Towards a uniformitarian account of creole similarity: Gender loss in Martinican Creole

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Abstract. This paper argues that it is possible to develop a uniformitarian account of at least some of the similarities. With the adoption of the Interpretability Hypothesis (Hawkins & Hattori 2006; Tsimpli & Dimitrakopoulou 2007), it is predicted that uninterpretable features are particularly vulnerable and may be lost in creole genesis because of the critical role of L2 acquisition in this process. In contrast, interpretable features are more resilient. Thus, it is predicted that, under the assumption of a feature interpretability-based analysis of gender (Kramer 2014, 2015), grammatical gender is very likely to be lost during creolization, while natural gender is more likely to be retained. These predictions are shown to be borne out in Martinican Creole. Because the Interpretability Hypothesis does not rely on the assumption of an impoverished input, the study suggests that there is no need to postulate that creoles develop out of pidgin to account for some of their similarities. It is, therefore, a welcome result of the study that it suggests a way to improve the predictive power of a uniformitarian approach to creole formation.

Keywords. creole genesis; uniformitarianism; creole exceptionalism; grammatical gender; feature interpretability

1. Introduction. One of the most controversial issues in the field of creole studies centers around their typological classification. Two main views may thus be distinguished. The first, which I shall refer to as the *exceptionalist view*, holds that creole languages form a typological class of their own (see, e.g., Bakker et al. 2011; Parkvall 2008; McWhorter 1998, 2001, 2018). The second view, which will be designated here as the *uniformitarian view*, argues against the existence of such a typological class (see, e.g., DeGraff 2003, 2005; Mufwene 2001, 2008; Aboh 2015, 2020). Empirically, there seems to be some substance to the claims made by the exceptionalist camp. Previous surveys of creoles and pidgins (Bakker et al. 2011; McWhorter 1998, 2018) do appear to suggest that it is possible to identify some properties that are particularly frequent among creole languages. Conceptually, however, I consider the uniformitarian approach to be superior insofar as it assumes that creole genesis is the result of processes that are not exclusive to it, which makes it congruent with the postulate that the Faculty of Language is identical across the species. The exceptionalist view, on the other hand, holds that creoles develop out of pidgins and are, thus, the products of a break in transmission.

There is, then, an obvious tension between the conceptual desideratum of a uniformitarian approach to creole genesis and the apparently empirically valid observation that there is some level of similarity across creoles. This paper is an attempt to solve that tension by investigating whether it is possible to formulate a uniformitarian account of creole genesis which can accommodate creole similarity (or, at the very least, similarities). To demonstrate what such an approach may look like, this paper focuses on grammatical gender, as it has often been claimed that creole languages generally lack this category (e.g. Holm 2000; Neumann-Holzschuh 2006; Michaelis et al. 2013).

Building on the field's consensus that L2 acquisition plays a key role in creole genesis, I propose that the consistent loss of certain features, including gender, can be attributed to certain properties of L2 acquisition. Specifically, I adopt the Interpretability Hypothesis (Hawkins & Hattori 2006; Tsimpli & Dimitrakopoulou 2007), which posits that uninterpretable features are vulnerable during L2 acquisition. Furthermore, assuming that grammatical gender is an uninterpretable feature (Kramer 2014, 2015), the Interpretabilty Hypothesis predicts that gender will be consistently lost in the emergence of creole languages. It also makes the interesting prediction that natural gender, which Kramer analyzes as an interpretable feature, is less likely to be lost during creolization. Taking Martinican Creole as an exemplar, I show that both predictions are borne out. This result suggests that a uniformitarian approach enriched with the Interpretability Hypothesis could explain (at least) some of the similarities found across creoles.

The paper is organized as follows. Section 2 offers some theoretical background into the issue of creole genesis. Section 3 focuses on the Interpretabilty Hypothesis and its application to language contact (Walkden & Breitbarth 2019). Section 4 then applies the line of reasoning alluded to in Section 3 to the study of gender in Martinican Creole. Section 5 considers the implications of this analysis for the study of creole genesis in general. Finally, Section 6 concludes the paper.

2. Views on reole genesis: exceptionalism vs. uniformitarianism. An exhaustive exploration of creole genesis is well beyond the scope of this paper. Instead, what I offer here is a brief overview of the current debate between the exceptionalist and uniformitarian camps alluded to in the introduction. At the root of the controversy is the question of whether creoles are necessarily the products of a break in transmission.

