates how indexical gender interacts with grammatical gender on some targets in Yanyuwa, resulting in a different categorization across genderlects but no cross-genderlect syncretism. Kirton (1988) suggests that this situation results from the loss of masculine class markers in the male speech.¹⁶

¹⁵ Except in the nominative where 'male-masculine' is zero-marked.

¹⁶ In the paradigm of possessive prefixes for body part nouns, a rare masculine prefix can be used in male speech. If this is taken into account in this paradigm, then the distinction between masculine and male classes is attested across genderlects (Kirton 1988: 115).

| , | • | | 71 | ` 1 | , | | |
|--------------|------|-----------|--------|----------|------|----------|----------|
| | male | masculine | female | feminine | food | arboreal | abstract |
| genderlect ♀ | a | с | J | | c | ~ | L |
| genderlect ♂ | 1 | b | a | e | 1 | g | П |

TABLE 9.34 Yanyuwa as an instance of Type G (class prefixes)

Type G is a non-canonical interacting IG&GG system, because gender assignment is variable in part of the gender system and depends on the gender of a speech act participant $\{-\text{same}; -\text{total}; +\text{absent}\}$.

9.8 Type H {-same; -total; -absent}: The least canonical type

In Type H, indexical gender interacts with grammatical gender, leading to a different gender categorization across genderlects and some cross-genderlect syncretism between distinct values (Table 9.35).

Type H is illustrated by a subsystem of Yanyuwa, three Oto-Manguean languages, and one of Wolff's accounts of Yuchi.

Yanyuwa has been described above as showing a Type G of interacting IG&GG on some targets. On other targets, it shows Type H, because some cross-genderlect syncretism is observed. As previously stated in section 9.7, the Yanyuwa female speech distinguishes male and masculine classes, while the male speech only has a super-value covering 'male' and 'masculine'. In the class prefixes, these different values are distinctly marked. In personal and demonstrative pronouns, subject prefixes on transitive and reflexive verbs, and pronominal suffixes, the marking follows a different pattern (Kirton 1988: 115). The markers for the male super-value in the male speech are syncretic with the markers for the male subclass of female speech (Table 9.36). The analysis of the Yanyuwa gender system for these targets is summarized in Table 9.37. The only form that is not shared across genderlects is a trans-form (masculine in the female genderlect). As mentioned in section 9.7, this situation is supposed to result from the loss of the masculine value in the male speech.

Table 9.35 Type H

| | gender x | gender y | gender z |
|--------------|----------|----------|----------|
| genderlect 1 | | C | |
| genderlect 2 | a | b | C |

TABLE 9.36 Yanyuwa nominative male and masculine personal pronouns

| | male | masculine |
|--------------|------|-----------|
| genderlect 9 | yiwa | alhi |
| genderlect ♂ | yiwa | |

TABLE 9.37 Yanyuwa as an instance of Type H (pronouns)

| | male | masculine | female | feminine | food | arboreal | abstract |
|--------------|------|-----------|--------|----------|------|----------|----------|
| genderlect Q | a | b | C | d | 0 | f | α |
| genderlect ♂ | á | ı | C | u | C | 1 | g |

Table 9.38 1920s Yuchi third person pronouns (actor forms not included) according to Wolff (1948), organized in sub-values

| | _ | masculine | _ | l | Yuchi.pl | non-Yuchi | non- Yuchi.pl |
|--------------|-----|-----------|----|-------------|----------|-----------|------------------|
| genderlect Q | s?e | o: | se | | he: | we | we: |
| genderlect ♂ | h | õ | se | \tilde{e} | ne. | WE | we. |

When taking into account all possible targets of grammatical gender, Yanyuwa is even less canonical: the IG&GG interaction differs depending upon the target. Crossgenderlect syncretism is absent when the targets are class prefixes and present in the pronominal paradigm.

