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The Exponence of Gender in Spanish

1. Introduction: *El Cheapo* and the Mating Problem

Fake-Spanish expressions like *el cheapo* reveal that English speakers need not know much Spanish in order to perceive, albeit dimly, a fundamental fact about the canonical form of Spanish adverbs, adjectives, nouns, pronouns, and determiners: they end in the vowel *o* more often than not. This is the conspicuous tip of a morphological iceberg that involves, in particular, grammatical gender and the vowels *o* and *a* in word-final position. For example:

(1) muchacho   'boy'   muchacha   'girl'
     abuelo   'grandfather'   abuela   'grandmother'
     nieto   'grandson'   nieta   'granddaughter'
     tío   'uncle'   tía   'aunt'

Sets of words like (1) are pet examples used in linguistics textbooks to illustrate the notion "morpheme," as the following passage illustrates:

(2) ". . . the form *a* occurs always and only as a suffix when the word refers to 'female', while the meaning 'male' occurs in conjunction with the suffix *o*. The linguist concludes from these correlations of form and meaning that it is probable, at least for this set of words, that Spanish has the morphemes *a* 'female' and *o* 'male'." (Falk (1978, 32))[1]

These are the starting points of the present study: First, the set of examples in (1) is so impoverished as to support no general conclusion. The -*a* and -*o* in (1) belong to

[1] Essentially the same view is expressed in works as far separated in time and orientation as Nida (1949), Stockwell, Bowen, and Martin (1965, chap. 3), and Sloat, Taylor, and Hoard (1978, chap. 9). Falk's is the most concise statement of this view that I have found. Other relevant works are Anderson (1961), Echaide (1969), Murphy (1954), and Saporta (1962).

a class of seven or more morphologically analogous elements that participate in no fewer than twenty-four different relationships with gender. I will call these elements *word markers*.[2] Second, (2) errs in conflating biological sex (male versus female), grammatical gender (masculine versus feminine), and form class (*-o* versus *-a*). I will argue that these are interrelated but autonomous domains of linguistic generalization, each one of which demands independent formal representation. Sex is a matter of semantics and/or biology, gender is involved in syntax-dependent concord, and form class is a matter of the morphophonology of individual lexical items. Insight into the true nature and interaction of these modules depends on understanding the internal organization of each; this cannot be gained without recognizing the autonomy of each module with respect to the others.[3]

To be sure, preferred associations among these three domains can be identified within particular subclasses of words. For example, as illustrated in (1), the associations of female sex with feminine gender and of feminine gender with word marker *-a* are highly favored within the subclass of nouns that refer to human beings. The statistical correlation of these three factors, however, falls far short of Falk's "always and only," within the class of human nouns or any other class. Take gorillas, for instance. Our biological/semantic knowledge of this near-human species includes the fact that they reproduce sexually. But the grammatical gender system of Spanish admits no feminine gorillas: the stem *goril-* is masculine, period. Worse, masculine *goril-* belongs to the declensional class with final vowel *-a*, whose favored correlation is with feminine gender. In short, both male and female gorillas are masculine *gorilas*, with "feminine" *-a*.[4]

In short, no word marker "occurs always and only" with a particular "meaning" (whatever that means), nor is any particular "meaning" always associated with any particular gender, nor any gender with any form. Of the three factors meaning, gender, and form, only gender has direct syntactic relevance. This is precisely the factor omitted from the equation in (2).

Consider next the gender-form pairings in these examples:

(3)   *Masculine*   *Feminine*

a.	poeta	'poet'	virago	'virago'
b.	sirviente	'servant'	sirvienta	'servant'
c.	doctor	'doctor'	doctora	'doctor'
d.	cónyuge	'spouse'	cónyuge	'spouse'

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[2] I retain this terminology from Harris (1985), where the unique morphological behavior of word markers is discussed in some detail. These morphemes are called *terminal elements* in Harris (1983, 91–94). Briefly, word markers must occur in word-peripheral position, where they can be followed at most by plural *-s*. More on this below.

[3] Throughout this article I observe a terminological distinction between *male/female* for biological-semantic sex and *masculine/feminine* for grammatical gender. *Form class, declensional class,* and the like refer only to phonological shape. For example, all nouns, adjectives, and adverbs with the morpheme *-o* illustrated in (1) and (3) belong to the same declensional class, whatever their gender and sex (or lack of either).

[4] As an amusing consequence, 'pregnant gorilla' is *gorila embarazado*, where the adjective *embarazado* 'pregnant' is unmistakably masculine. This example is not valid for some speakers, who admit feminine as well as masculine *gorila*. Gender concord in adjectives is taken up again in section 2.2.

The pairings in (3a) are just the opposite of those in (1); those in (3b–d) are new. On the basis of (1) and (3) together, Falk's linguist might conclude that anything goes. This is false; the system of gender-form associations in Spanish imposes certain interesting restrictions. Consider the words in (4):

(4)   *Masculine*   *Feminine*
       *{presidento   presidente}   'president'
       *{lingüista   lingüisto}   'linguist'

Of these words, *presidente* and *lingüista* are phonologically well-formed and actually exist; *presidento* and *lingüisto* do not exist, but their shapes violate no phonological constraint (compare male/masculine *muchacho* in (1) and female/feminine *virago* in (3), respectively). The crucial fact about (4)—this is how the notation should be understood— is that the *pairing* of masculine and feminine words of the forms shown is disallowed. Note carefully that the issue is well-formedness, not attestedness. For example, none of the words *tindre* (m), *tindre* (f), *tindra* (m), *tindra* (f) actually exists, but all speakers know with utter clarity that although all four are well-formed, the pair {*tindre* (m)/*tindra* (f)} is acceptable and *{*tindra* (m)/*tindre* (f)} is not, if the stem *tindr-* refers to humans.

So far as I know, this phenomenon—"the mating problem"—has not been noted in any previous study of Spanish, much less accounted for.[5] The mating problem is interesting—this is what shifts the investigation from the level of bookkeeping to that of explanation—in that it involves the familiar phenomenon of "negative evidence," that is, data absent from the linguistic experience that shapes the grammar eventually attained by the learner. Pairs like *{*presidento* (m)/*presidente* (f)} presumably never occur in the linguistic experience of the child learning Spanish. Since they never occur, they cannot be branded unacceptable. Therefore, the adult's certain knowledge that such pairings are ungrammatical must be deducible from something else, namely, the conjunction of universal principles that constitute part of human genetic endowment and the language-particular generalizations that can be based on available linguistic experience. These principles and generalizations are the object of the present inquiry.

The basic premise of this investigation has already been presented: Biological sex, grammatical gender, and declensional class are interrelated but autonomous domains of linguistic generalization and as such demand independent formal representation. I will argue that the formal representation of grammatical gender involves one privative (non-binary) gender mark, which I write as *f*(eminine) for obvious mnemonic reasons. There is no place for a unary mark *m*(asculine), or for binary features like [±feminine] or [±masculine], standardly used or implied in the literature on Spanish gender. I claim also that form classes are identified privatively; the description I propose utilizes three such marks. The class of forms with final vowel ("word marker") -*o* represents the default case, corresponding to the lack of any lexical mark. There exists a set of mor-

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[5] This statement is carried forward from the 1986 draft and is true to this day, so far as I know.

phological redundancy rules that allow the full range of relevant morphophonological information to be predicted from maximally impoverished (morphologically underspecified) lexical representations.[6] Finally, the remaining aspect of the "*el cheapo*" syndrome—the fact that Spanish nouns, adjectives, and so forth, canonically end in a vowel—is explicated in terms of a prosodic template of which one or more positions are filled, in the normal case, by a "word marker."

The remainder of the article is organized as follows: Section 2 lays out and organizes the rich array of basic data. Section 3 provides an explicit analysis of these data, including proposals regarding lexical entries, constraints on lexical entries, and rules that relate gender classes to declensional classes, and declensional classes to phonological shape. Section 4 contains a summary and concluding remarks.

2. Survey of Data

The final vowels -*o* and -*a* illustrated in (1) and (3) belong to a set of seven or more morphemes that I call *word markers*, following Harris (1985). The primary morphological property of word markers is that their appearance marks a derivationally and inflectionally complete word; word markers cannot be followed by any other suffix, derivational or inflectional, except for plural -*s*.[7] For example, the marker -*a* signals the end of the word *demócrat + a* 'democrat' and does not appear in *democrát + ic + o* 'democratic', whose word marker is -*o*. Neither marker appears in the infinitive *democrat + izar* 'to democratize', since verbs do not have word markers.

The nouns, adjectives, and adverbs in (5) illustrate the most common word markers and their possible associations with gender:

(5)	*Marker*	*Gender*	*Example*	
a.	-o	m only	muchacho	'boy'
		f only	mano	'hand'
		m or f	testigo	'witness'
		none	dentro	'inside'
b.	-a	f only	muchacha	'girl'
		m only	día	'day'
		m or f	turista	'tourist'
		none	fuera	'outside'
c.	-Vs	m only	Lucas	'Luke'
		f only	síntesis	'synthesis'
		m or f	mochales	'loony, nutty'
		none	lejos	'far'

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[6] This work thus observes a clear distinction between morphological and phonological underspecification. Harris (1985) confuses the two, at least in exposition if not in substance.