According to the exceptionalist view, it is a definitional property of creoles that they develop out of a pidgin and are, therefore, the result of a break in transmission (McWhorter 1998; Bickerton 1981). The pidgin itself is assumed to emerge out of the necessity for the superstrate and substrate populations to communicate with one another. Structurally, the pidgin is hypothesized to be drastically simpler than the superstrate language, so much so that it does not rise to the level of a full-fledged language. By way of consequence, it cannot satisfy the full range of communicative and cognitive needs of either population. Thus, when the pidgin offered as input to the offspring of the substrate populations, it has to undergo a complexification which eventually transforms it into a full-fledged language that meets these children's communicative and cognitive needs (see, e.g. the Bioprogram Hypothesis in Bickerton 1984). Structurally, the creole which emerges out of this process is more complex than its parent pidgin, but not quite as complex as the superstrate language. In fact, McWhorter (2001) goes so far as to declare creole grammars to be the simplest grammars among the world's languages. Claims of creole simplicity, however, are not the only ones made by the exceptionalists.

More relevant to the present paper is the exceptionalists' assertion that creoles form a distinct typological class (Bakker et al. 2011; McWhorter 1998, 2011). On this view, it is possible to identify a set of linguistic properties that sets creoles apart from other natural languages. To be clear, the claim is not that these individual properties are only found in creoles, but rather that their combination is exclusive to creole languages. This, of course, raises the question of why such a state of affairs should hold. After all, not all creoles can be traced back to the same superstrate and substrate languages. Per the exceptionalists, the typological relatedness of creoles must be attributed to the fact that they supposedly all emerge according to the scenario described

above.[1] Claims of creole similarity, however, are not universally accepted.

To begin with, uniformitarians reject the claim that creoles necessarily emerge out of a pidgin. Mufwene (2001, 2008), notably, argues that, geographically, there is a complementary distribution between creoles and pidgins. This, he proposes, reflects the fact that there are critical differences in the contexts which favor the formation of either type of language. The assumption that creoles are, by definition, the products of a break in transmission is also called into question by Chaudenson (1992, 2001), who proposes instead that creoles are approximations of approximations of their lexifiers. Under this view, there is no reason to posit some mechanism that would be exclusive to creole formation. Instead, as suggested by Mufwene (2001, 2008), creole languages are the product of the recombination of features contributed by the various languages in presence. Crucially, Mufwene argues that feature recombination is also responsible for L1 acquisition. The child's task in L1 acquisition is to construct their idiolect by recombining the features contributed by the various idiolects to which they are exposed. The difference between creolization and L1 acquisition would thus reduce to how much variation is found in the feature pool. There is obvious appeal to Mufwene's Feature Pool Hypothesis if one assumes that the Faculty of Language is identical across the species. Unsurprisingly, the Feature Pool Hypothesis has enjoyed a favorable reception among generativists, as notably attested by UG-based implementations of feature recombination (see, e.g., Aboh & DeGraff 2016; Aboh 2015, 2020).

The issue of creole similarity may be regarded as a major challenge to the uniformitarian approach. Exceptionalist claims that creoles constitute a distinct typological class are usually countered by pointing out methodological concerns (DeGraff 2003, 2005; Blasi et al. 2017). These critiques are certainly valid, but I would like to consider the eventuality that there may be some truth to exceptionalist assertions of creole similarity. To be clear, what I mean here is not that creoles and pidgins form a typological class of their own, but rather than there may be certain properties which are more frequent in creole languages than in other natural languages.In the spirit of this weaker claim, it is probably more appropriate to speak of creole similarities, rather than similarity. At any rate, the question which I would like to address here is whether it is possible for uniformitarian approaches, especially those that assume feature recombination, to account for creole similarities. This question can be answered in at least two ways. One possible answer would be to posit that similarities across creoles result from similarities in the feature pools. This hypothesis is, of course, untenable, given the very different situations in which creoles emerged. The second way of approaching this question is to hypothesize that the competition and selection of features is subject to constraints that favor certain features over others. This hypothesis will be entertained in the rest of the paper. Specifically, given the field's consensus on the role of L2 acquisition in creole genesis, I will now investigate whether some similarities may be accounted for by the Interpretability Hypothesis.