The second case of Type H is 1920s Yuchi. The Yuchi gender system has already been introduced in section 9.5. Depending on the analysis, gender in third person pronominals is considered to be categorized identically or differently across gender-lects. One of Wolff's accounts of the system does not presuppose that male and female speakers share the same gender values. Table 9.38 shows that where women have one category 'Yuchi feminine', men have two: 'Yuchi feminine older' and 'Yuchi feminine not older'. Conversely, where men have one category 'Yuchi masculine', women have two: 'Yuchi masculine older' and 'Yuchi masculine not older'. So transvalues are more finely categorized (with the additional parameter of relative age) than cis-values. Whatever the analysis in terms of values, there is always some crossgenderlect syncretism going on: the 'Yuchi feminine not older' of the male speech

| | | masculine | Yuchi_ feminine not older | feminine | Yuchi.pl | non-Yuchi | non- Yuchi.pl |
|--------------|---|-----------|---------------------------------|----------|----------|----------------|------------------|
| genderlect Q | a | С | e | | ; | l _r | m |
| genderlect ♂ | l |) | e | h | 1 | K | m |

Table 9.39 1920s Yuchi as an instance of Type H

Table 9.40 Partial Guelavía Zapotec pronominal paradigm (free forms)

| | 3rd familiar | 3rd masculine | 3rd honorific | 3rd child | 3rd animal | 3rd inanimate |
|--------------|-----------------|------------------|------------------|--------------|---------------|------------------|
| genderlect Q | laab | | laany | laaby | laam | 11 01 11 |
| genderlect ♂ | laab | laall | шину | шиоу | iuum | ngui |

and the 'Yuchi feminine' of the female speech are in fact formally identical. Table 9.39 summarizes 1920s Yuchi as an instance of Type H.

The Oto-Manguean language Guelavía Zapotec is the third example of a Type H interacting IG&GG. Here the interaction is again found within the pronominal system and more specifically in the expression of third person. Jones and Church (1985) show a pronominal system with five basic values for third person, and an additional grammatical gender value in the male speech. Table 9.40 shows the third person free pronouns. The four common values are marked identically across genderlects. The fifth value, for familiar human reference, shows a genderlect distinction. A specific value for third person masculine is found in the male speech only. The *laall* form is said to be 'used only by men when referring to other men' (Jones and Church 1985: 10). It indicates both masculine gender of the referent and masculine gender of the speaker, and is thus what we call a cis-form. ¹⁷ This masculine sub-value specific to the male genderlect has a unique form, while the feminine sub-value is syncretic with the super-value that neutralizes gender in the female genderlect.

¹⁷ It is also said to 'express familiarity between men who use them' (Jones and Church 1985: 10), which is ambiguous. This quote could be interpreted as *laall* being a marker of relational gender indexicality with a genderlect restricted to male speakers addressing male addresses (Type 3 gender indexicality). This is probably why it is referred to as a male-to-male form in the comparative work by Operstein (2003). The above quote could also just refer to the fact that the masculine–feminine distinction is specified only for a familiar referent, within a Type 1 gender indexicality system, where the gender of the speaker only is relevant. I am following this interpretation here.

| | 3rd familiar | 3rd masculine | 3rd honorific | 3rd child | 3rd animal | 3rd inanimate |
|--------------|-----------------|------------------|------------------|--------------|---------------|------------------|
| genderlect 9 | í | a | | d | 0 | f |
| genderlect ♂ | a | b | | u | е | 1 |

TABLE 9.41 Guelavía Zapotec as an instance of Type H

Table 9.42 Partial Texmelupa Zapotec pronominal paradigm (free forms), based on Marlett (1993)

| | 3rd honorific feminine and deity | | | 3rd familiar feminine and inanimate | 3rd animal |
|--------------|--|---|---|---|------------|
| genderlect ♀ | mi | | | ñi | та |
| genderlect ♂ | mi | у | и | ñi | mu |

Table 9.41 summarizes how Guelavía Zapotec illustrates Type H of interacting IG&GG, with distinct categorization and syncretism across genderlects.