[7] For a more careful statement, see Harris (1983, 91–94).

d.	-u	m only	espíritu	'spirit'
		f only	tribu	'tribe'
e.	-i	m only	bikini	'bikini'
		f only	metrópoli	'metropolis'
		m or f	cursi	'in bad taste'
f.	-s	m only	tóra[ks]	'thorax'
		none	quizás	'maybe'
g.	-e	m only	héroe	'hero'
		f only	prole	'progeny'
		m or f	inmune	'immune'
		none	adrede	'intentionally'

The complete inventory of word markers includes all the possibilities of *(V)(s)*, where *V* can be any one of the five underlying vowels of Spanish, /a e i o u/, and parentheses indicate optionality. Nearly all marker shapes are found in words that are only masculine, words that are only feminine, words that can be either gender, and words with no gender at all (adverbs, see below). As implied by the two sets of parentheses in the marker formula *(V)(s),* some Spanish nouns, adjectives, adverbs, and determiners do not have word markers. Such words are common and manifest all the possibilities of gender seen in the various classes in (5). A sample is given in (6):

(6)	*Gender*	*Example*		
a.	m only	padre	'father'	
		sol	'sun'	
b.	f only	madre	'mother'	
		col	'cabbage'	
c.	m or f	amante	'lover'	
		mártir	'martyr'	
d.	none	delante	'ahead'	
		atrás	'behind'	

As illustrated, the phonetic representations of words without a word marker typically end in a single coronal consonant or in [e]. Predictably, [e] appears after otherwise unsyllabifiable segments. For example, the sequences *dr* of *padr-, madr-* and *nt* of *amant-, delant-* are not permissible codas in Spanish; final [e] permits the acceptable syllabifications *pa.dre, ma.dre, a.man.te, de.lan.te.*[8] In contrast, *sol, col, mártir, atrás* are exhaustively syllabifiable without [e]. The stems *hero-, prol-,* and those of other words

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[8] If I am not mistaken, Stockwell, Bowen, and Martin (1965) were the first to discern that the *-e* in (6) is "an empty syllable carrier" (p. 43), and Klein (1983) was the first to relate this observation to a set of explicit rules. The latter work (whose first draft appeared years before the published version) contains precursors of several other ideas in the present study.

of type (5g) are also fully syllabifiable without a final vowel. Yet they have one: *héroe, prole.* This phonologically unpredictable *-e* must then be due to some sort of lexically marked irregularity.[9]

Both (1) and (5)–(6) obfuscate the true nature of the system of gender exponence in Spanish: (1) is hopelessly simplistic; (5)–(6) reveal something about the complexity of the data but give no clue about where any systematicity lies. There are, in fact, two axes of systematicity. One, there are generalizations particular to each of the categories of words that bear word markers (nouns, pronouns, determiners, adjectives, and adverbs). Two, the examples in (5)–(6) are not all on a par; rather, they fall naturally into three hierarchically related classes: an *inner core* of prototypes, illustrated in (1); an *outer core* of slightly deviant cases, namely, the class of markerless words illustrated in (6); and a motley *residue.* This hierarchy is illustrated in table 1.

In the *inner core* the suffix *-o* is invariably attached to masculine stems and the suffix *-a* is invariably attached to feminine stems, in words of both animate and inanimate reference. Words in the *outer core* are those that do not have word markers (but may have [e] for syllabicity). It is thus logically impossible for them to manifest any correlation between word marker and grammatical gender. In fact, the outer core contains masculine and feminine words in approximately equal numbers, as well as genderless words. The *residue* contains all words not in the core.

Inner and outer core are grouped together in table 1 as regular cases in opposition

Table 1

REGULAR					IRREGULAR
Inner core		Outer core			Residue
m	f	m	f		
hijo 'son'	hija 'daughter'	padre 'father'	mujer 'woman'		problema (m) 'problem'
cedro 'cedar'	sidra 'cider'	mar 'sea'	liebre 'hare'		lejos 'far'
					tribu (f) 'tribe'
					etc.

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[9] This will be discussed in more detail below. For the moment, we can observe that this *-e* is not an integral part of the stem since it does not appear if the stem has another affix: for example, *hero + in + a* (**heroe + in + a*) 'heroine', *hero + ísm + o* (**heroe + ísm + o*) 'heroism'. There is no independently motivated rule that would delete such a stem-final vowel.

to the irregular residue—that is, as the unmarked as opposed to the marked case, in some technical sense that remains to be clarified. Several asymmetries support this primary partitioning. First, numerical preponderance. The vast bulk of nouns, adjectives, and adverbs in Spanish belong to the core. The residue is relatively small overall, and its subclasses are tiny for the most part. For example, the subclass of feminine nouns with word marker -*u* contains the single item *tribu* 'tribe'. The largest subclass is that of masculine words with marker -*a*, which contains about 600 nouns and a fair number of adjectives.[10] The other subclasses cluster toward the smaller rather than the larger end of this range.

Second, productivity. Inner and outer core are productive in the sense that both accept loanwords and other types of neologisms freely. The residue has only a limited ability to house neologisms. Indeed, this is close to tautologous: a potential new word is rarely considered "really Spanish" unless it adheres to the canonical patterns of the core.

Third, historical drift. Words tend to migrate over time from the residue into the core. For example, residual feminine *tribu* has become core masculine *tribo* in some dialects of the southwestern United States, and residual masculine *idioma* 'language' has become regularly feminine in other dialects. There is no systematic migration from core to residue.[11]

Relative markedness is not so obvious in the secondary partitioning between inner core and outer core. I know of no clear pattern of diachronic migration between the two, and both seem to accept loans and other neologisms with equal ease. The only asymmetry is in numbers: inner core words outnumber outer core words by about two to one.

We now survey each of the categories—nouns, pronouns, determiners, adjectives, adverbs—to which word markers may attach. I will start with adverbs, about which there is least to say.

2.1. Adverbs

Spanish adverbs have no intrinsic component of meaning related to sex, and they do not enter into the gender system of Spanish in any way: they have no lexical gender, and they do not participate in gender concord. Adverbs do, however, have word markers that display precisely the same distinctive morphological behavior as the word markers of nouns and adjectives. For example:

(7) a.   dentr<u>o</u>   (adverb, (5a))   'inside'
          a + dentr + ar   (verb)   'to penetrate'
          *a + dentr<u>o</u> + ar

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[10] Teschner and Russell (1984) count 591 nouns of this sort, most of them in common use; no tally of adjectives (or of adverbs) is given.

[11] In the case of *tribo* (m) and *idioma* (f), form has driven gender shift. It does not always go that way; for example, *modista* (m/f) 'fashion designer' has spawned *modisto* (m) '(male) fashion designer'.

b.	fuera	(adverb, (5b))	'outside'
	fuer + eño	(noun)	'outsider'
	*fuera + eño		
c.	lejos	(adverb, (5c))	'far'
	lej + ano	(adjective)	'distant'
	*lejos + ano		

In sum, adverbs show in a particularly transparent way the independence of bio-logical/semantic sex, grammatical gender, and morphological form class. Adverbs have no sex reference and are not marked in any way for gender. Yet the *-o, -a,* and *-os* in *dentr + o, fuer + a, lej + os,* and the like, are the same morphemes as the *-o, -a,* and *-os* in *muchach + o* 'boy' and *Robert + o* 'Robert', *muchach + a* 'girl' and *Robert + a* 'Rob-erta', *cosm + os* 'cosmos' and *Carl + os* 'Charles', and so on. I reiterate these obser-vations since they alone suffice to discredit the idea that word markers are sex/gender morphemes in the sense of (2).

2.2. Adjectives

Like determiners and other noun modifiers, adjectives have no inherent gender; they do, however, show gender concord with the noun they modify, as illustrated in (8):

(8) a.   Mi $\begin{Bmatrix} \text{sobrino (m)} \\ \text{padre (m)} \end{Bmatrix}$ es $\begin{Bmatrix} \text{inteligente (m)} \\ \text{alto (m)} \end{Bmatrix}$.

'My $\begin{Bmatrix} \text{nephew} \\ \text{father} \end{Bmatrix}$ is $\begin{Bmatrix} \text{intelligent} \\ \text{tall} \end{Bmatrix}$,

   b.   Mi $\begin{Bmatrix} \text{sobrina (f)} \\ \text{madre (f)} \end{Bmatrix}$ es $\begin{Bmatrix} \text{inteligente (f)} \\ \text{alta (f)} \end{Bmatrix}$.

'My $\begin{Bmatrix} \text{niece} \\ \text{mother} \end{Bmatrix}$ is $\begin{Bmatrix} \text{intelligent} \\ \text{tall} \end{Bmatrix}$,

These examples provide another transparent illustration of the independence of gender and form: noun-adjective concord demands a match in gender; the form of the matching elements is irrelevant. As in the case of (7), this alone would force us to abandon the analysis proposed in (2) of word markers as direct exponents of gender (or sex), even if there were no other evidence against it.

Not surprisingly, most adjectives are prototypical inner core words with *-o* in the masculine and *-a* in the feminine, illustrated in (9a). Most of the rest are of the outer core type, which lack word markers, as illustrated in (9b). A small subtype illustrated in (9c) contains mostly but not exclusively ''gentilic'' adjectives, which have national, geographical, or ethnic reference; these have no word marker in the masculine but *-a* in the feminine. Finally, there is a residual type, illustrated in (9d), in which both mas-culine and feminine have the word marker *-a*:

(9)   *Masculine*   *Feminine*

   a.   italian<u>o</u>   italian<u>a</u>   'Italian'
       bonit<u>o</u>   bonit<u>a</u>   'nice'
       crud<u>o</u>   crud<u>a</u>   'raw'
       zurd<u>o</u>   zurd<u>a</u>   'left-handed'

   b.   posible   'possible'
              verde   'green'
              azul   'blue'

   c.   anglosajón   anglosajon<u>a</u>   'Anglo-Saxon'
       español   españo<u>la</u>   'Spanish'
       holgazán   holgazan<u>a</u>   'lazy'
       grandote   grandot<u>a</u>   'big' (augmentative)

   d.   cosmopolit<u>a</u>   'cosmopolitan' (*cosmopolit<u>o</u>)
             agrícol<u>a</u>   'agricultural' (*agrícol<u>o</u>)
             belg<u>a</u>   'Belgian' (*belg<u>o</u>)

What (9) does not contain is as important as what it does. In particular, the converses of (9c) and (9d) do not occur. That is, there are no pairs that differ from (9c) in that the masculine is in the inner core, with marker -*o*, whereas the feminine is in the outer core, with no word marker (for example, *grandoto* (m)/*grandote* (f)). Similarly, there is no adjective that differs from the (9d) type in that word marker -*o* is neutral with respect to concord. The fact is that every adjective with -*o* is masculine and only masculine.

In a different dimension, there is no adjective stem, whatever word marker it may take, that can be only masculine or only feminine.[12] This is true even of adjectives of the sort illustrated in (10a), which for semantic or other reasons can be felicitously predicated only of a single noun or of a single type of noun. Such adjectives display, and must display, concord with any noun they are predicated of. This is easy to see in contexts in which the anomaly of the predication is neutralized, as illustrated in (10b):

(10) a.   una mujer (f) embarazad<u>a</u> (f)
         'a pregnant woman'
         año (m) bisiest<u>o</u> (m)
         'leap year'
         vientos (m) alisi<u>o</u>s (m)
         'trade winds'

   b.   Mi padre (m) soñó que estaba $\left\{ \begin{array}{l} \text{embarazad}\underline{o}\ (m) \\ \text{*embarazad}\underline{a}\ (f) \end{array} \right\}$.

       'My father dreamed that he was pregnant.'

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[12] Presumably, such monogeneric adjectives are excluded by Universal Grammar.

