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Agreement features in the nominal domain as classifiers: theoretical and experimental perspectives

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Number and gender features are often assumed to differ in agreement processing, yet psycholinguistic evidence does not consistently support this distinction. This paper examines optional agreement in complex NPs (e.g., Italian *Un centinaio di senatori si è dimesso / si sono dimessi*, “A hundred senators has/have resigned”), where verbs may agree with either the singular head noun or the plural embedded noun. We argue that number and gender operate similarly as feature bundles, functioning like nominal classifiers. Crosslinguistic data show that optional agreement arises from nominal class valuation rather than from inherent gender/number differences. Psycholinguistic experiments further reveal that speakers’ choices reflect structural prominence and processing ease, rather than morphological categorical distinctions. Our analysis unifies gender and number within a classifier-based framework, challenging traditional divisions and offering a streamlined account of agreement variability.

KEYWORDS

optional agreement, classifiers, nominal phrase, complex NPs, gender feature, number feature, feature bundles

1 Introduction: theoretical perspectives on optional agreement in complex NP

The phenomenon of optional agreement in complex noun phrases (NPs) in (1) where verbs may alternatively agree with either the singular head noun or the plural embedded noun—has been analyzed.

- (1) Un centinaio_i di senatori_k si sono dimessi_k/ è dimesso_i
A hundred of senators cl.refl are resigned.pl/ is resigned.sg
“A hundred senators have resigned.” Italian

The verbal agreement can target either the numeral item/quantifier or the noun embedded under the preposition *di* (of) that bears a θ role interpretation and the agreement operation involves both number (2) and gender (3) features.

Number Agreement

- (2) Una dozzina_i di tifosi_k hanno_k/ha_i cercato di aggredirmi
a dozen of fans have/has tried of attack.inf.cl.1sg
“A dozen fans tried to attack me” Italian

Gender + Number Agreement

- (3) 30 axuz-im me-ha-maskoret holxim /holexet le-sxardira.
 30 percent-m.pl of-def-salary.f.sg go.m.pl /goes.f.sg to-rent
 “30% of the salary goes to (paying the) rent.” Hebrew
 (Danon, 2013)

Optional agreement with embedded NPs represents a rich area of syntactic investigation, we will focus on two recent analyses which involve distinct but complementary theoretical frameworks: the work by Lorusso and Franco (2017) and Manzini and Franco (2019). While both approaches adopt a minimalist, probe-goal agreement system following Chomsky’s (2001) feature valuation framework, they differ fundamentally in their theoretical emphasis and analytical focus, offering complementary perspectives on this syntactic variation that have significantly advanced our understanding of agreement phenomena.

Lorusso and Franco (2017) present a primarily syntactic account that emphasizes crosslinguistic variation in agreement patterns through a parametric approach. Their framework identifies three clear typological groups among languages:

- Head-only agreement languages (e.g., French, German), where agreement is strictly with the head noun:

- (4) Une meute de loups a/*ont attaqué la ferme.
 a. pack of wolves.m.pl has/*have attacked the farm
 “A pack of wolves has attacked the farm.” French
- (5) Ein Rudel Wölfe hat/*haben einen Bauernhof angegriffen.
 a.n pack wolves has/have a farm attacked
 “A pack of wolves has attacked a farm.” German

In these languages, the prepositional phrase (PP) acts as a strong phase barrier, completely blocking agreement relations with the embedded NP.

- Embedded-only agreement languages (e.g., Sardinian, Occitan), where agreement must target the embedded noun:

- (6) Unu muntoni de pippius *est/funt andaus a iscola.
 a.m lot of children.m.pl *is/are gone.m.pl to school
 “A lot of children have gone to school.” Sardinian
- (7) Una ardada de lops *ataquèt/ataquèron la bòria.
 a.f pack of wolves *attacked.3sg/attacked.3pl the farm
 “A pack of wolves attacked the farm.” Occitan

Here the PP is syntactically transparent, forcing agreement with the θ -marked NP.