The fourth case of Type H interaction is found within the pronominal paradigm of another Oto-Manguean language called Texmelupa Zapotec (Marlett 1993). Table 9.42 shows that third person in Texmelupa Zapotec has three gender values in the female speech (animal; honorific and deity; familiar and inanimate), but four in the male speech (animal; honorific feminine and deity; masculine; familiar feminine and inanimate). Only the male speech distinguishes masculine and feminine. The female speech categorizes the masculine referents as either honorific or familiar. Table 9.42 illustrates this. The system shows one shared value with a shared marker (ma for animal), two cases of syncretism between a super-value in the female speech and a sub-value in the male speech, and a form for masculine present only in the male speech. This marked form is a cis-form. Operstein (2003) does not reconstruct grammatical gender in Proto Zapotec and considers the masculine pronoun to be an innovation in Texmelupa Zapotec.

Table 9.43 summarizes how Texmelupa Zapotec shows a Type H interaction of indexical gender with grammatical gender.

The last instance of H is Diuxi Mixtec, another Oto-Manguean language that shows a genderlect distinction in part of its pronominal paradigm (Table 9.44). Both genderlects share the values and markers for first person (not illustrated here), second person adult honorific, and third person adult feminine. The genderlects share the value, but not the marker, for second person familiar. The genderlects show

TABLE 9.43 Texmelupa Zapotec as an instance of Type H

| | 3rd honorific feminine and deity | 3rd honorific masculine | 3rd familiar masculine | 3rd familiar feminine and inanimate | 3rd animal |
|--------------|--|----------------------------|---------------------------|---|------------|
| genderlect 9 | a | 1 | | С | d |
| genderlect ♂ | а | t |) | С | u |

Table 9.44 Diuxi Mixtec partial pronominal paradigm (Kuiper and Pickett 1974)

| | 2nd adult honorific | 2nd adult familiar | 2nd adult general | 2nd child | 3rd adult.f | 3rd adult.м | 3rd child.м | 3rd child.м |
|--------------|---------------------------|--------------------------|-------------------------|--------------|----------------|----------------|----------------|----------------|
| genderlect Q | ndiší | уо?о́ | meén | тей | meñá | meté | meí | |
| genderlect ♂ | nuisi | ndo?ó | те | én | mena | m | eés | meí |

TABLE 9.45 Diuxi Mixtec as an instance of Type H

| | 2nd adult honorific | 2nd adult familiar | 2nd adult general | 2nd child | 3rd adult.F | 3rd adult.м | 3rd child.м | 3rd child.м |
|--------------|---------------------------|--------------------------|-------------------------|--------------|----------------|----------------|----------------|----------------|
| genderlect Q | | b | d | e | f | g | i | |
| genderlect ♂ | a | С | Ċ | l | 1 | ŀ | 1 | i |

different values in the rest of the system. The male speech has a super-value for second person general, while the female genderlect has two sub-values distinguished on the basis of age. The male speech also has a super-value for third person masculine (adult or child) distinct from both third adult feminine and third child feminine, while the female speech distinguishes third adult masculine, third adult feminine, and third child (of whatever gender). In the end, the two genderlects have the same number of values within third person, but these are categorized differently.

Table 9.44 shows that wherever the grammatical gender categorization differs, cross-genderlect syncretism is observed. There is no systemic regularity in the cross-genderlect differences: both genderlects have one super-value where the other shows two sub-values. Both therefore show additional markers for the sub-values that are not syncretic with the super-value: second child in the female genderlect, and third child masculine in the male speech. Table 9.45 summarizes the data of Diuxi Mixtec as a Type H of interacting IG&GG.