Es un disparate hablar de semanas (f) $\left\{ \begin{array}{l} \text{bisiestas (f)} \\ \text{*bisiestos (m)} \end{array} \right\}$.

'It's nonsense to talk about leap weeks.'

No hay mareas (f) $\left\{ \begin{array}{l} \text{alisias (f)} \\ \text{*alisios (m)} \end{array} \right\}$.

'There are no trade tides.'

2.3. Nouns

Nouns are more complicated. They are more numerous than adjectives and display a greater variety both of word markers and of marker-gender associations.

2.3.1. Gender in Nouns.
All Spanish nouns have lexical gender, either masculine or feminine (but not neuter). For nouns referring to humans, grammatical gender usually matches biological sex, as illustrated in (1)—but not always (see below). As illustrated in (11), the gender of other nouns is arbitrary: there is no correlation with either meaning (11a) or phonological shape of the stem (11b).[13]

(11)		*Masculine*	*Feminine*		
	a.	domicilio	residencia	'home'	'residence'
		pájaro	ave	'bird'	'bird'
		ostión	almeja	'oyster'	'clam'
		asiento	silla	'seat'	'chair'
		ratón	rata	'mouse'	'rat'
		sapo	rana	'toad'	'frog'
	b.	libro	libra	'book'	'pound'
		caso	casa	'case'	'house'
		paso	pasa	'step'	'raisin'
		palo	pala	'stick'	'shovel'

2.3.2. Gender and Word Marker in Nouns.
Nonhuman outer core (12a) and residual (12b) words belong freely to either gender:

(12)		*Masculine*	*Feminine*		
	a.	frente	frente	'front'	'forehead'
		orden	orden	'order' (succession)	'order' (command)
		moral	moral	'blackberry bush'	'morality'
		corte	corte	'cut'	'court'
		pez	pez	'fish'	'pitch' (resin)

[13] A few tiny pockets of partial predictability exist. For example, some stems refer to fruit when feminine and to the corresponding tree when masculine: *cereza* (f)/*cerezo* (m) 'cherry/tree', *manzana* (f)/*manzano* (m) 'apple/tree', *naranja* (f)/*naranjo* (m) 'orange/tree', and a few others. Many fruit-tree pairs, however, are not related in this way: for example, *higo* (m)/*higuera* (f) 'fig/tree', *membrillo* (m)/*membrillo* (m) 'quince/tree', *coco* (m)/*cocotero* (m) 'coconut/tree', *pera* (f)/*peral* (m) 'pear/tree', *nuez* (f)/*nogal* (m) 'walnut/tree'.

b. análisis   síntesis   'analysis'   'synthesis'
    brindis   crisis   'toast'   'crisis'
                                  (drink)
    cruce   cruz   'crossing'   'cross'.
    pene   ene   'penis'   '(letter) n'

There exists, however, a striking asymmetry among residual nouns. With nearly 600 exemplars, masculine nouns (human and nonhuman) with word marker -*a* constitute the largest single class in the residue. A sample is given in (13a). In contrast, there is just one guaranteed example of an invariably feminine noun with word marker -*o* in common use. This is *mano* 'hand', shown in (13b) along with all the other cases I know of, which are relatively exotic.

(13) a. *Masculine*

    telegrama   'telegram'
    profeta   'prophet'
    poeta   'poet'
    día   'day'
    problema   'problem'
    síntoma   'symptom'
    drama   'drama'
    mapa   'map'
    and approximately 600 others

b. *Feminine*

    dinamo/dínamo   'dynamo'
    virago   'virago'
    nao   'ship'
    libido/líbido   'libido'
    mano   'hand'
    and no others[14]

This asymmetry in nouns is especially interesting in light of the fact, noted in connection with (8), that there are quite a few adjectives with word marker -*a*, but not one with word marker -*o*, that can be either masculine or feminine.

2.3.3. Mating in Nouns.   A striking fact about nouns that refer to human beings is stated in (14):

(14) Human nouns are "mated": both a masculine and a feminine form exist for each human noun.

Exceptions to (14) are rare, and getting rarer every day, as we will see shortly. The

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[14] *Fotografía* (f) 'photograph' and *motocicleta/motoneta* (f) 'motorcycle/motorscooter' are commonly shortened to *foto* (f) and *moto* (f), which look like examples of (13b). Their final -*o*, however, does not behave like a word marker.

classic case of human noun mating in Spanish is illustrated in (1). One might conclude from (1) that inner core human nouns are limited largely to kinship terms, but this is not true, as illustrated in (15a). Words like those in (1) and (15a) are prototypical and quite numerous. Other patterns of human mating are illustrated in (15b–g):

	Masculine	Feminine	
(15)			
a.	secretario	secretaria	'secretary'
	campesino	campesina	'peasant'
	cocinero	cocinera	'cook'
	criado	criada	'servant'
	alumno	alumna	'student'
	amigo	amiga	'friend'
b.		estudiante	'student'
		intérprete	'interpreter'
		cómplice	'accomplice'
		esquimal	'Eskimo'
		caníbal	'cannibal'
		cónyuge	'spouse'
		mártir	'martyr'
		joven	'young man'/'young woman'
c.	(presid)ente	(presid)enta	'president'
	(sirvi)ente	(sirvi)enta	'servant'
	(profes)or	(profes)ora	'professor'
	colegial	colegiala	'student in a *colegio*'
	doncel	doncella	'lad'/'lass'
	monje	monja	'monk'/'nun'
	nene	nena	'child'
	jefe	jefa	'chief'
d.	duque	duquesa	'duke'/'duchess'
	poeta	poetisa	'poet'/'poetess'
	actor	actriz	'actor'/'actress'
e.		(aristó)crata	'aristocrat'
		(art)ista	'artist'
		(mon)arca	'monarch'
		camarada	'comrade'
		acróbata	'acrobat'
		patriota	'patriot'
		suicida	'(person who commits) suicide'
		policía	'police'
		colega	'colleague'

	Masculine	*Feminine*	
	pirata		'pirate'
	guía		'guide'
f.	contralto		'contralto'
	soprano		'soprano'
	testigo		'witness'
	modelo		'model'
g.	macho	hembra	'male'/'female'
			(*hembro/*macha)
	hombre	mujer	'man'/'woman'
	padre	madre	'father'/'mother'
	yerno	nuera	'son-'/'daughter-in-law'
			(*nuero/*yerna)

These subtypes have the following characteristics:

(15b)
No word marker (outer core); each can be either masculine or feminine. This set is large enough to defy exhaustive listing.

(15c)
Outer core masculines (plus residual *nene*)[15] mated to (inner core) feminines with word marker *-a*. This set is listable; it contains an arbitrary two or three of the many nouns with the suffix *-ente*, nouns with the derivational suffix *-or*, and a scattering of other stems. It is thus marked in some sense with respect to (15b).

(15d)
Masculine and feminine related by derivational suffixation. This set is listable and relatively small.

(15e)
Word marker *-a*; each can be either masculine or feminine. Contains nouns formed with *-crat, -ist,* and *-arc* as well as underived stems. This set is sizeable and heterogeneous.

(15f)
Word marker *-o*; each can be either masculine or feminine. Contains only the examples shown, so far as I know (but see immediately below), thus contrasting significantly in size with (15e).

(15g)
Suppletive mates. List is exhaustive, barring oversight. Note that in the cases with *-o* and *-a*, the suppletive mate blocks the expected inner core mate.

Absolutely unmated noun stems that refer to humans—that is, exceptions to (14)—

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[15] Residual since *n* is a regular word-final coda, in which case *-e* is syllabically unwarranted.

are extremely rare. I can find only four totally solid cases in the entire lexicon of Spanish:[16]

(16)   *Masculine*   *Feminine*
    marido   *marida   'husband'   'wife'
    *criaturo   criatura   'baby'
    *persono   persona   'person'
    *víctimo   víctima   'victim'

At this point some sociolinguistic comments are in order. The accelerating entry of women into previously male-dominated professions has led to radical dialectal and even idiolectal variation in the case of words like those in (17a):[17]

(17) a.   (primer) ministro   '(prime) minister'
        abogado   'lawyer'
        químico   'chemist'
        gramático   'grammarian'
        ingeniero   'engineer'
        médico   'doctor'
        físico   'physicist'
        músico   'musician'

b.   Mi madre (f) es $\left\{ \begin{array}{l} \text{un \ (m) buen \ (m) ingeniero (m)} \\ \text{una (f) \ buena (f) \ ingeniero (f)} \\ \text{una (f) \ buena (f) \ ingeniera (f)} \end{array} \right\}$.

'My mother is a good engineer.'

It is not possible to call a woman grammarian *una gramática,* or a woman musician *una música*; the feminine forms *gramática* and *música* are preempted by the abstract meanings 'grammar' and 'music'. But what do we call a woman prime minister, a woman engineer, and so on, where no such blocking effect obtains? Not all cases are uniform even for a given speaker, but one set of options for one particular case is shown in (17b). The most conservative option is all-masculine *un buen ingeniero*; the moderate option is *una buena ingeniero*, treating *ingeniero* as a member of the subtype illustrated in (15f); the most liberal option is *una buena ingeniera*, which assimilates *ingeniero* fully to the inner core class illustrated in (15a). This order of innovation to the goal of placing nouns in the inner core surely reflects a progression from maximum to minimum markedness in some sense.

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[16] There are perhaps a few other marginal candidates. For example, *ángel* (m) 'angel' has no feminine mate, but it is not clear to me that angels are human; *vástago* (m) 'stem, offshoot, offspring' can clearly refer to humans but perhaps by metaphorical extension from its botanical meaning. *Marido*, the first example in (16), may be suppletively mated with *mujer* in the sei   f 'wife', but the more basic meaning of *mujer* is 'woman', whose suppletive mate is *hombre* 'man', as illustrated in (15g). In any event, no female reference is possible for the word *marido*, nor is there any possible feminine form of its stem.

[17] Recent discussion of the usage of such terms can be found in DeMello (1990).

Interestingly, the increasing order of markedness exhibited in (15a) through (16) is reversed for nonhuman animals. The general case for animals is that one gender, arbitrarily masculine or feminine, is used for both male and female of a given species, as illustrated in (18a). There are a few cases, illustrated in (18b), in which the names of males and females of the same species are related by suppletion or derivational affixation. Only a few familiar animal names, illustrated in (18c), are like human prototypical inner core nouns.