- Optional agreement languages (e.g., Italian, Spanish), where both agreement patterns are grammatical:

- (8) Un centinaio di senatori è/sono dimesso/i.
 a.m hundred of senators.m.pl is/are resigned.m.sg/m.pl
 “A hundred senators have resigned.”
- (9) Una parte dei ragazzi arriverà/arriveranno tardi.

a.f part.of.the.m.pl boys will.arrive.3sg/will.arrive.3pl late
 “Some of the boys will arrive late.”

Lorusso and Franco analyse this variation through a parametric approach building on Rezac (2008)’s Case Opacity Constraint, proposing that languages differ in whether they treat PPs as opaque phases for agreement relations.

In contrast, Manzini and Franco (2019) develop a more abstract syntactic theory centered on labeling operations within the Minimalist Program (Chomsky, 2000, 2001). Their framework explains intra-linguistic optionality through a unified labeling algorithm where agreement paths depend on whether the PP projects a syntactic label and we have singular agreement with the head nouns *un centinaio* (10) or the P fails to label its projection, allowing the embedded NP (*senatori*) to control agreement (11): the Agreement of Structural Obliques Parameter (ASOP).

- (10) [DP [QP un centinaio] [PP di [NP senatori]]] ha votato
 [DP [QP a hundred] [PP of [NP senators]]] has voted
 “A hundred senators have voted.”
- (11) [DP [NP un [NP sacco [PP di [NP senatori]]]] hanno votato
 [DP [NP a [NP hundred [PP of [NP senators]]]] have voted
 “A hundred senators have voted.”

The key theoretical differences between these approaches are significant:

- While Lorusso and Franco emphasize parametric variation tied to PP phasehood across languages, Manzini and Franco focus on labeling-driven optionality within individual grammars.
- Lorusso and Franco’s account is more descriptively oriented, while Manzini and Franco’s model is more abstract and theoretically unified.

However, both frameworks crucially converge on analyzing number and gender alike rather than distinct grammatical categories. This represents an important theoretical unification, dissolving the traditional dichotomy between “syntactic” number features and “lexical” gender features. In summary, while Lorusso and Franco’s parameter-based account provides robust predictions for crosslinguistic variation, Manzini and Franco’s labeling model offers a more principled explanation for intra-linguistic optionality. Together, these frameworks advance our understanding of agreement variation by revealing how different syntactic configurations/parameters can license alternative agreement relations while maintaining a unified grammatical architecture. Their complementary perspectives demonstrate how the same core phenomena can be insightfully analyzed through both comparative parametric and abstract derivational approaches within modern syntactic theory. But are these accounts compatible with psycholinguistic data and grammatical feature hierarchy? Do gender and number work alike in this respect? While in Section 2 we will review some psycholinguistic data about how optional number agreement with embedded NPs is parsed, in Section 3 we will see how gender features are processed. Section 4 will be devoted to discussion on the main proposal of this

paper, the fact that number and gender work alike, namely as classifiers. The classifier analogy will be supported by parallels with Bantu noun class systems (Franco et al., 2015), where similar agreement alternations occur based on the classificatory properties of nominal morphology.

2 Number agreement with complex NPs

The processing of number features in complex noun phrases (NPs) presents a unique window into how the human language faculty resolves syntactic and semantic conflicts during real-time comprehension. When speakers encounter phrases like *una dozzina di tifosi* (“a dozen fans”) in (2), they must rapidly compute agreement relations between the verb and either the singular head noun (*dozzina*) or the plural embedded noun (*tifosi*). This computation engages multiple cognitive systems, including syntactic feature-checking, semantic integration, and working memory resources, as evidenced by behavioral and neurocognitive studies. The variability in agreement patterns across languages—from strictly head-oriented (e.g., French, German) to flexible (e.g., Italian, Spanish)—further reveals how the grammatical system prioritizes structural vs. notional features during processing.