In the five languages showing a Type H of interacting IG&GG, all shared values show shared markers across genderlects. The different categorization applies precisely in values for human referents. Syncretism is observed between super-values and one of their sub-values (but only for one super-value in 1920s Yuchi). The additional marker for the other sub-value is specific to a genderlect: in Yanyuwa and 1920s Yuchi, it is a trans-form, while in the two Zapotecan languages it is a cis-form. In Diuxi Mixtec, it is difficult to conclude that there is such a marked form, because categorization results from the intersection of both gender and age. In 1920s Yuchi, the categorization is finer (integrating the relative age parameter) in the trans-values rather than in the cis-values. While the Yanyuwa system seems to result from loss of a grammatical gender distinction, the Zapotecan systems seem to result from innovation of a masculine–feminine distinction. Again, the diachronic origin of the Yuchi system is unknown.

Type H systems {—same; —total; —absent} are the most non-canonical interacting IG&GG systems: the pragmatic conditions of the genderlect distinction do not apply uniformly to the whole gender system. Only parts of this system show different values depending on the gender of the speaker, and cross-genderlect syncretism additionally blurs the relation between the gender systems and the two genderlects.

9.9 Discussion of the results

This chapter presents and discusses languages in which genderlects interact with grammatical gender. Within a canonical typology of gender, the gender systems of these languages are non-canonical because gender marking is context-dependent. The gender of a speech act participant is a condition that shapes the gender markers and sometimes even the gender values.

The first result of this study is that the interaction of genderlects with grammatical gender is cross-linguistically rare, with twelve attested cases. This typological rarity results from the general rarity of genderlects, the non-universality of grammatical gender, and the logical independence of indexical gender and grammatical gender.

The second result is that the typology of interacting IG&GG systems is diverse and complex, with the more non-canonical types being attested more often. Table 9.46 shows the distribution of attested integrating IG&GG systems per type (the two parts of the Yanyuwa system that differs depending on the target, and the two accounts of the 1920s Yuchi system each count as 0.5). The typology consists of eight types, with two logically possible types not yet exemplified, to the present state of our knowledge. The fact that eight types were needed to account for only thirteen attested cases highlights how much diversity is observed in the IG&GG systems. Two facts are nevertheless worthy of discussion. The first fact is that the canon, i.e. the logically determined clearest system, is not very frequent, as expected within a Canonical Typology approach (Corbett and Fedden 2016: 497). It is instantiated by two

Table 9.46 Distribution of attested accounts within the types of interacting IG&GG

| Туре | Same categorization | Total application of genderlect | Absence of cross- genderlect syncretism | Number of accounted cases |
|------|---------------------|---------------------------------------|--|---------------------------|
| A | + | + | + | 2 |
| В | + | + | - | 0 |
| С | + | - | + | 2 |
| D | + | - | - | 0.5 |
| E | - | + | + | О |
| F | - | + | - | 4 |
| G | - | - | + | 0.5 |
| Н | - | - | - | 4 |

languages only. The second fact is more unexpected: a great majority of the attested cases instantiate Types F and H, which are highly non-canonical instances of interacting IG&GG (with regard to two or three parameters respectively). Indeed, Types F and H involve different gender values across genderlects, some of them being syncretic. Type F' is extreme in that only one of the genderlects shows a grammatical gender system. The Garifuna case of Type F" is completely unexpected: a class of controllers being assigned the gender opposite to the gender of the speaker. As a result, these systems are very difficult to describe, and authors (especially second-hand authors) often get confused (Rose 2015b).

The third group of results consists in the generalizations that can be drawn from the different attested instances of the types. First, one must note the frequent correlation of {-absent}, i.e. the presence of cross-genderlect syncretism, with {-same}, i.e. a different grammatical gender categorization across genderlects. It is not an absolute correlation, since one account of 1920s Yuchi (Type D) shows cross-genderlect syncretism within a system in which both genderlects share the same grammatical gender categorization. The otherwise strongly attested correlation could actually be used as an argument supporting Wolff's (1948) other account of 1920s Yuchi as Type H rather than as Type D. Second, even though Types E to H are defined as showing a different grammatical gender categorization across genderlects—this is the property{-same}—they always happen to share a number of gender values, at least one. We also note that the formal markers indexing gender affect only the values that are not equivalent across genderlects. The values that are common to both genderlects always show common encoding.