(18)   *Masculine*   *Feminine*

		Masculine	Feminine		
a.	camello	*camella	'camel'	
	reno	*rena	'reindeer'	
	erizo	*eriza	'hedgehog'	
	dinosaurio	*dinosauria	'dinosaur'	
	*foco	foca	'seal'	
	*cebro	cebra	'zebra'	
	*ardillo	ardilla	'squirrel'	
	*jirafo	jirafa	'giraffe'	
b.	toro	vaca	'bull'/'cow'	(*vaco, *tora)
	caballo	yegua	'horse'/'mare'	(*yeguo, *caballa)
	carnero	oveja	'ram'/'ewe'	(*ovejo, *carnera)
	gallo	gallina	'cock'/'hen'	(*gallino, *galla)
c.	perro	perra	'dog'	
	gato	gata	'cat'	

2.4. Pronouns and Determiners

The set of pronouns and determiners in Spanish contains some special cases with respect to gender exponence (see table 2). Specifically, third person nominative pronouns, definite articles, and demonstratives exhibit a three-way contrast not found in nouns and

Table 2

	Masculine	Feminine	Neuter	
Nom. pronoun	él	ella	ello	'he, she, it'
Article	el	la	lo	'the'
Demonstrative	este	esta	esto	'this'
	ese	esa	eso	'that'
	aquel	aquella	aquello	'that (distant)'

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adjectives (or in other kinds of pronouns and determiners). The extra member is traditionally called *neuter*.[18]

    Though it is not unusual in the languages of the world for pronouns and determiners to present morphological surprises, the particular alignments in table 2 seem odd. In addition to showing a bit of stem allomorphy, the masculine and feminine mates look like "gentilic" adjectives (9c) and nouns of type (15c)—with no word marker in the masculine and -*a* in the feminine—whereas the corresponding neuters look like core masculines—with -*o*. The neuters thus seem to have bumped the masculines out of the core.

2.5. Summary

Leaving aside the rich variety of details presented in the preceding subsections, I summarize in chart form in table 3 the main characteristics of Spanish nouns, pronouns, adjectives, determiners, and adverbs with respect to (a) a component of meaning related to biological sex, (b) lexical gender and gender concord, and (c) declensional class as manifested in selection of word marker shape or lack of word marker. An empty cell indicates absence of a property in a set of forms, " + " indicates universal presence of a property in a set of forms, and " ± " indicates that only some members of the set have the property.

3. Analysis

The fundamental strategy of an investigation that aims to give an insightful analysis of the material laid out in the previous sections—an analysis that includes an explanation for the "mating problem" discussed in section 1—must be to account for the preferred associations among the domains of semantics (sex), syntax (gender), and morphology (form class) while recognizing the formal autonomy of these three domains. I begin by

Table 3

	Noun	Pronoun	Adjective	Determiner	Adverb
Sex reference	±	±	±		
Lexical gender	+	±			
Gender concord target			+	+	
Form class	(5a–g)	(5a–b)	(5a–d,g)	(5a,b,e)	(5a–c)
	(6)	(6)	(6)	(6)	(6)

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[18] I retain the traditional terminology but disavow commitment to any particular theory of the (currently controversial) syntax of these items. For discussion, see Klein (1988), Luján (1980), Ojeda (1984), Otheguy (1978), and references therein.

introducing the basic descriptive devices in section 3.1; the role of these devices in words of the various syntactic categories is then discussed in the order in which they are presented in section 2: adverbs in section 3.2, adjectives in section 3.3, nouns in section 3.4, pronouns and determiners in section 3.5. The phonological realization of word markers is the topic of section 3.6.

3.1. Basic Machinery

As illustrated in (5) and (6), each of the declensional classes of Spanish—that is, each of the sets containing all and only those words with a particular word marker, plus the set of markerless words—is heterogeneous with respect to gender. This is one of the reasons why the formal representation of declensional class must be distinct from that of gender.

I propose the notations shown in (19a) for the representation of gender and declensional class in lexical entries. Sample entries are shown in (19b) for the masculine noun *libro* 'book', the feminine noun *libra* 'pound', the adjective *libre* 'free', and the masculine noun *día* 'day'; *UR* stands for *underlying representation*.

(19) a. Gender: f = feminine
    Class:]a = words with marker -*a*
    ]∅ = words with no marker (phonetic -*e* ~ ∅ depending on syllable structure)

b.

	libro (m)	libra (f)	libre	día (m)
Meaning	'book'	'pound'	'free'	'day'
UR of stem	/libr/	/libr/	/libr/	/di/
Category	N	N	A	N
Gender		f		
Class			]∅	]a

There is little doubt that masculine is the unmarked or default gender in Spanish; the standard literature is full of unassailable arguments to this effect. I will provide only one elementary example here:

(20) a. Tienes   demasiados (m) "paras" en ese párrafo;
    'You have too many   "paras" in that paragraph;

b. por ejemplo, mira: este (m) "para" está de más.
    for example, look: this   "para" is   superfluous.'

The metalinguistically mentioned preposition *para* 'for' is inherently genderless and thus cannot transfer gender via concord to the quantifier *demasiados* or the demonstrative *este*. Yet these modifiers show unambiguous masculine concord, not neuter. Since there is no source of masculine gender in such cases, it follows that masculine is the default gender.

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   To the limited extent that discussion is explicit, it is claimed in the literature—
including Harris (1985)—that the formal representation of gender in Spanish is binary.
This claim is usually implemented by means of the feature [±feminine], with " + " and
" − " designated as marked and unmarked values, respectively. I now explicitly reject
this view: I interpret unmarked or default gender literally as the absence of any infor-
mation about gender in lexical entries. Hence the blank in the corresponding position
under the masculine nouns *libro* and *día* in (19b) and the single-valued mark *f* under the
feminine noun *libra*. This is the appropriate formal reflection of the situation illustrated
in (20). Genderless words like *para* cannot transfer or be checked for either value of a
binary feature like [±feminine], and they obviously cannot host either [m gender], to
be interpreted as feminine, or [∅gender], if this is interpreted as masculine. Concord
targets like determiners and adjectives must be genderless in the lexicon (presumably
universally); they acquire gender only through concord. In cases like (20) they can ac-
quire literally nothing; literally nothing, then, is the proper formal mark of masculine
gender in Spanish.[19]
   Similarly, I take membership in the classes of forms that take one or the other word
marker, or no word marker, to be lexically registered as a nonbinary property. As sug-
gested in (19b), there are two marked cases here, one registered by the diacritic]*a*, for
words that take marker -*a*, and the other registered by the diacritic]∅, for words that
take no marker. Words that take marker -*o* are lexically unmarked, literally; that is, they
bear no form-class diacritic of any sort.
   For inner core feminine nouns, the form-class diacritic]*a* does not appear in lexical
entries either; it is supplied by the redundancy rule given in (21):

(21) *Feminine Marker Rule*
      f →]*a*

The phonological manifestation of word markers is provided by the "spell-out" rule
(22), stated first in ordinary prose in (22a) and then more formally in (22b):[20]

(22) *Marker Realization Rule*
      a. To form the X^0 level of nouns, adjectives, and adverbs, insert suffixal
          /a/ if the stem is marked]*a*; otherwise, insert suffixal /o/.
      b. $\emptyset \rightarrow \begin{Bmatrix} [+\text{low}] \\ [+\text{round}] \end{Bmatrix} / [[\begin{Bmatrix}]a \\ (\text{else}) \end{Bmatrix}]_{N/A} \underline{\quad}]_{X^0}$

Marker Realization takes for granted some theory of underspecification whereby
phonological redundancy rules supply feature values left unspecified in underlying pho-

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[19] Of course, a gender-marking system could be set up in which some lexical items bear the feature
[+feminine] and all others are subject to the redundancy rule [ ] → [−feminine]. I am not aware, however,
that this additional machinery has ever been (or could be) empirically motivated.
   [20] The role of this rule in the grammar of Spanish is clarified in section 3.6.

nological matrices. The features [+low] and [+round] in (22b) are sufficient to distinguish /a/ and /o/, respectively, from each other and from all other vowels in the underlying inventory /a e i o u/ of Spanish. Marker Realization is distinct from the phonological redundancy rules of Spanish, which it feeds. For typographical convenience in illustrations and discussion below, vowels are identified by standard alphabetic symbols rather than by minimally distinct underlying feature specifications like [+low] and [+round]. The reader should keep in mind, however, the distinction between morphological redundancy rules like Feminine Marker and Marker Realization, which provide (morphological or phonological) information predictable from morphological information, and phonological redundancy rules, which provide phonological information predictable from phonological information.

The diacritic]∅ exempts stems and derivational suffixes from Marker Realization; word markers -*a* and -*o* (underspecified in underlying phonological representations as [+low] and [+round], respectively) thus never attach to items with this lexical property. Now that Marker Realization has actually been stated, it becomes evident that "]∅" is simply the typographically convenient representation I am using for a rule exception feature of the familiar sort.

A word marker can be manifested phonologically only on the rightmost stem or suffix of a morphologically complex word: for example, *demócrat+a* 'democrat' but *democrát+ic+o* 'democratic', not **democrat+á+ic+o*.[21] The outer bracket]$_{X^0}$ in the environment of Marker Realization reflects this restriction. Use of the variable X is intended to suggest that word markers are transparent to category in the same way as the English prefix *counter*-: $_N$[*counter*$_N$[*espionage*]], $_V$[*counter*$_V$[*sign*]], $_A$[*counter*$_A$[*productive*]], and so on.

These technical details should not distract our attention from the crucial and most significant property of Marker Realization, namely, that it contains no mention of grammatical gender or semantic/biological sex. The absence of these elements from the formalization in (22b) is of course a direct reflection of the formal autonomy of the semantic, syntactic, and morphological domains: the rule expresses a purely morphological generalization.

In sum, words like those in (19b) are derived as illustrated in (23):

(23) Lexical entries

	libro	libra	libre	día
	/libr/	/libr/	/libr/	/di/
	N	N	A	N
		f		
			]∅	]a

---

[21] The same is of course true of the anomalous (residual) word markers: for example, *Sócrat+es* 'Socrates', *socrát+ic+o* 'socratic', not **socrat+és+ic+o*.

					"	[libr]
					"	A
Concord[22]					"	f
					"	]∅

Feminine Marker (21)		]a		]a	
Marker Realization (22)	[libr]o	[libr]a	[libr]	[libr]	[di]a
Syllabification	li.bro	li.bra	li.bre	li.bre	dí.a

3.2. Adverbs

All but the two rarest of the seven declensional classes illustrated in (5) contain adverbs, as does the class of markerless words illustrated in (6). In no adverb, however, can class affiliation be predicted on the basis of biological/semantic sex or gender. The reason is simple: no adverb has these properties lexically or ever acquires them syntactically. Lexical entries of the various cases are illustrated in (24a); the application of relevant morphological and phonological (syllabification) rules to these lexical entries is shown in (24b).