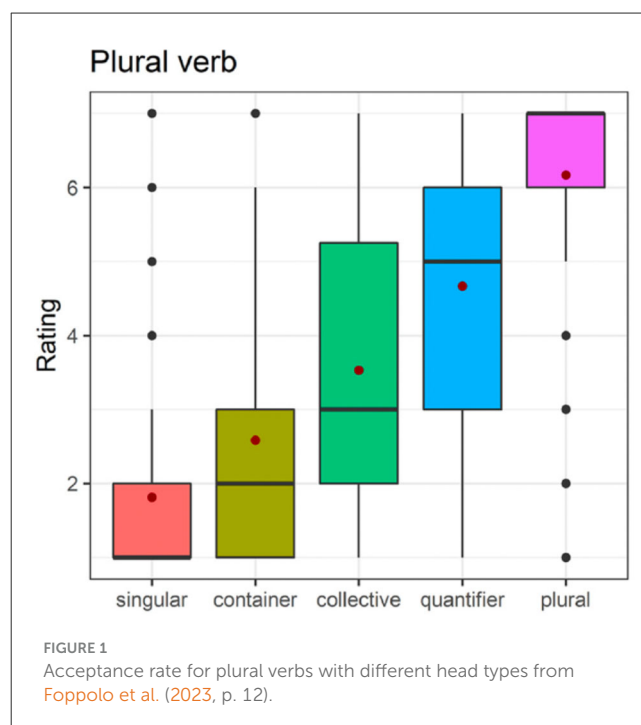
A central debate in psycholinguistics concerns whether number agreement is primarily governed by syntactic hierarchy (i.e., the structural position of the controller) or by semantic notional plurality (i.e., the conceptual “plurality” of the referent), mediated by the semantics of the controller.

Foppolo et al. (2023) tested acceptability judgments with different head types (46 participants): container nouns like *scatola* “box,” collective nouns like *corteo* “procession,” quantifier/measure phrases like *un centinaio* “a hundred,” and singular and plural fillers. General preferences for singular agreement (i.e., agreement with the head) were observed, but differences in the acceptance of plural verb forms were crucial, as shown in Figure 1.

Foppolo et al. (2023) found that Italian speakers often prefer singular agreement (*ha*) with container nouns like *scatola* (“box”) in a sentence like the one in (12), as the head noun is syntactically dominant. However, plural agreement (*hanno*) becomes marginally acceptable when the focus shifts to the plurality of the individual chocolates (Foppolo et al., 2023). This suggests that while syntax initially constrains agreement, semantic factors can override it—particularly in languages like Italian, where number morphology is robust.

As for collective nouns, plural agreement is favored with embedded NPs, as they inherently denote multiplicity (13). Finally, group nouns (e.g., *branco* “pack”) prefer singular agreement, as they emphasize unity (14), though plural agreement is more tolerated than with container nouns.

- (12) Una scatola di cioccolatini ha/ ?hanno avvelenato la vittima.
a box of chocolates.m.pl has/ ?have poisoned the victim
- (13) Un centinaio di senatori si sono dimessi/*?si è dimesso.
a hundred of senators have resigned/*?has resigned
- (14) Un branco di lupi ha/?hanno attaccato la fattoria.
a pack of wolves has/?have attacked the farm



This divide aligns with the measure (quantifiers) vs. referent (containers) interpretation (Landman, 2004). In an eye-tracking experiment using the same stimuli, Foppolo et al. (2023) show that speakers process quantifier-headed NPs faster when verbs agree with the embedded plural noun, whereas container-headed NPs elicit quicker responses with singular agreement.

From a psycholinguistic perspective, the optional agreement found in Italian and Spanish requires maintaining both the head and the embedded NP in memory until disambiguation (De Vincenzi, 1999). This aligns with Faussart et al.’s (1999) finding that plural agreement increases reading times in French (where it is ungrammatical) but not in Spanish. In languages where agreement with the head noun is preferred, it reduces cognitive load, as the parser need not evaluate embedded NPs. Conversely, languages with mandatory embedded agreement simplify parsing by eliminating competition, though this may come into conflict with notional plurality (Lorusso and Franco, 2017). The next section is devoted to describing gender agreement in complex NPs.