3. The vulnerability of uninterpretable features in language contact. The Interpretability Hypothesis (IH) (Hawkins & Hattori 2006; Tsimpli & Dimitrakopoulou 2007) is based on the assumption that L2 grammars are qualitatively different from L1 grammars and that these differences are in part due to the vulnerability of uninterpretable features during L2 acquisition. It is

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[1] This, of course, begs the question of what factors are responsible for creole similarity. These factors may be domain-specific, as illustrated by the Bioprogram Hypothesis (Bickerton 1981, 1984), which holds that creoles instantiate the default parameters of Universal Grammar.Alternatively, one could ascribe creole similarity to the influence of domain-general cognitive factors involved in L1 acquisition.

argued that these features pose a significant challenge to L2 learners, which may result in their eventual absence in L2 grammars. Interestingly, Walkden & Breitbarth (2019) recruit the IH to account for changes in the expression of negation in Middle Low German. They argue that the transition from Stage II to Stage III of Jespersen's Cycle is best regarded as the product of L2 acquisition in the context of language contact. Their claim is based on an account of Jespersen's Cycle that depends crucially on the notion of feature interpretability.

Building upon Zeijlstra (2004) and van Gelderen (2011), Walkden & Breitbarth (2019) present the evolution of negation in French. Old French is represented as Stage I in Jespersen's Cycle. As illustrated by (1a), this stage is characterized by the presence of the negative particle *ne*, which lexicalizes an uninterpretable [*u*NEG] feature. Stage I is, therefore, associated with the underlying representation give in (2a). Middle and Modern written French represent the Stage II in Jespersen's Cycle. This stage is exemplified in (1b), which involves the coocurrence of *ne* with the adverbial reinforcer *pas*, which they associate with an interpretable [*i*NEG] feature. Thus, Stage III may be schematized as in (2b). Finally, Stage III, which is associated with Modern Colloquial French, is defined by the loss of the negative particle *ne* and the retention of the adverbial reinforcer. This is shown in (1c). As schematized in (2c), *ne* is replaced by a null head at this stage.[2]

(1)   a.   stage I   *jeo ne dis*   (Old French)
      b.   stage II   *jeo ne dis pas*   (Middle and Modern Written French)
      c.   stage III   *jeo dis pas*   (Colloquial French)

(2)   a. $[_{NegP} \ldots [_{Neg'} \text{Neg}^0 {}_{[uNEG]} [_{VP} \ldots]]]$ stage I
      b. $[_{NegP} \text{XP}_{[iNEG]} [_{Neg'} \text{Neg}^0 {}_{[uNEG]} [_{VP} \ldots]]]$ stage II
      c. $[_{NegP} \text{XP}_{[iNEG]} [_{Neg'} [\text{Neg}^0] [_{VP} \ldots]]]$ stage III

Walkden & Breitbarth apply the same analysis to Middle Low German's transition from Stage II to Stage III. Stage II is illustrated in (3a) and Stage III in (3b).

(3)   a.   *dar **en** sculle wii se **nicht** ane hinderen*
          there NEG shall we them NEG from bar

          'we shall not bar them from it' (UB Lübeck 06/01/1450)
      b.   *den   schall me dat **nicht** weygeren*
          the.DAT shall   one that NEG deny

          'One shall not deny that' (UB Lübeck 19/11/1474)

Thus, in the examples above, *en* is the exponent of an uninterpretable [*u*NEG] feature, while *nicht* is an adverbial reinforcer associated with an interpretable [*i*NEG] feature. The transition from Stage II to Stage III is characterized by the loss of the overt negative particle.

Crucially, Walkden & Breitbarth observe that the pace of this transition was not the same across all Middle Low German dialects. The transition was much faster in North Low Saxon and East Elbian Hansa cities than in Westphalian and Eastphalian cities. This disparity, Walkden &

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[2] Examples (1) and (2) are reproduced from (Walkden & Breitbarth 2019:189) and example (3) from Walkden & Breitbarth (2019:192).