Since adverbs neither have gender lexically nor acquire it through concord, Feminine Marker has no input. Marker Realization, on the other hand, applies in the expected fashion—exactly as in (23)—as do the rules of syllabification. I delay discussion of the anomalies in *apenas* and *adrede* until we reach the more ample context of sections 3.4.1 and 3.6.[23]

3.3. Adjectives

The primary generalizations about concord, gender, and form classes of adjectives set forth in section 2.2 are summarized for convenience in (25):

(25) a.   No adjective stem is marked lexically for gender (as either exclusively masculine or exclusively feminine).
     b.   Gender in adjectives is supplied through concord.
     c.   Many adjectives have -*a* for both genders.
     d.   No adjective has -*o* for (both masculine and) feminine.

Generalization (25a) can be registered formally by means of the filter shown in (26), which is presumably just the Spanish instantiation of a principle of Universal Grammar:

(26)   *Constraint on Lexical Entries*
       *[Adj, f]

---

[22] The intended interpretation of the notation is this: concord with a masculine noun changes nothing (indicated by the ditto marks); concord with a feminine noun adds the feature *f* to the set of lexical properties of the adjective.

[23] The -*as* of *apenas* places this word in the residue (see (5c) and table 1). The stem-final voiced coronal -*d* of *adred*- is a normal word-final coda; thus, the word-final -*e* of *adrede* is not needed for syllabification.

(24) a.

	(5a) medio 'halfway' /medi/	(5b) nunca 'never' /nunk/	(5c) apenas 'hardly' /apen+as/	(5g) adrede 'intentionally' /adred+e/	(6) ayer 'yesterday' /aier/	(6) -mente '-ly' /ment/
Meaning						
UR						
Gender						
Class		]a			]∅	]∅
b. Lexical entries	/medi/	/nunk/]a	/apen+as/	/adred+e/	/aier/]∅	/ment/]∅
Concord	—	—	—	—	—	—
Feminine Marker (21)	—	—	—	—	—	—
Marker Realization (22)	[medi]o	[nunk]a	—	—	—	—
Syllabification	me.dio	nun.ka	a.pe.nas	a.dre.de	a.yer	men.te

Generalization (25c), on the other hand, requires that many adjective stems be specified lexically for declensional class. Thus, the lexical entries of the class of adjectives illustrated in (9d) are as shown in (27):

(27)

	agrícola	belga
Meaning	'agricultural'	'Belgian'
UR of stem	/agricol/	/belg/
Category	A	A
Gender		
Class	]a	]a

As stated in (25d), Spanish systematically lacks adjectives ambiguous with respect to gender that have word marker -*o*. This fact is explained by the proposal that -*o* is the unmarked case, literally. If there were a lexical diacritic]*o* parallel to]∅ and]*a*, then adjective stems could bear this diacritic as a lexical peculiarity. In that case there would be no natural way of ruling out the set of forms that does not occur. The nonexistence of such a diacritic thus has exactly the desired consequences.

What of the small idiosyncratic class (9c) of "gentilic" adjectives (with largely but not exclusively geographical/national/ethnic reference) that have no word marker in the masculine but -*a* in the feminine? I propose that this double peculiarity (most masculine adjectives have marker -*o*; most masculines without a marker are paired with identical feminines) be marked lexically by supplying stems with a special diacritic *g* (mnemonic for "gentilic") that triggers the redundancy rule shown in (28):

(28) *Gentilic Rule*

$$g \rightarrow \begin{Bmatrix}]a \, / \, [\rule{1cm}{0.4pt}, \, f] \\ ]∅ \quad \text{(elsewhere)} \end{Bmatrix}$$

The Gentilic Rule supplies the diacritic]*a* to feminine "gentilics" and exempts masculines (by disjunctivity) from Marker Realization. No further machinery is required for adjectives. A sample derivation of each class in (9) is given in (29):

(29)

Lexical entries		crudo/-a		verde	
		'raw'		'green'	
		/krud/		/berd/	
		A		A	
					]∅
Concord		"	/krud/	"	/berd/
		"	f	"	f
		"		"	]∅

Gentilic Rule (28)				
Feminine Marker (21)		]a		*block*
Marker Realization (22)	[krud]o	[krud]a	[berd]	[berd]
Syllabification	kru.do	kru.da	ber.de	ber.de
Lexical entries	galés/-a		belga	
	'Welsh'		'Belgian'	
	/gales/		/belg/	
	A		A	
	g		]a	

Concord	"	/gales/	"	/belg/
	"	f	"	f
	"	g	"	]a

Gentilic Rule (28)	]Ø	]a		
Feminine Marker (21)	*block*			
Marker Realization (22)	[gales]	[gales]a	[belg]a	[belg]a
Syllabification	ga.les	ga.le.sa	bel.ga	bel.ga

In sum, I have proposed the following descriptive machinery: (a) the single lexical gender mark *f*; (b) the three form-class lexical diacritics]*a*,]Ø, and *g*; (c) redundancy rule (28), the Gentilic Rule, for stems marked with the diacritic *g*; (d) redundancy rule (21), Feminine Marker, for feminine stems; (e) spell-out rule (22), Marker Realization. The diacritics mark idiosyncratic contrasts; the redundancy and spell-out rules provide predictable information. None of these elements is employed exclusively for adjectives. It is hard to see how any of them can be simplified or eliminated without loss of descriptive adequacy.

3.4. Nouns

3.4.1. Core Nonhuman Nouns. The descriptive apparatus developed up to this point for adverbs and adjectives is also necessary and sufficient for nonhuman nouns, and it evidently provides the basis for exactly the right set of descriptive generalizations. This is illustrated in the sample lexical entries shown in (30), where only immediately relevant lexical properties are given:

(30)		*UR*	*Gender*	*Marker*
a.	libro	/libr/		
b.	libra	/libr/	f	
c.	orden	/orden/		]Ø
d.	orden	/orden/	f	]Ø
e.	drama	/dram/		]a

Libro exemplifies the class of masculine inner core nouns. Gender and word marker class are unspecified; default word marker *-o* is supplied by Marker Realization.

Libra exemplifies the class of feminine inner core nouns. Gender is specified; word marker class is not. Rule (21), Feminine Marker, predicts marker class]*a* from marked gender; Marker Realization guarantees the phonological shape /a/ for the word marker.

Orden (30c) exemplifies the class of masculine outer core nouns. Gender is unspecified; word marker class is specified as]∅, which exempts the stem from Marker Realization.

Orden (30d) exemplifies the class of feminine outer core nouns. Gender is marked; word marker class is specified as]∅, which exempts the stem from Marker Realization.

Drama exemplifies the class of residual masculine nouns with word marker *-a*. Gender is unspecified; marker class is idiosyncratically specified as]*a*, which triggers Marker Realization to guarantee word marker *-a*.

This array of descriptive mechanisms hits a stone wall when it comes to providing a lexical representation for the feminine nonhuman noun *mano* and its exotic companions *nao, virago, dinamo/dínamo*, and *libido/líbido*. Feminine gender can (and must) be specified with the feature f, but the proposed mechanisms cannot attach word marker *-o* to the stems in question. This is exactly as it should be: feminine forms with word marker *-o* fall outside the systematic possibilities of Spanish morphology. As noted above, the truly exceptional character of such forms is reflected with great clarity in the whopping imbalance of about 600-to-1 between masculine nouns with *-a* (which are themselves marginal!) and feminine nouns with *-o*, along with the parallel disparity in adjectives. In formal terms, my claim is that feminine nouns and adjectives with *-o* are outside the morphological system of the language in the sense that the relevant rules of this system—namely, Feminine Marker and Marker Realization—do not automatically generate this word marker as they do in core masculine forms. Lexical entries must be provided with a phonological representation for the word marker *-o* attached to feminine stems: the lexical entry of *mano* is essentially $[[man]_{\text{stem}} + o]_N$. Of course, I assume some theory of phonological underspecification, but the *-o* of *mano* is treated like any other underlying /o/: its missing features are filled in by *phonological* redundancy rules—the *morphological* spell-out rule Marker Realization has nothing to do with it.

The same is true for the small groups of nouns with word markers *-i, -u, -Vs*, and *-s*: all *phonologically* nonredundant features must be specified in lexical entries. The set of words like *héroe* illustrated in (5g) merits special comment. It is more than obvious that the final *-e* of these words is not required for full syllabification of the stem:
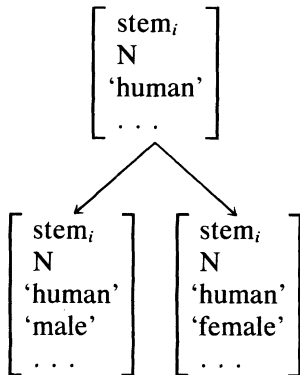
(31) a.   hé.ro.e̠   'hero'   o.bo.e̠   'oboe'
     b.   he.ro + ic̠o   'heroic'   o.bo + ist̠a   'oboist'

The derived words in (31b) illustrate that the final *-e* here, in addition to being unnecessary for syllabification, is not an integral part of the stem but rather displays the syndrome of morphological behavior of a word marker. The derivation of words with syllabically anomalous *-e* is discussed further in section 3.6.

3.4.2. Core Human Nouns.   We turn now to human nouns. I propose the redundancy rules in (32) as the grammatical mechanisms responsible for two fundamental observations made in section 2.3, namely, that in human nouns grammatical gender matches biological sex (with extremely rare exceptions to which we return below) and that both a masculine and a feminine form exist for each human noun.