It has been previously pointed out that genderlect distinctions are crosslinguistically often found in (pro)nominal agreement: pronominal paradigms and gender (including noun class) systems (Fleming 2012; Rose 2015b). The fourth result of this study is that it does not seem to be a mere coincidence that, within the (pro) nominal agreement systems, the genderlect distinction predominantly affects the human values, masculine and feminine, depending on the sex of the referents (the columns on the left within the tables). Five of the thirteen systems described in this chapter involve more grammatical gender values than just masculine and feminine. In four of these (Mojeño as in Table 9.16, 1990s Yuchi as in Table 9.18, Yanyuwa as in Table 9.37, and Texmelupa Zapotec as in Table 9.42), ¹⁸ the genderlect distinction chiefly affects values that are associated with human referents, while values for animal or inanimate referents are not affected. This suggests some kind of functional dependency between indexical and grammatical gender: indexical gender affects grammatical gender in the very same values it is based on, those related to human social gender. It can even be more specifically stated that in some languages, the grammatical gender values affected by the genderlect distinction are those comprising referents comparable to the speech act participants (singular but not plural in Mojeño; 'Yuchi' but not 'non-Yuchi' in Yuchi). This leads us to wonder whether the genderlect distinction could have been specifically innovated to make speaker- or addressee-related categories more marked.

The fifth and last result of this chapter is that most of the interacting IG & GG systems, canonical or not, result from innovations. Table 9.7 shows that several types of IG&GG interaction can be found within a language group: two Tupí-Guaraní languages (Kayabí and 1930s Kokama) are classified as Type A and Type F', respectively; two Arawak languages (Mojeño and Garifuna) are classified as C and F", respectively. In contrast, the three Oto-Manguean languages of the survey (Diuxi Mixtec, Guelavía Zapotec, and Texmelupa Zapotec) are all classified as Type H, even though their systems are not actually identical. An important point is that interacting IG&GG systems have never been reconstructed at family level anywhere. Some of the systems presented in this chapter are likely to be recent, as hinted by the fact that the grammatical gender systems are generally semantically transparent. Others, however, have existed for centuries now, as is the case for Mojeño (Rose 2013a, 2015a) and Chiquitano. The old interacting IG&GG system of Garifuna is highly endangered, the system presented here being used only rarely in traditional speech. This chapter suggests that most interacting IG&GG systems result from innovations. 19 This leads us to propose an explanation for the low frequency of canonical instances in

 $^{^{18}\,}$ In the fifth language, Diuxi Mixtec, all values but the second person adult honorific are affected by the genderlect distinction (see Table 9.27).

¹⁹ Only in Yanyuwa is the non-canonical interacting IG&GG system said to result from loss (of an earlier, supposedly more canonical interacting IG&GG system).

diachronic terms: reaching the canon requires more innovations, or at least one innovation and then some analogical mechanism leading to a regular system. The canon would therefore be infrequently attested not just because it is a logical construction, but because it is most costly to reach. This chapter also shows that indexical gender and grammatical gender often seem to conspire in creating cisvalues. In the four languages that neutralize the masculine/feminine distinction in one genderlect (Chiquitano, Cheke Holo, 1930s Kokama, and Guelavía Zapotec), the gender-neutral form is syncretic with the trans-form of the other genderlect. In Chiquitano and Cheke Holo, there is internal evidence that this form has been inherited, while the cis-form of the genderlect distinguishing masculine and feminine is an innovation. In 1930s Kokama, conversely, the cis-form has been inherited. Finally, the thought that the genderlect distinction could have been innovated to make speaker-related categories more marked could lead us to speculate that the male speech has been innovated in the three languages in which the genderlect distinction affects masculine but not feminine gender (Mojeño, Yanyuwa, Yuchi). This is very likely the case in Mojeño (Rose 2015a).

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