Breitbarth argue, stems from differences in the sociolinguistic contexts that characterized these two sets of cities. Owing to their geographic location, the dialects spoken in North Lower Saxon and East Elbian cities were, in fact, international lingua francas. As such, they were spoken by a critical mass of adult L2 learners. Given the IH, it is predicted that the bipartite expression of negation illustrated in (3a) should have posed a challenge to these L2 speakers because of the [uNEG] feature lexicalized by *en*. These adult L2 speakers would then have been more likely to produce the pattern exemplified in (3b). It is thus very likely that the transition from Stage II to Stage III in the aforementioned cities was precipitated by the significant presence of L2 speakers, with dialect leveling eventually resulting in the spread of Stage III negation across all dialects.

The Middle Low German case is therefore a perfect illustration of the role that feature interpretability can play in contact situations, especially those that involve a significant proportion of L2 learners. Creole languages, *mutatis mutandis*, emerge in very similar conditions. I take this as an indication that the IH could help us address the issue of creole similarities. This possibility is explored in Section 4, but let us first note that the IH could also shed some light on the related topic of creole simplicity. Walkden & Breitbarth (2019) may be regarded as an extension of Trudgill (2011) and its claim that short-term contact tends to lead to simplification. In Trudgill's framework, complexity is operationalized as ease of acquisition by L2 learners. Therefore, under IH, the loss of uninterpretable features can be regarded as a form of simplification. However, to be clear, a proper assessment of creole simplicity must go beyond unbalanced comparisons between creoles and their lexifiers. Such comparisons usually focus on lexifier properties that are missing in the creole. Much less is about creole properties that are not found in the lexifiers. This imbalance results in a deficit view of creoles that I do not mean to endorse. I do, however, consider it reasonable to think of creole grammars as simpler with respect to properties that can be shown to derive from the loss of uninterpretable features found in the lexifiers. Again, this only holds if complexity is construed as ease of acquisition by L2 learners.

To sum up, in this section we have considered the implications of the IH for contact-induced language change. It is predicted that uninterpretable features are more likely to be lost when situations of language contact involve a critical mass of L2 learners. Section 4 exploits this prediction to account for gender loss during creolization.

4. Gender loss in creolization: the case of Martinican Creole. Typological studies of creole languages tend to converge on the view that most creoles lack grammatical gender. Maurer (2013) claims that, out of a sample of 75 creoles, 60 do not marker gender-based distinctions on their adjectives. To put these numbers in perspective, let us keep in mind that some of the creoles in that sample have a lexifier which does not possess grammatical gender in the first place. This is, for example, the case of English-based creoles. However, even when grammatical gender is found in their lexifier, it is generally the case that creoles did not inherit this property. For instance, Baxter (2010) concludes that grammatical gender is absent from Malacca Creole Portuguese. Neumann-Holzschuh (2006) comes to a similar conclusion with respect to French-based creoles. Thus, grammatical gender, may be regarded as a reasonable candidate for the investigation of whether there can be a uniformitarian account of creole similarity/similarities. The account, I propose, is one that enriches the Feature Pool Hypothesis with the IH.

As a preliminary step, I should mention that, in line with the consensus in the literature (Corbett 1991), gender will be diagnosed on the basis of agreement between nouns and other categories. Specifically, I will follow Maurer (2013) by focusing on the moprhological marking

of gender on adjectives. Martinican Creole (MC) is selected as the language of choice on the grounds that gender is an active category in its lexifier, French. Furthermore, MC is one of the French-based creoles which **?** has claimed to lack gender altogether. Here, I would like to argue for a weaker version of this claim: MC does not have grammatical gender but it has natural gender.

This claim finds support in data provided by Bernabé (1994). The first observation is that MC possesses a subset of nouns that possess both a masculine and a feminine form. Examples of these are offered in Table 1, reproduced from Térosier (2023:328).

Masculine	Feminine	
kwafè	*kwafez*	'hairdresser'
profésè	*profésez*	'teacher/professor'
mantè	*mantez*	'liar'
chantè	*chantez*	'singer'
enstitè	*enstitris*	'teacher'
agrikiltè	*agrikiltris*	'farmer'
aktè	*aktris*	'actor'
met	*métres*	'teacher'
chaben	*chabin*	'light-skinned person'

Table 1. MC nouns which possess a masculine and a feminine form

Of course, the data presented in this table simply do not allow us to make any claim about the relevance of gender to the grammar of MC. The morphological contrast between *chant* 'male singer' and *chantez* 'female singer' can reasonably be treated as a matter of derivational morphology. We may thus postulate the existence of two agentive suffixes, *-è* and *-ez*, which differ with respect to the gender specification of the agent. Nevertheless, the existence of oppositions such as those listed in Table 1 suggests that, as far as nouns are concerned, the creators of MC were able to perceive and inherit gender-sensitive derivational morphology. What is more important, however, is that the same observation holds true of other categories.