(32) a.   *Human Gender*

'female' → f / [＿＿＿, 'human']

b.   *Human Cloning*

$$\begin{bmatrix} \text{stem}_i \\ \text{N} \\ \text{'human'} \\ \cdots \end{bmatrix}$$

$$\begin{bmatrix} \text{stem}_i \\ \text{N} \\ \text{'human'} \\ \text{'male'} \\ \cdots \end{bmatrix} \quad \begin{bmatrix} \text{stem}_i \\ \text{N} \\ \text{'human'} \\ \text{'female'} \\ \cdots \end{bmatrix}$$

The effect of Human Cloning is this: for every lexical entry L of a noun stem that contains the semantic specification 'human' without specification of sex, Human Cloning replaces L with a pair of entries L_m and L_f, each identical to L except for the addition of the semantic specifications 'male' and 'female', respectively. Of course, Human Cloning is not deeply explanatory; it simply encodes the observation made in English prose in (14). As a structure-building redundancy rule, however, it has the desirable formal property of blocking when its output would duplicate corresponding elements of an existing lexical entry. Consider, for example, the entries in (33), which exemplify the set of suppletive mated pairs illustrated in (15g):

(33)		padre	madre	yerno	nuera
	Meaning	'parent'	'parent'	'child's spouse'	'child's spouse'
		'male'	'female'	'male'	'female'
	UR	/padr/	/madr/	/yern/	/nuer/
	Category	N	N	N	N
	Gender				
	Class	]∅	]∅		

Cloning of the stem of *padre*, for example, would produce—after application of all relevant redundancy rules—the outer core feminine word **padre* meaning 'female parent', but this is preempted (blocked) by existing *madre*. Cloning of the stem of *nuera* would

ultimately produce the inner core masculine word *nuero* meaning 'child's male spouse', but this is preempted (blocked) by existing *yerno*. And so on.

Of course, suppletive pairs of mated human nouns are the exceptional case. The operation of the rules of Human Gender and Human Cloning in the vast bulk of human nouns in Spanish is illustrated in the derivations shown in (34):

(34) Lexical entries   amigo/-a   juez
                                     /amig/   /xwes/
                                     N   N
                                     'friend'   'judge'
                                                          ]∅

Cloning (32b)	/amig/	/amig/	/xwes/	/xwes/
	N	N	N	N
	'friend'	'friend'	'judge'	'judge'
	'male'	'female'	'male'	'female'
			]∅	]∅

Gender (32a)		f		f
Feminine Marker (21)		]a		]a
Marker Realization (22)	[amig]o	[amig]a	*block*	*block*
Syllabification	a.mi.go	a.mi.ga	xwes	xwes

No additional descriptive machinery is needed to account for the remaining subtypes of nouns catalogued in (15). The stems of schizophrenic nouns like *monje/monja* and *jefe/jεfa* (15c)—with outer core masculines but inner core feminines—are lexically marked with the diacritic *g* that triggers the Gentilic Rule originally motivated by "gentilic" adjectives like *galés/galesa* and *grandote/grandota*. A sample lexical entry is provided in (35a). The derivation of nouns in this subclass is entirely analogous to that of the adjective *galés/galesa* shown in (29). In the nouns, Human Cloning has the same effect as concord in adjectives: both a masculine and a feminine form are generated for each lexical entry, whereupon the Gentilic Rule provides the diacritics]∅ and]a for masculines and feminines, respectively.

(35)	a.	b.	c.	d.	e.
	jefe/-a	gato/-a	colega	marido	persona
	/xef/	/gat/	/koleg/	/marid/	/person/
	'chief'	'cat'	'colleague'	'spouse'	'person'
	'human'	'human'	'human'	'human'	'human'
				'male'	
	g		]a		f

The general observation regarding the diacritic *g* is that this is a label for a class of items with a particular morphological behavior: not all members of this class refer to

geography, nationality, or ethnicity. Nor are all or even the majority of terms of geography, nationality, and ethnicity members of this class. But this comes as no surprise: it is a commonplace in the world's languages that semantic classes and related morphological classes are not coextensive.[24]

This suggests a way to deal with dogs, cats, and the few other familiar animals that come in mated inner core pairs, as illustrated in (18c). I propose that they are morphologically human *honoris causa*, as illustrated in (35b). That is, they have no arbitrarily fixed lexical gender as do most animals, and their lexical entries do undergo cloning via (32b).

The subtype of human noun illustrated in (15e) with *camarada, acróbata*, and so on—nouns with marker -*a* for both masculine and feminine—is analogous to the set of adjectives illustrated in (9d). As illustrated in (35c), their lexical entries contain the marker-class diacritic]*a* but no specification for gender; derivations are exactly like that of *belga* in (29), with Human Cloning instead of Concord generating masculine and feminine mates from a single entry unspecified for gender.

3.4.3. Anomalies. The anomalous unmated human nouns *marido, criatura, persona*, and *víctima* (16), and any others of this type that may exist, can be dealt with quite naturally as follows. *Marido*, which in fact refers exclusively to biological males, contains the semantic specification 'male' in its lexical entry, as illustrated in (35d). Human Cloning is thus prevented from cloning a mate with the specification 'female'. *Criatura, persona*, and *víctima*, whose meaning has no component referring to sex, have lexical entries that contain a specification for (feminine) gender, as illustrated in (35e). No grammatical device exists that can delete this specification; hence, no masculine mate can be generated.

We are left with the anomalous human nouns with word marker -*o* illustrated in (15f) and (17). In light of the sociolinguistic factors outlined in section 2.3.3, it is clear that the status of such nouns is currently unstable but that they are in transition to the inner core, whose lexical entries and derivations are like that of *amigo/amiga* in (34). The starting point of this transition is illustrated in the first line of (17b) with obligatorily masculine *ingeniero*. I must assume that *ingeniero* and similar names of practitioners of professions illustrated in (17a) are registered lexically as exclusively male human nouns, like *marido* in (35d).[25] The intermediate stage illustrated in the middle line of (17b) coincides with the tiny class of nouns listed in (15f), like *testigo* and *modelo*, which can be both masculine and feminine with no change in word marker -*o*. This suggests that the lexical specification 'male' has been lost, so that cloning is not only possible but also predicted. A feminine mate does exist in the anomalous intermediate stage, but not with the predicted word marker -*a*. This fact suggests that, as in the case of the feminine

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[24] As we learn from Garde (1980), bacteria and oysters are morphologically inanimate in Russian, whereas dolls, corpses, and playing cards are animate.

[25] Many of the same stems, but not all, also form feminine nouns that refer to the corresponding subject matter: for example, *química* 'chemistry', *gramática* 'grammar', *física* 'physics', *música* 'music'.

nonhuman noun *mano*, the markers of these words must be supplied in lexical entries about which the morphological rules of Spanish say nothing.

3.5. *Pronouns and Determiners*

On the face of it, the pronouns and determiners shown in table 2 seem to contradict my claim that gender in Spanish is formally represented by the single privative feature f: a single mark cannot distinguish three categories of things (masculine, feminine, and neuter). The apparent contradiction disappears quickly, however.

The so-called neuters are the troublesome forms. As pointed out in section 2.4, there is no consensus in the literature regarding their syntactic status. It is clear, however, that there are no neuter lexical nouns in Spanish. Therefore, the neuter determiners cannot acquire gender through concord, as do their masculine and feminine counterparts. And we know independently that the default gender in Spanish is masculine, not neuter. Consequently, whatever "neuter" is, it is not a third gender in Spanish, along with masculine and feminine.

These facts add up to a conundrum—how to mark the three-way distinction in table 2—if the notions of gender and form class are conflated. But there is no puzzle for the analysis proposed above, where gender and word markers are related but distinct entities. This analysis can provide a straightforward and well-motivated description of the forms in question (though we await clarification of "neuter" by future syntactic investigation), as follows.

The masculine and feminine forms of the nominative pronouns refer to male and female humans, respectively; their mating is thus predicted by Human Cloning. The gender of the masculine and feminine articles and demonstratives is derived by Concord, as in the case of lexical adjectives. Furthermore, the singular forms of these determiners are like the "gentilic" adjectives in that they end in -$\emptyset$~*e* and -*a* in the masculine and feminine, respectively. The lexical entries and derivations of these forms, then, are analogous in relevant respects to those of *galés*/-*a* illustrated in (29).[26] All the neuter forms get their -*o* by default—that is, precisely by *not* bearing the diacritic *g* or any other mark of gender or form class. Nothing further need be said about the word markers in table 2.

Something else can be said, however, about the traditional statement that the masculine definite article *el* "contracts" with the prepositions *de* 'from, etc.' and *a* 'to, etc.' to form *del* and *al*, respectively. On the traditional assumption that contraction applies literally to *de* + *el* and *a* + *el*, we cannot understand the result *al*, since there is no independently motivated rule that would delete the initial *e* of the article. Suppose, however, that the underlying representation of the definite article is just the segment /l/. Addition of word markers produces the expected forms in the case of feminine *la(s)*,

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[26] On the other hand, the corresponding plural forms *los*/*las*, *estos*/*estas*, and so on, are like inner core nouns and adjectives. The basic peculiarity of these determiners, then, is that unlike nouns and adjectives, singulars bear a lexical diacritic but plurals are unmarked.

neuter *lo,* and masculine plural *los.* What of masculine singular *el*? Its initial *e* is predicted by an independently motivated rule that inserts *e* to the left of an otherwise unsyllabifiable liquid.[27] For convenience, let us call this the *eL Rule.* The following (desirable) consequences now follow: With /de/ + /l/ and /a/ + /l/ as the underlying representations of the preposition-article sequences, the /l/ is syllabifiable without intervention of the *eL* Rule; the outputs are simply *del* and *al.* No appeal need be made to an unmotivated deletion rule to rectify an alleged sequence **a + el*. For uncontracted *el,* operation of the *eL* Rule permits syllabification of /l/; the diacritic]∅ thus correctly predicts *el* rather than **le, *lo,* or **elo.*[28] These proposals are summarized in the following illustrative derivations:

(36)		Masculine	Contraction	Feminine	Neuter
		l,]∅	a+l,]∅	l,]a	l, "neuter"
Marker Realization (22)		l—	a+l—	l+a	l+o
Syllabification		—	.al.	.la.	.lo.
Epenthesis by *eL* Rule		el	—	—	—
Surface		el	al	la	lo

3.6. The Phonological Realization of Word Markers

In the normal case, phonological substance is provided to the word markers -*a* and -*o* by Marker Realization. Since the focus of this study is morphological rather than phonological, I do not wish to dwell on Marker Realization at length, but I will outline one proposal for its implementation in order to provide a modicum of concreteness. Filling in the details of this outline is left for discussion elsewhere. It should be clear that the formalization of Marker Realization is logically separable from other issues treated in sections 3.1–3.5; consequently, the proposals sketched below can be modified radically without affecting the rest of the analysis.[29]

In the comments on (5) in section 2, I observed that the complete inventory of word markers exactly matches all the possibilities of *(V)(s),* where parentheses indicate that one or both of these segments may be absent. Now consider these additional facts: (a)

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[27] See Harris (1983, 37). The rule is stated there as applying only before *r*, but extension to both liquids is trivial. Also, it should be understood that what is inserted is simply an unspecified [− consonantal] segment; phonological redundancy rules associate the remaining features of [e].