3 The processing of gender agreement in complex NPs: insights from psycholinguistic and neurolinguistic studies

The processing of gender agreement mismatch in complex noun phrases (NPs) is found in configurations where the head noun and embedded noun differ in gender but not in number. Unlike number agreement, where plural marking often correlates with semantic plurality, grammatical gender is largely arbitrary in many languages, making its processing a purer test of syntactic vs. semantic influences on agreement resolution.

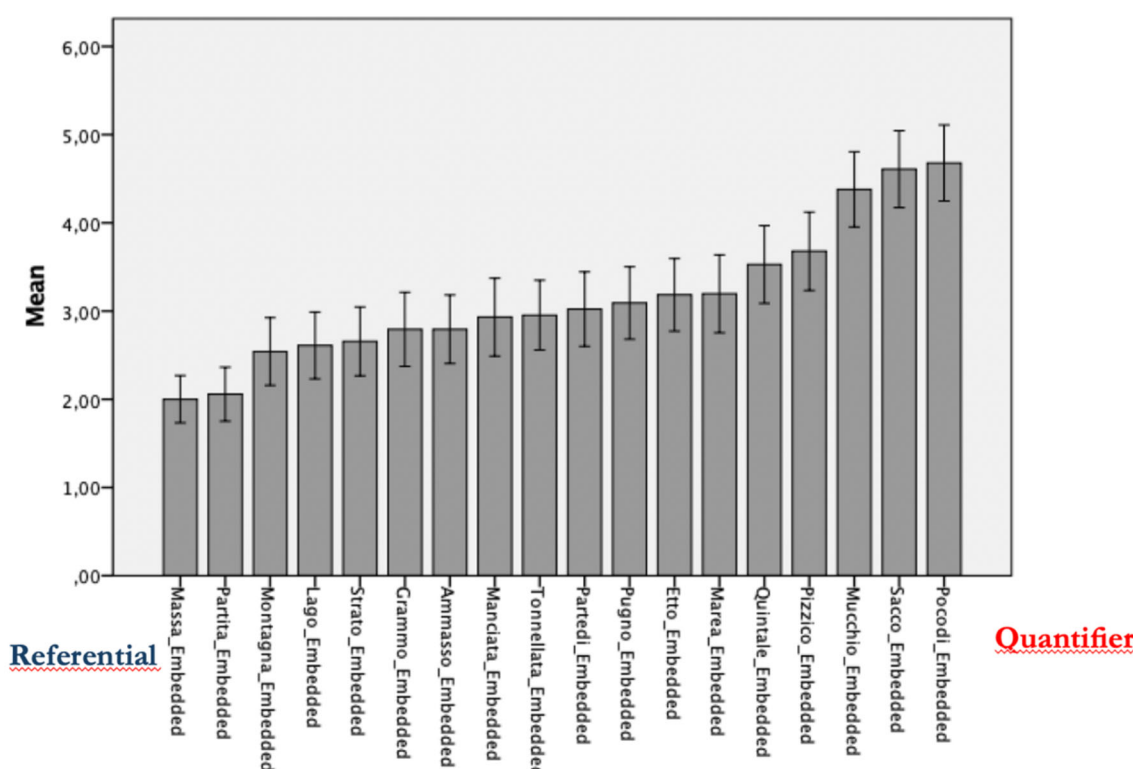


FIGURE 2

Sentence judgement task's mean scores for embedded agreement divided by the item in the head in Mazzaggio et al. (2020, p. 12).