Bernabé (1994) notes that there is a very restricted but non-trivial set of MC adjectives which distinguish between a masculine and feminine form. This is illustrated by the list in Table 2, reproduced from Térosier (2023:329).
Although they may be small in number, these adjectives are critical to determine whether MC possesses gender.

When used as adnominal modifiers, these adjectives behave as shown in (4). In (4a), where the noun denotes a male human referent, only the masculine form is acceptable. In (4b), where, this time, the noun denotes a female human referent, the pattern is reversed: the only acceptable form is the feminine.

(4) a. an nonm visié/*visiez
         a   man   vicious.MASC/vicious.FEM
         'a vicious man'

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Masculine	Feminine	
fou	*fol*	'crazy'
visié	*visiez*	'vicious'
bondalè	*bondalez*	'callipygous'
éré	*érez*	'happy'
eskandalè	*eskandalez*	'scandalous'
fwansé	*fwansez*	'French'
grenché	*grenchez*	'grumpy'
japonné	*japonnez*	'Japanese'
manipilatè	*manipilatris*	'manipulative'
meksitjen	*meksitjèn*	'Mexican'

Table 2. MC adjectives which possess a masculine and a feminine form

b. an fanm   visiez/*visié
   a   woman vicious.FEM/vicious.MASC
   'a vicious woman'

In contrast, when the referent of the noun it modifies is animate but not human, an attributive adjective is no longer sensitive to gender-based distinctions. Therefore, as illustrated in (5a) and (5b), only the masculine form regardless of whether the referent is a male or a female dog.

(5)   a. an chien   visié/*visiez
         a   male.dog vicious.MASC/vicious.FEM
         'a vicious (male) dog'
      b. an fimel-chien visié/*visiez
         a   female.dog vicious.MASC/vicious.FEM
         'a vicious female dog'

This pattern is also found with attributive adjectives that modify an inanimate referent. In (6a), the noun *kanmiyon* 'truck' is only compatible with the masculine form of the adjective. This, however, cannot be attributed to the fact that its French etymon *camion* is masculine. As a matter of fact, in (6b), the same pattern is observed with *loto* 'car', whose French etymon *auto* is feminine.

(6)   a. an kanmiyon fwansé/*fwansez
         a   truck   French.MASC/French.FEM
         'a French truck'
      b. an loto fwansé/*fwansez
         a   car   French.MASC/French.FEM
         'a French car'

   Similar patterns are also observed with adjectival predicates. By way of illustration, consider the examples in (7-9), whose only difference from those in(4-6) lies in the predicative use of the adjectives, as signaled by the immediately preceding anterior marker *té*.

(7) a. Nonm-lan té   visié/*visiez
        man=DEF ANT vicious.MASC/vicious.FEM
        'The man was vicious.'

    b. Fanm-lan   té   visiez/*visié
        woman=DEF ANT vicious.FEM/vicious.MASC
        'The woman was vicious.'

(8) a. Chien-an   té   visié/*visiez
        male.dog=DEF ANT vicious.MASC/vicious.FEM
        'The (male) dog was vicious.'

    b. Fimel-chien-an   té   visié/*visiez
        female.dog=DEF ANT vicious.MASC/vicious.FEM
        'The female dog was vicious.'

(9) a. Kanmiyon-an té   fwansé/*fwansez
        truck=DEF   ANT French.MASC/French.FEM
        'The truck was French.'

    b. Loto-a   té   fwansé/*fwansez
        car=DEF ANT French.MASC/French.FEM
        'The car was French.'