The basic idea that the article *el* consists of the stem /l/ preceded by epenthetic *e* can be found in Stockwell, Bowen, and Martin (1965, 49). These authors do not, however, relate this idea to the contractions *del* and *al*.

[28] It is tantalizing to consider integrating the description of the masculine forms in table 2 with that of the small arbitrary subset of masculine singular adjectives that lose the word marker -*o* in prenominal position: for example, *el buen∅ libro* 'the good book' versus *el libro bueno*. But the generalization isn't valid: the masculines in table 2 are markerless in postnominal as well as prenominal position: for example, *el libro este* (**esto*) 'this book' as well as *este libro*.

[29] The basic idea of word markers as floating morphemes—that is, lexically unassociated segments linked to a prosodic template in the course of the derivation—first appears in Harris (1980) and is developed in Harris (1985). There are substantial differences, however, between those works and the ideas sketched in the present section. An alternative is offered in Harris (forthcoming).

all regular noun and adjective plurals have the form [*stem*]*Vs*; (b) noun and adjective singulars like [*lun*]*es* 'Monday', [*dos*]*is* 'dose' have identical plurals: *dos* [*lun*]*es* (*lúneses*) 'two Mondays', *dos* [*dos*]*is* (*dósises*) 'two doses'.[30] In sum, the fact emerges that *all* representatives of the major lexical categories other than verbs (that is, nouns, adjectives, and adverbs—be they singular, plural, or numberless) have one single canonical shape, namely, $[[stem](V)(s)]_{X^0}$.

I propose to capture this striking generalization in the following way. I assume that *all* Spanish roots, stems, and affixes that belong to the major categories noun, adjective, and adverb are in fact bound morphemes: such stems and affixes must always undergo (further) affixation in order to form a complete prosodic word.[31] Specifically, they must be bound to a prosodic "template" whose properties are given in (37):[32]

(37)   "word marker template"
        Meaning   (none)
        UR   /VC/
        Category X^0
        Context   *stem*]$_{N/A}$ ———
        Other   phonologically noncyclic

We can now understand the function of Marker Realization in the following way: this rule associates a segmental melody to the empty V position in the word marker template, which enforces the universal canonical shape of all nonverb major category words in Spanish. For example:

(38)   libros   libras
        Lexical entries   /libr-/   /libr-/
                                                                      f

        Template concatenation   CVCC] VC]   CVCC] VC]
                                                  | | | | | | | |
                                                  l i b r   l i b r

        Morphology: Plural suffixation   CVCC] VC]   CVCC] VC]
                                                  | | | | | | | | | |
                                                  l i b r   s   l i b r   s

        Morphology: Feminine Gender (21),   CVCC] VC]   CVCC] VC]
        Marker Realization (22) | | | | | | | | | | | |
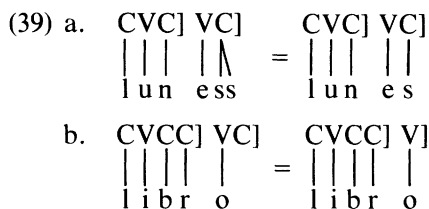   l i b r o s   l i b r a s

The hyphen in the lexical entries is a shorthand representation of the fact that the

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[30] Unlike words in which *Vs* is contained within the stem: *lápiz/lápices* 'pencil(s)'.

[31] Verb stems don't appear unsuffixed either; they take the appropriate person and number endings as demanded by agreement, in addition to tense, mood, and aspect suffixes. The only unaffixed words in Spanish, then, are *sí* 'yes', *no* 'no', prepositions, and other "small change" items, mostly clitics.

[32] The format of (37) follows that of (19) and (27). The symbols V and C in the template can be understood as skeletal X slots attached to segmental root nodes annotated with [−consonantal] and [+consonantal], respectively. I intend the template notation to be neutral with respect to various views of segment geometry.

stems in question are bound morphemes. The (phonologically invariable) plural mor-
pheme /s/ is also lexically unattached to a prosodic slot. Since it is a suffix (that is,
attaches at the right edge of its host), it fills the C position of the template. In cases like
[Luc]as 'Luke', [Marc]os 'Mark', [lun]es 'Monday', and so on, where the (single) C
position is filled with the s of the idiosyncratic bisegmental word marker, association of
plural -s to the same slot is phonetically vacuous, as illustrated in (39a).[33] In core sin-
gulars, where the C position of the template remains unfilled, this position is simply
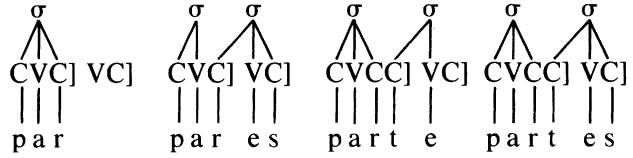phonetically unrealized, as illustrated in (39b).

(39) a.   CVC] VC]   CVC] VC]
          | | | | |\   = | | | | |
          l u n   e s s   l u n   e s

      b.   CVCC] VC]   CVCC] V]
           | | | | | = | | | | |
           l i b r   o   l i b r   o

Forms marked with the diacritic]∅ are lexical exceptions to Marker Realization.
Thus, no phonological matrix is supplied by this rule to the V position of the word marker
template. Consequently, when this position is syllabified, phonological redundancy rules
fill it with the features of the maximally unspecified default vowel e.[34] Slots that remain
unsyllabified and empty at the end of the phonological derivation are either removed by
convention or simply ignored. All this is illustrated in (40):

(40)

	Singular	*Plural*	*Singular*	*Plural*
	par		parte	
Lexical entries	/par-/		/part-/	
	]∅		]∅	
			f	
Template concatenation; Marker Realization (22) does not apply	CVC] VC] | | | p a r	CVC] VC] | | | p a r	CVCC] VC] | | | | p a r t	CVCC] VC] | | | | p a r t
Plural suffixation	CVC] VC] | | | p a r	CVC] VC] | | | | p a r s	CVCC] VC] | | | | p a r t	CVCC] VC] | | | | | p a r t s
Syllabification	σ /\ CVC] VC] | | | p a r	σ σ /\ /\ CVC] VC] | | | | p a r s	σ σ /\ /\ CVCC] VC] | | | | p a r t	σ σ /\ /\ CVCC] VC] | | | | | p a r t s

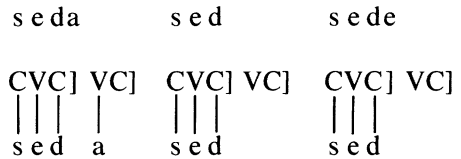[33] Alternatively, we could say that attachment of one -s blocks attachment of the other.

[34] The claim that e is the default vowel in Spanish has a long history and seems unassailable to me. More
detailed discussion—in need of revision but on the right track, I think—of the various aspects of syllabification
at work here is found in Harris (1985).

Phonological   σ   σ   σ   σ   σ   σ   σ
   redundancy rules
                CVC] VC]   CVC] VC]   CVCC] VC]   CVCC] VC]
                │││ ││   │││ ││ ││   ││││ ││   ││││ ││
                p a r   p a r e s   p a r t e   p a r t e s
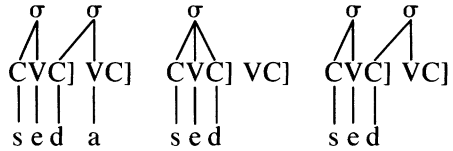
The stems of words like *héroe* ((5g), (31)), *chile* 'chili', and *sede* 'seat, see', whose final *-e* follows a segment that can normally be syllabified without addition of a nucleus, bear the diacritic]∅ and are furthermore lexically exempted from the syllabification process that normally incorporates single coronal consonants into a word-final rhyme.[35] Relevant portions of the derivation of the minimally contrasting trio of feminine nouns *seda* 'silk' (core), *sed* 'thirst' (]∅), and *sede* (syllabically exceptional) are shown in (41):
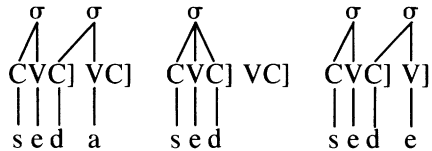
(41)   Template concatenation;   s e d a   s e d   s e d e
       Marker Realization (22)
                                    CVC] VC]   CVC] VC]   CVC] VC]
                                    │││ │   │││   │││
                                    s e d a   s e d   s e d

       Syllabification   σ   σ   σ   σ   σ

                                    CVC] VC]   CVC] VC]   CVC] VC]
                                    │││ │   │││   │││
                                    s e d a   s e d   s e d

       Phonological redundancy rules σ   σ   σ   σ   σ

                                    CVC] VC]   CVC] VC]   CVC] V]
                                    │││ │   │││   │││ │
                                    s e d a   s e d   s e d e
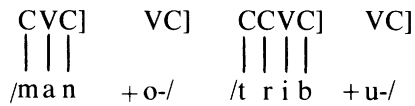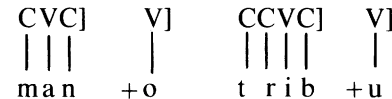
Individual lexical entries provide the phonological content of template V positions in idiosyncratic cases such as *mano* and *tribu*, discussed in section 3.4.1. The lexical filling of skeletal V in these cases preempts Marker Realization. This is illustrated in (42):

(42)   Lexical entries;   CVC]   VC]   CCVC]   VC]
       template concatenation   │││   ││││
                                    /m a n + o-/   /t r i b + u-/

       Melody-skeleton association; CVC]   V]   CCVC]   V]
       removal of empty slots   │││   │   ││││   │
                                    m a n   + o   t r i b + u

---

[35] This double exceptionality accords well with the rarity of such words. Their treatment in terms of exceptional syllabification, on the other hand, automatically accounts for the fact that the vowel found in word marker position is [e] rather than [i] or [u]. Additional discussion can be found in Harris (1985).

Of course, the segments transcribed /o/ and /u/ in (42) are not fully specified in lexical entries: only [+round] for /o/ and [+high, +round] for /u/ are required to distinguish these vowels from each other and from all others in the underlying inventory of Spanish; phonological redundancy rules complete the respective matrices. I underscore (once more) the distinction between the application of phonological redundancy rules and the nonapplication of morphological redundancy rules in cases of the type illustrated in (42).