The examination of gender agreement in structures like Italian *una parte del bottino è stata/è stato trafugato/a* (“a part of the loot has been stolen.FEM/MASC”) reveals distinct patterns of cognitive processing that differ from number agreement in crucial ways. Grammatical gender, unlike number, often lacks transparent semantic motivation in Indo-European languages. In Italian, for example, the gender of inanimate nouns is lexically specified and must be retrieved from memory:

- (15) Una parte (FEM) del bottino (MASC) è stata trafugata/
stato trafugata.
a.f part of.the.m loot is been.f stolen.f/
been.m stolen.
“A part of the loot has been stolen.”

This arbitrary assignment means that gender agreement cannot rely on conceptual cues in the same way number agreement can, making it a stronger test case for purely syntactic accounts of agreement processing. Psycholinguistic studies using acceptability judgments and forced-choice tasks reveal systematic asymmetries in gender agreement resolution:

- Head preference: speakers overwhelmingly prefer gender agreement with the head noun when possible (Mazzaggio et al., 2020). This preference is stronger than for number agreement, suggesting that gender is more tightly bound to syntactic structure.
- Default masculine: when agreement with the embedded noun occurs, masculine gender is more readily accepted

than feminine, reflecting its status as the default gender in Italian (Harris, 1991), as in (16):

- (16) Una folla (FEM) di turisti (MASC) è arrivata / ??
sono arrivati.
a.f crowd of tourists.m is arrived.f/ ??
are arrived.m
“A crowd of tourists has arrived.”

- Animacy effects: gender mismatches involving animate nouns (where biological sex could conceptually override grammatical gender) show more flexibility than inanimate pairs (Mazzaggio et al., 2020).

Crucially, Mazzaggio et al. (2020) found that once more, variation depends on the measure expressed by the head/controller. They found a preference for embedded agreement to be higher with nouns denoting a quantification (*poco di* = Eng. *little of*) than with nouns denoting a container or other referential element (*lago*, *montagna* = Eng. *literally lake*, *mountain*, used in the sense of *a lot*). The items on the right of the scale in Figure 2 are prototypical examples of approximate quantifiers (e.g., *poco di*) and led participants to accept embedded agreement more than items on the left of the scale, which are prototypical examples of collective nouns (e.g., *lago*, *montagna*).

To conclude this session, we can argue that characteristics of the controller and other semantic features intervene in the acceptability judgement for both number and gender, suggesting that they work alike in determining the preferred route of agreement in complex NPs. The next section is devoted to entertaining this

hypothesis, which goes against the idea that number and gender are computed separately.

4 Discussion. Gender and number as nominal classifiers: a unified account of agreement variation

The study of morphosyntactic features such as person, number, and gender has long intrigued linguists and psycholinguists alike. In foundational work, [Greenberg \(1963\)](#) proposed a typological feature hierarchy: *Person* > *Number* > *Gender*. This implicational model, supported by cross-linguistic evidence from around 30 languages, suggested that the presence of a lower feature (like gender) in a language implies the presence of higher features (number and person). This hierarchy reflects not only typological generalizations but also points to a potential cognitive and processing hierarchy within the human linguistic system.

Within syntactic theory, particularly in [Chomsky's \(2000, 2001\)](#) minimalist framework, morphosyntactic features are conceptualized as *bundled φ -features*. These features, which include person, number, and gender, are not treated as separate units within syntactic computation. Instead, they form a single bundle that undergoes feature checking through the formal operation known as Agree. The Agree operation ensures that features are copied from a controller (goal) to a dependent (probe), as in subject-verb agreement.

However, while this theoretical unification implies that all φ -features are processed uniformly, psycholinguistic evidence has not fully aligned with this view [see [Lorusso \(2018\)](#) for a review]. Numerous experimental studies reveal nuanced differences in how these features are processed during real-time language comprehension. In particular, person is consistently found to have a distinct status both in syntax and processing, while number and gender yield more ambiguous results.