What are we to take away from the above data? First, we can observe that, as suggested by previous studies (Neumann-Holzschuh 2006; Bernabé 1994), MC does not have grammatical gender. This is supported by the absence of adjectival agreement with non-human referents. Second, as shown in (4) and (7), adjectival agreement obtains with human referents, which suggests that natural gender is an active category in the language. These observations are of critical importance to the debate over creole genesis. The very existence of nouns and adjectives whose forms is dictated by gender-based distinctions means (i) that gender was probably not absent from the input available to the creators of MC, which militates against the view that creoles are necessarily preceded by pidgins;[3] and (ii) that, not only were the creators of MC exposed to gender-based distinctions but they were also able to perceive their significance. The MC data, however, raise a critical question: In the transition from French to MC, why was grammatical gender lost, while natural gender was carried over? To answer this question, let us turn to the analysis of gender developed by Kramer (2014, 2015).

In line with earlier proposals (Kihm 2005; Acquaviva 2009), Kramer develops an analysis couched in the Distributed Morphology (Halle & Marantz 1993; Embick & Noyer 2001; Embick 2015) which centers around the key assumption that gender, recast as a [±FEM] feature is located on the nominalizing head *n*. Crucially, she makes the further claim that the distinction between natural and grammatical gender reduces to a matter of feature interpretability. That is, natural gender is presented as an interpretable gender feature (i.e., [*i*FEM]) and grammatical gender as

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[3] A pidgin should have been stripped of gender-based distinctions.

its uninteptretable counterpart (i.e., [*u*FEM]). On this view, the French gender system may be captured by the inventory of *n*s presented in (10).
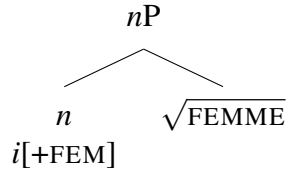
(10) *Inventory of French ns*

  a. *n i*[+FEM]
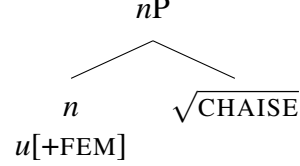 b. *n i*[-FEM]
  c. *n u*[+FEM]
  d. *n*

Thus, (10a) represents the *n* that is associated with roots that denote animate male referents. Meanwhile, the *n* in (10b) is the one that associates with roots that denote animate female referents. These first two *n*s capture the expression of natural gender in the language. The *n* in (10c), on the other hand, encodes grammatical gender, since it selects roots that denote inanimate feminine referents. Finally, the *n* in (10d) illustrates the fact that masculine is the default in French
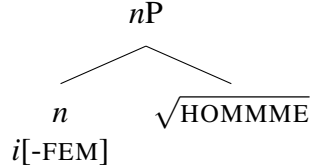
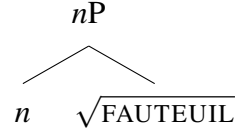These various configurations are illustrated in (11).

(11) a. *femmme* 'woman'

$$nP$$

$$n \qquad \sqrt{\text{FEMME}}$$
$$i[+\text{FEM}]$$

c. *chaise* 'chair'

$$nP$$

$$n \qquad \sqrt{\text{CHAISE}}$$
$$u[+\text{FEM}]$$

b. *hommme* 'man'

$$nP$$

$$n \qquad \sqrt{\text{HOMMME}}$$
$$i[-\text{FEM}]$$

d. *fauteuil* 'armchair'

$$nP$$

$$n \qquad \sqrt{\text{FAUTEUIL}}$$

In (11a), natural feminine gender, as found in *femme* 'woman', is captured by the merger of the *n* in (10a) with the root $\sqrt{\text{FEMME}}$. Natural masculine gender, as in the case of *hommme* 'man' in (11b), is schematized by the merger of the *n* in (10b) with the root $\sqrt{\text{HOMMME}}$. Feminine grammatical gender, illustrated by *chaise* 'chair' in (11c), involves the merger of the *n* in (10c) with an appropriate root ($\sqrt{\text{CHAISE}}$ in this example). Finally, (11d) illustrates masculine grammatical gender with *fauteuil* 'armchair' which results from the merger of the *n* in (10d) with the root $\sqrt{\text{FAUTEUIL}}$. These representations are congruent with Kramer's (2014, 2015) interpretability-based analysis of gender. This analysis, as we will immediately, can be exploited to account for the MC facts.