4. Summary and Conclusion[36]

Tradition has it that the -o of such nouns as *maestr-o* '(male) teacher', *tor-o* 'bull', *disc-o* 'disk', and the -a of such nouns as *maestr-a* '(female) teacher', *vac-a* 'cow', *cint-a* 'tape' are gender-marking suffixes. Tradition is wrong: the -o and -a in question belong to a set of exponents of declensional class. They are markers of pure form; members of a particular form class uniquely share no attribute other than membership in that class. The class-marking suffixes have no meaning or function; they obey no higher semantic or syntactic authority. They are simply pieces of form that must be at the right place at the right time, by their own rules. They may perform an incidental phonological service by permitting syllabification of otherwise impermissible clusters. For example, *nt* cannot be tautosyllabic in Spanish, and the -a of *cint-a* allows the syllabification *cin.ta*. But this service can be rendered in other ways. For example, the stem *tint-* 'tint' belongs to a declensional class that has no vocalic suffix. In this case *nt* is saved by epenthesis: *tin.te*.

Reduced to its essentials, the argument that the suffixes in question are declension-class markers rather than gender markers is this: These suffixes share a unique pattern of distribution. They thus constitute a coherent set of morphemes. The form classes defined by these morphemes, however, are unrestricted with respect to gender; each may contain masculine, feminine, and gender-ambiguous nouns, adjectives, and specifiers. Moreover, adverbs—which are strictly genderless—are scattered throughout the various form classes. These cannot, therefore, be gender classes.

The exponence of gender in Spanish is *modular* in that it involves four interrelated but autonomous domains of linguistic generalization: biological/semantic sex, syntactic gender, morphophonological form classes, and strictly phonological redundancy rela-

[36] Roca's recent study "The Organisation of Grammatical Gender" (1989), which is concerned almost exclusively with Spanish, came to my attention after this article was substantially completed. Where coverage overlaps, the two works agree on many points—one notable exception being that Roca accepts the standard view that the two Spanish gender classes are distinguished formally by means of the binary feature [±f(eminine)], which I have argued against in some detail. Roca's study does not provide explicit formal treatment of the numerous subclasses illustrated in (5) and does not recognize the role of syllable structure in the distribution of -e. The descriptive devices map gender marking directly into phonological form without the intervention of form-class marks. Roca does not broach the overarching explanatory issue of the "mating problem." On the other hand, he provides a much more thorough and insightful treatment of semantic aspects of gender than I have attempted here.

I also became aware of Klein (1989), a follow-up to Klein (1983), after completing the present work (see footnote 8).

tions. We cannot gain insight into the interactions among these modules unless we have some understanding of the separateness and internal organization of each.

Neither declensional class membership nor gender is fully predictable from the other, or from anything else. There is some partial predictability, however, and this must be registered in the grammar. Within the class of nouns that refer to humans, gender is predictable from sex (with exceptions): nouns that refer to biological males are usually masculine gender; those that refer to biological females are usually feminine gender. Within the class of feminine nouns and adjectives that take a vocalic form-class suffix (not all feminines do), this suffix is -a (with vanishingly rare exceptions in nouns and none in adjectives); within the class of masculine nouns and adjectives that take a vocalic form-class suffix (not all masculines do), the majority take -o, though there is a large minority that take -a. These subregularities and others are captured by grammatical rule; the many exceptions are noted in lexical entries, as are the aspects of form-class membership and gender that are never predictable.

The grammatical apparatus with which I propose to account for this material includes the items in the following list, among others:

(43) a.   The single lexical gender mark *f*, mnemonic for "feminine";
     b.   Two form-class lexical diacritics:]*a*, which marks the class of forms that take suffix -*a*; and]∅, which marks the items that take no declension-class suffix;
     c.   The Human Cloning rule (32b), which predicts the existence of mated masculine-feminine pairs of stems for every human noun;
     d.   The Human Gender rule (32a), which predicts feminine gender from the semantic property 'female' in human nouns;
     e.   Redundancy rule (21), Feminine Marker, which predicts the form-class diacritic]*a* for feminine items;
     f.   Redundancy rule (28), the Gentilic Rule, which assigns the diacritics]*a* and]∅ to feminine and masculine "gentilic" forms, respectively;
     g.   Spell-out rule (22), Marker Realization, which supplies phonologically unpredictable features to the slots of prosodic template (37);
     h.   A theory of phonological redundancy whereby phonologically predictable features are supplied to incompletely specified matrices.

"Masculine" gender is not marked in Spanish in any way, lexically, morphologically, or phonologically. No binary feature [−feminine], or any formal equivalent, plays any role in the grammar of Spanish. The traditional term "masculine" is just the label applied to the absence of any grammatical manifestation whatsoever of feminine gender (or of "neuter," whatever that turns out to be) where it could in principle occur. Any overt formal grammatical entity reflecting "masculine" gender would be otiose, and thus must be rejected.

Similarly, the declension class defined by suffix -*o* is lexically unmarked, literally. Membership in this class is assigned by default—that is, in the absence of any mechanism

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that blocks it. (This is thus the class of so-called "neuter" words.) Briefly, the empirical argument against a lexical mark identifying the class of -o-suffixed items is based on the near total absence of feminine nouns and the total absence of feminine adjectives with the class suffix -o. If a lexical mark existed that identified -o-class items—say,]o, analogous to the diacritics]a and]∅—then there would be no nonarbitrary way to account for the lack of -o feminines. Absence of such a lexical diacritic, in conjunction with the independently motivated rule of Feminine Gender, predicts the absence of such forms.

To conclude, I return to the "mating problem" identified in section 1. Given a noun stem /tindr-/ that refers to humans, the well-formed masculine-feminine mated pairs with this stem are those shown in (44a) and the ill-formed pairs are those shown in (44b):

(44)   *Masculine*   *Feminine*
    a. Well-formed   tindr_o_   tindr_a_   (cf. amigo/amig_a_)
                                    tindre   (cf. amante)
                            tindre   tindr_a_   (cf. monje/monj_a_)
                                    tindr_a_   (cf. coleg_a_)

    b. Ill-formed   tindr_a_   tindr_o_
                            tindr_a_   tindre
                            tindre   tindr_o_
                            tindr_o_   tindre

The well-formed pairs have been illustrated and discussed above. The proposals advanced in section 3 account for them. These proposals also solve the explanatory problem posed by the fact that the ungrammaticality of cases like (44b) is an instance of "negative evidence," evidence not accessible to the learner. The solution, of course, is that the grammar motivated entirely by data accessible to the learner excludes the ill-formed pairs without additional stipulation. Specifically:

> *tindra/tindro* and *tindra/tindre*
> The stem would have to be lexically marked]a, which would be cloned onto both masculine and feminine mates, thus making it impossible to generate feminine *tindro* or *tindre*.
> *tindre/tindro* and *tindro/tindre*
> The stem would have to be lexically marked]∅, which would be cloned onto both masculine and feminine mates, thus making it impossible to generate masculine or feminine *tindro*.

References

Anderson, J. (1961) "The Morphophonemics of Gender in Spanish Nouns," *Lingua* 10, 285–296.

Bromberger, S. and M. Halle (1989) "Conceptual Issues in Morphology," ms., MIT, Cambridge, Massachusetts; presented as a lecture at Stanford University, January, 1989.

DeMello, G. (1990) "Denotation of Female Sex in Spanish Occupational Nouns: The DRAE Revisited," *Hispania* 73, 392–400.

Echaide, A. M. (1969) "El género del sustantivo en español: Evolución y estructura," *Ibero-romania* 1, 89–124.

Falk, J. S. (1978) *Linguistics and Language: A Survey of Basic Concepts and Implications,* 2nd ed., Wiley, New York.

Garde, P. (1980) *Grammaire russe,* Institut d'Etudes Slaves, Paris.

Halle, M. (1989a) "On Abstract Morphemes and Their Treatment," ms., MIT, Cambridge, Massachusetts; presented as a lecture at the University of Arizona, March, 1989.

Halle, M. (1989b) "An Approach to Morphology," ms., MIT, Cambridge, Massachusetts; presented at NELS, November, 1989.

Harris, J. W. (1980) "Nonconcatenative Morphology and Spanish Plurals," *Journal of Linguistic Research* 1, 14–31.

Harris, J. W. (1983) *Syllable Structure and Stress in Spanish,* MIT Press, Cambridge, Massachusetts.

Harris, J. W. (1985) "Spanish Word Markers," in F. H. Nuessel, Jr., ed., *Current Issues in Spanish Phonology and Morphology,* Indiana University Linguistics Club, Bloomington.

Harris, J. W. (forthcoming) "Declensional Classes in Spanish," ms., MIT, Cambridge, Massachusetts.

Klein, P. W. (1983) "Spanish Gender Morphology," *Papers in Romance* 2, 57–64.

Klein, P. W. (1988) "The Nature and Uses of the Spanish Neuter," *Studia Neophilologica* 60, 109–117.

Klein, P. W. (1989) "Spanish 'Gender' Vowels and Lexical Representation," *Hispanic Linguistics* 3, 147–162.

Luján, M. (1980) *Sintaxis y semántica del adjetivo,* Cátedra, Madrid.

Murphy, S. L. (1954) "A Description of Noun Suffixes in Colloquial Spanish," in H. R. Kahane and A. Pietrangeli, eds., *Descriptive Studies on Spanish Themes,* University of Illinois Press, Urbana.

Nida, E. A. (1949) *Morphology: The Descriptive Analysis of Words,* 2nd ed., University of Michigan Press, Ann Arbor.

Ojeda, A. (1984) "A Note on the Spanish Neuter," *Linguistic Inquiry* 15, 171–173.

Otheguy, R. (1978) "A Semantic Analysis of the Difference between *El/La* and *Lo*," in M. Suñer, ed., *Contemporary Studies in Romance Linguistics,* Georgetown University Press, Washington, D.C.

Roca, I. M. (1989) "The Organisation of Grammatical Gender," *Transactions of the Philological Society* 87, 1–32.

Saporta, S. (1962) "On the Expression of Gender in Spanish," *Romance Philology* 15, 279–284.

Sloat, C., S. H. Taylor, and J. E. Hoard (1978) *Introduction to Phonology,* Prentice-Hall, Englewood Cliffs, New Jersey.

Stockwell, R. P., J. D. Bowen, and J. W. Martin (1965) *The Grammatical Structures of English and Spanish,* University of Chicago Press, Chicago, Illinois.

Teschner, R. V. and W. M. Russell (1984) "The Gender Patterns of Spanish Nouns: An Inverse Dictionary-based Analysis," *Hispanic Linguistics* 1, 115–132.

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