Research by [Di Domenico and De Vincenzi \(1995\)](#) and [De Vincenzi \(1999\)](#) using cross-modal priming in Italian found that number features facilitated processing more than gender. Participants showed significant priming when disambiguating pronouns based on number, but not on gender. [Carminati \(2005\)](#) further supported this in a self-paced reading task, where number cues were more effective than gender in resolving referential ambiguities. She formulated the *Feature Strength Hypothesis*—the idea that cognitively stronger features are more efficient at disambiguation. Theoretically, this aligns with models positing number as syntactically prominent, projecting independently, while gender is lexically encoded and thus accessed later.

However, ERP studies complicate this picture: electrophysiological research ([Acuña-Fariña, 2009](#); [Barber and Carreiras, 2005](#); [Hagoort and Brown, 1999](#)), using ERP measures such as LAN, N400, and P600, have not found strong distinctions between number and gender violations. Most studies report similar neural signatures for both across languages and agreement configurations. This convergence aligns with Chomsky's view: number and gender are part of a bundled feature set. Another option, inspired by the role of the semantics of the head of complex NPs (Sections 2 and 3) and following [Manzini and Savoia \(2005, 2011\)](#), is that both features stem from nominal class morphology.

In Italian, for example, the morphological markers for number and gender are not uniquely associated with one meaning, and can vary depending on context and class. Italian inflectional endings (e.g., *-o* sing.masc., *-a* sing.fem., *-i* plur.masc., *-e* plur.fem.) do not neatly map onto gender or number. Inflectional classes and genders are not isomorphic ([Franco et al., 2015](#)) in Italian: nouns with different inflections *-a* and *-o* may belong to the same gender.

- | | | |
|------|--------------------------|------------------|
| (17) | Il | poet-a |
| | the _{masc.sing} | poet (masculine) |
| (18) | La | man-o |
| | the _{fem.sing} | hand (femenine) |

This syncretism resembles the noun class systems in Bantu languages. Thus, number and gender can be viewed as semantic markers within a broader inflectional paradigm rather than as independent cognitive primitives. Gender markers in Italian, in fact, are not completely meaningful; they work like mensural classifiers in Bantu languages. So while number can be seen as a nominal sortal classifier ([Franco et al., 2015](#)), gender identifies mensural classifiers akin to Bantu noun classes:

- Sortal classifiers (e.g., plural *-i* in Italian) individuate discrete entities, trigger embedded agreement, and favor plural agreement when introduced by a quantifier in complex NPs (Section 2, [Foppolo et al., 2023](#)).
- Mensural classifiers (e.g., singular *-o/a*) denote units vs. containers, favoring head agreement.

The fact that gender may represent different noun classes is confirmed by the data in (19), where the same nouns imply different semantic classes depending on the gender inflection. For example, the strategy in (19.c) is common in Italian to denote fruit trees (masculine) vs. fruit units (feminine).

- | | | |
|------|------------------------------|---------------------------------|
| (19) | <i>Masculine</i> | <i>Femenine</i> |
| a. | il tavolo-o
Desk/table | la tavol-a
table/board/chart |
| b. | il legn-o
wood (material) | la legn- a
firewood |
| c. | il mandorl-o
almond tree | la mandorl-a
almond fruit |

Like gender markers in Indo-European languages, classifiers are grammatical elements that must agree with the noun. Several visual-world eye-tracking studies using arrays of pictured objects show that classifier-language speakers, upon hearing the classifier, quickly look at classifier-consistent referents (e.g., animals when presented with the animal classifiers in Mandarin; [Huettig et al., 2010](#)). This finding aligns with speakers of Indo-European languages, who show a preference for gender-consistent referents over gender-inconsistent ones as soon as the gender marker is heard ([Dahan et al., 2000](#), among others).

Event-related potential (ERP) studies provide another route to identify a similarity between gender markers and classifier processing ([Mueller et al., 2005](#)). When the classifier mismatched a noun, it elicited N400s, suggesting that semantic information is relevant; but P600s were also found when classifier-noun

mismatches were embedded in sentential contexts, as happens with gender (and number; [Barber and Carreiras, 2005](#)).