In light of the the MC data we have reviewed, I propose that the language possesses the inventory of *n*s captured in (12).
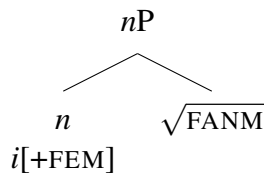
(12) *Inventory of French ns*
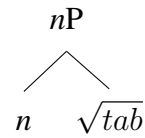
  a. *n i*[+FEM]
  b. *n i*[-FEM]
  c. *n*

The *n*s in (12a,b) may be regarded as a French inheritance, since they mirror the French *n*s in (10a,b). In other words, MC seems to have retained the natural gender distinctions of its lexifier. However, it should be noted that the substantive content of these MC *n*s diverges from their French sources insofar as they are strongly sensitive to a [+HUMAN] feature. The corresponding French *n*s, on the other hand, are only sensitive to animacy. As for the French *n* in (10c), it appears that it was lost during the formation of MC. Hence, the loss of grammatical gender. Finally, (12c) is the default *n* and lacks any [FEM] feature, which also reflects the absence of grammatical gender in the language.

By way of illustration, let us consider the MC nouns in (13). As shown in (13a), *fanm* 'woman' results from the merger of the merger of the *n* in (10a) with the root √FANM. In (13b), the merger of the *n* in (10b) with the root √NONM produces *nonm* 'man'. Finally, (13c) illustrates the merger of the *n* in (10c) with the root √TAB, which results in *tab* 'table'.

(13) a. *fanm* 'woman'
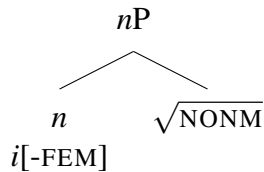
        *n*P

    n   √FANM
  i[+FEM]

   b. *nonm* 'man'

        *n*P

    n   √NONM
  i[-FEM]

   c. *tab* 'table

        *n*P

    n √*tab*

These facts beg the question of why we end up with the concomitant loss of grammatical gender and retention of natural gender. Assuming the interpretability-based analysis of gender proposed in Kramer (2014, 2015), this pattern finds a straightforward account. Given the IH, it is predicted that grammatical gender is more likely to be lost than natural gender because of its association with uninterpretable [*u*FEM] features. Meanwhile, the interpretable [*i*FEM] feature associated with natural gender predicts that this category is more likely to be kept in the course of creolization. These two predictions are borne out as far as the MC data are concerned, but this conclusion has implications beyond that language.

5. Steps toward a uniformitarian approach to creole similarity. The key question at the heart of the present paper is whether it is possible to formulate a uniformitarian account of creole similarity/similarities. In light of my investigation of gender loss in the formation of MC, I propose that this enterprise would beneftit greatly from the adoption of the IH. Earlier, I suggested that this hypothesis could help us explain creole similarities that can be pinned down to the loss of uninterpretable features. As we saw in Section 4 with the MC case, the frequent loss of grammatical gender in creolization could very well be attributed to its association with an uninterpretable feature. The IH further suggests that natural gender is more likely to be kept, as is the case in MC. Critically, this last statement reflects the fact that the IH does not make any deterministic prediction about interpretable features. Although they are more be likely to be carried over in L2

grammars than their uninterpretable counterparts, it is not, by any means, guaranteed that they will be retained. This means that we should also inquire what the factors are that may either favor or disfavor the retention of interpretable features.

An exhaustive exploration of these factors is beyond the scope of this paper. Nonetheless, I conjecture that experience, the second factor in language design (**?**), plays a key role here. The acquisition of gender relies critically on the identification of morphophonological cues. The transparency of these cues determines how easy the acquisition of gender will be. If the cues are not straightforward, the result will be protracted acquisition (see **?**:for the case of Dutch). In contrast, in languages in which morphophonological cues are abundant and transparent (see, e.g., the analysis of Spanish gender sketched in **?**), the acquisition of gender is expected to be relatively fast. With respect to creolization, this means that the retention of interpretable features (including natural gender) is likely depend on the input in both its qualitative and quantitative dimensions.