This perspective fundamentally challenges traditional grammatical distinctions by revealing the shared structural behavior and classificatory function of these features in agreement systems. The data demonstrate that what have been conventionally treated as distinct grammatical categories—with number considered “syntactic” and gender “lexical”—actually function in parallel ways when properly understood as elements of a nominal classification system. This is also confirmed by the effect on the optionality of gender and number preferred agreement with complex NPs, where the semantics of the head influence the general acceptance rate and the processing of agreement morphology.

Both gender and number participate in identical agreement mechanics. Optionality with complex NPs is allowed by the two possible configurations of the labeling algorithm described in the *Agreement of Structural Obliques Parameter* of [Manzini and Franco \(2019\)](#), determining which set of features projects and controls agreement. When the prepositional phrase projects as a phase, the head noun’s classifiers dominate; when it doesn’t, the embedded noun’s classifiers become accessible. One or the other labeling mechanism is influenced by the noun class of the controller, and marginally by the embedded NP, in complex NPs. This identical treatment of gender and number within the syntax provides strong theoretical support for their unified analysis.

The consistency across different languages indicates that the unified classifier analysis reflects a fundamental property of how nominal features operate in natural language, rather than being an idiosyncratic property of any single grammatical system.

The classifier analogy thus offers significant explanatory advantages over traditional approaches that separate gender and number. It accounts for:

1. the identical structural behavior of both features in agreement alternations;
2. the parallel sensitivity to both hierarchical and interpretive influences;
3. the psycholinguistic evidence showing similar processing of gender and number violations and the role of the noun class of the controller in the processing of optional agreement with complex NPs.

By reconceptualizing both gender and number as nominal classification devices—differing in their specific semantic correlates but identical in their grammatical operation—we achieve a more parsimonious and empirically adequate account of agreement phenomena. This approach eliminates artificial distinctions while capturing the genuine systematicity of how nominal features govern syntactic relationships. Future research should explore how this unified perspective might extend to other domains of feature agreement and to a broader range of languages with richer nominal classification systems.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

Ethical approval was not required for the study involving humans in accordance with the local legislation and institutional requirements. Written informed consent to participate in this study was not required from the participants or the participants’ legal guardians/next of kin in accordance with the national legislation and the institutional requirements.

Author contributions

PL: Conceptualization, Investigation, Resources, Validation, Visualization Writing – original draft, Writing – review & editing.

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Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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References