For the sake of illustration, let us consider again the case of MC. To make complete sense of the patterns we observed, we should ideally follow up with a study of the morphophonological cues of gender in the 17th and 18th varieties of French that were given as input to the creators of the language. Because this, unfortunately, cannot be undertaken here, I will consider Modern French, instead. While it is clear that Modern French has both natural and grammatical gender, it is equally clear that adjectives do not provide the most consistent cues for the acquisition of these categories. This is especially true if one focuses on oral, rather than written, French. Written French abounds with silent feminine suffixes. For instance, *étonné* 'astounded' has a homohonous feminine form *étonnée*: both forms are pronounced [etonɛ]. Similarly, *endormi* 'aslept' and its feminine form *endormie* are both realized as [ɑ̃dɔʁmi]. Moreover, regardless of the modality, there are adjectives that simply do not distinguish between a masculine and a feminine form. The adjective *constructiviste* 'constructivistic' possesses a single form with a single pronunciation: [kɔ̃stryktivist]. What we can gather from these examples and many others that readily come to mind is that it is safe to conclude that French gender is not quite as morphophonologically salient as one may imagine. This is probably especially true of adjectives. Because many French adjectives have a single form, it is rather logical that MC, too, should only have a single form for the corresponding adjectives. But, it is also possible that in other cases, specifically those in which French possesses both a masculine and a feminine form, MC may not have retained that distinction because either of the two forms was not frequent enough in the input. It is, after all, reasonable to hypothesize that infrequent forms are harder to learn than more frequent ones.[4] This may help us understand why the set of MC adjectives that possess a masculine and a feminine form is rather limited.

Frequency may also have played a role in the loss of grammatical gender. Given the arbitrariness and frequent morphological opacity of gender assignment for nouns that denote non-human entities, it seems reasonable to assume that the target-like acquisition of French should be subject to threshold effects. In contrast, the assignment of gender to animate entities poses less of a challenge to an L2 learner because of it can be established on the basis of extralinguistic prop-

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[4] Frequency, alone, cannot account for all the data. The French adjective *bon* 'good' is relatively frequent and it is expected that it would also be true of its feminine form *bonne*. That form, however, was lost in the process of creolization. However, it may very well be possible that the feminine form was not salient enough. In 17th century French, the masculine form was pronounced [bɔ̃] and the feminine [bɔ̃n]. (Today, the latter is pronounced [bɔn].) Salience may, therefore, be another factor which can impact the retention or loss of gender-based morphological distinctions.

erties. This notably suggests that the acquisition of natural gender should not be as sensitive to frequency as that of grammatical gender. Thus, the upshot of this discussion is that the role of frequency should not be overlooked in the study of creole genesis.

Yet, despite the possible influence of other factors, the facts I have presented suggest that some of the similarities found across creoles could be related to feature interpretability. The IH predicts that uninterpretable features are more likely to be lost during creolization. Interpretable features, in contrast, are less vulnerable. Given a feature interpretability-based analysis of gender la Kramer (2014, 2015), the prediction is that grammatical gender is more likely to be lost than natural gender, which finds support in my analysis of the MC data. Crucially, these results indicate that a uniformitarian account of creole similarity/similarities is very much a possibility. The IH, which is at the core of this proposal, does not rely on the assumption of an impoverished input. This implies that, contra exceptionalist claims, it is not necessary to assume that a pidgin stage in the formation of creoles. Moreover, by enriching the Feature Pool Hypothesis with the IH, we have improved the former's predictive power. If uninterpretability disfavors some competitors in the feature pool, we end up with a theory that is superior in terms of falsifiability. Besides this welcome result, this study supports the conclusion that at least some creole similarities can be accommodated by uniformitarian approaches.

6. Conclusion. Using the case of gender in Martinican Creole as a testing ground, I have argued that it is possible to develop a uniformitarian account of creole genesis that is compatible with creole similarity/similarities. Given the critical role of L2 acquisition in creole genesis, I have proposed that, in line with the Interpretability Hypothesis, Martinican Creole did not inherit grammatical gender from its lexifier because this property is associated with an uninterpretable. The retention of natural gender, on the other hand, is congruent with the lesser vulnerability of interpretable features in L2 acquisition. The results of this study suggests that a uniformitarian account of creole similarity/similarities is a reasonable objective. The Interpretability Hypothesis has shown that there are properties of L2 acquisition which can account for certain properties of creole languages without the need for the assumption of an impoverished input (i.e., a pidgin). It remains to be determined, however, whether the approach I suggest here can accommodate other languages and other creole similarities. Further, given the potential influences of frequency and morphological transparency in the acquisition of gender, this study should ideally be followed up with an investigation of the actual input that was offered to the creators of MC, notably by conducting a corpus-based probe of gender-marking in 17th and 18th varieties of French. These considerations must be left for further research.

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