- Acuña-Fariña, J. (2009). The psycholinguistics of agreement in English and Spanish: a tutorial overview. *Lingua* 119, 389–424. doi: 10.1016/j.lingua.2008.09.005
- Barber, H., and Carreiras, M. (2005). Grammatical gender and number agreement in Spanish: an ERP comparison. *J. Cogn. Neurosci.* 17, 137–153. doi: 10.1162/0898929052880101
- Carminati, M. N. (2005). Processing reflexes of the feature hierarchy (person > number > gender) and implications for linguistic theory. *Lingua* 115, 259–285. doi: 10.1016/j.lingua.2003.10.006
- Chomsky, N. (2000). “Minimalist inquiries: the framework,” in *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik* (Cambridge, MA: MIT Press), 89–155.
- Chomsky, N. (2001). “Derivation by phase,” in *Ken Hale: A Life in Language* (Cambridge, MA: MIT Press), 1–52. doi: 10.7551/mitpress/4056.003.0004
- Dahan, D., Swingle, D., Tanenhaus, M. K., and Magnuson, J. S. (2000). Linguistic gender and spoken-word recognition in French. *J. Mem. Lang.* 42, 465–480. doi: 10.1006/jmla.1999.2688
- Danon, G. (2013). Agreement alternations with quantified nominals in Modern Hebrew. *J. Linguist.* 49, 55–92. doi: 10.1017/S0022226712000333
- De Vincenzi, M. (1999). Differences between the morphology of gender and number: evidence from establishing coreferences. *J. Psycholinguist. Res.* 28, 537–553. doi: 10.1023/A:1023272511427
- Di Domenico, E., and De Vincenzi, M. (1995). “Gender and number in the retrieval of pronoun antecedents: differences in use and representation,” in *Actes du Deuxième Colloque Langues et Grammaire* eds. L. Nash, G. Tsoulas and A. Zribi-Hertz (Paris: Université Paris 8), 95–109.
- Faussart, C., Jakubowicz, C., and Costes, M. (1999). Gender and number processing in spoken French and Spanish. *Riv. Linguist.* 11, 75–101.
- Foppolo, F., Mazzaggio, G., Franco, L., and Manzini, M. R. (2023). A group of researchers are testing pseudopartitives in Italian: notional number is not the key to the facts. *Glossa Psycholinguist* 2, 1–34. doi: 10.5070/G6011145
- Franco, L., Manzini, M. R., and Savoia, L. M. (2015). N class and its interpretation: the neuter in Central Italian varieties and its implications. *Isogloss. Open Journal of Romance Linguistics* 41–68. doi: 10.5565/rev/isogloss.14
- Greenberg, J. H. (1963). “Some universals of grammar with particular reference to the order of meaningful elements,” in *Universals of Language* (MIT Press), 73–113.
- Hagoort, P., and Brown, C. M. (1999). Gender electrified: ERP evidence on the syntactic nature of gender processing. *J. Psycholinguist. Res.* 28, 715–728. doi: 10.1023/A:1023277213129
- Harris, J. W. (1991). The exponence of gender in Spanish. *Linguist. Inq.* 22, 27–62.
- Huetig, F., Rommers, J., and Meyer, A. S. (2010). Using the visual world paradigm to study language processing: a review and critical evaluation. *Acta Psychol.* 137, 151–171. doi: 10.1016/j.actpsy.2010.11.003
- Landman, F. (2004). *Indefinites and the Type of Sets*. Oxford: Blackwell. doi: 10.1002/9780470759318
- Lorusso, P. (2018). “On gender and number: a psycholinguistic review,” in *Structuring Variation in Romance Linguistics and Beyond. In Honour of Leonardo M. Savoia*, eds. M. Grimaldi, R. Lai, L. Franco and B. Baldi (John Benjamins: Amsterdam), 97–109. doi: 10.1075/la.252.06lor
- Lorusso, P., and Franco, L. (2017). Patterns of syntactic agreement with embedded NPs. *Lingua* 195, 39–56. doi: 10.1016/j.lingua.2017.06.001
- Manzini, M. R., and Franco, L. (2019). ‘Agreement of structural obliques’ parameter: dom and pseudopartitives. *Lingvist. Investig.* 42, 82–101. doi: 10.1075/li.00030.man
- Manzini, M. R., and Savoia, L. M. (2005). *I Dialetti Italiani e Romanci: Morfosintassi Generativa*. Alessandria: Edizioni dell’Orso.
- Manzini, M. R., and Savoia, L. M. (2011). *Grammatical Categories: Variation in Romance Languages*. Cambridge University Press: Cambridge.
- Mazzaggio, G., Franco, L., and Manzini, M. R. (2020). Pseudopartitives vs. agreement attraction: an experimental study. *Lingue E Linguaggio* XIX, 159–190. doi: 10.1418/99002
- Mueller, J. L., Hahne, A., Fujii, Y., and Friederici, A. D. (2005). Native and nonnative speakers’ processing of a miniature version of Japanese as revealed by ERPs. *J. Cogn. Neurosci.* 17, 1229–1244. doi: 10.1162/0898929055002463
- Rezac, M. (2008). The syntax of eccentric agreement: the person case constraint and absolute displacement in Basque. *Nat. Lang. Linguist. Theory* 26, 61–106. doi: 10.1007/s11049-008-9032-6