# Chapter 19

# Person splits in Romance: Implications for parameter theory

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This contribution addresses person splits in which 1/2P and 3P, or 1P and 2P systematically differ from one another with respect to the core grammar properties of case and agreement, giving raise to parametric variation. We consider two case studies from Romance varieties. The first one concerns 1/2P object clitics which, in Italian like in other Romance languages, have a simplified morphology with respect to 3P clitics, namely a single gender- and case-neutral object form, as opposed to the accusative vs. dative distinction, and the gender distinctions found in 3P. Moreover, 1/2P clitics only optionally trigger perfect participle (v) agreement, otherwise obligatory with 3P accusative clitics. We argue that these behaviors correspond to a core syntax phenomenon, whereby 1/2P clitics trigger DOM, which in the Romance languages takes the form of obliquization. The fact that 1/2P clitics are DOM obliques explains their specialized behavior in comparison with 3P clitics. The second case study has to do with partial pro-drop patterns in Northern Italian dialects involving the 1P vs. 2P split, interacting with the Externalization process and the Recoverability principle. We show that the (micro)parameters regulating the distribution of subject clitics are best seen as a reflex of macrocategories of grammar. Finally, we compare our approach with the literature on these phenomena (Cardinaletti & Repetti 2008; Calabrese 2008) and with the ReCoS parametric theory of Ian Roberts and his collaborators, discussing their different explanatory capabilities and results.



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### 1 Introduction

Our focus in this contribution is person splits, by which we mean interactions between pronouns and syntactic rules and relations such as Agree, Case, etc. in which 1/2P and 3P, or 1P and 2P, are seen to systematically differ from one another. We provide two case studies from Romance varieties.<sup>1</sup> In §2 we argue that partial pro-drop patterns in Northern Italian dialects involve the 1P vs. 2P split, interacting with the Externalization process and the Recoverability principle. Though the possible parametric values individuate a microvariation set (including only subject clitics), the parameters are best identified with the categorial splits themselves (such as 1/2P vs. 3P etc.), which involve macrocategories of grammar.

In this section, we concentrate on object clitics in Standard Italian, henceforth Italian. 1/2P object clitics have a simplified morphology (a single object form, gender neutral) with respect to 3P clitics (encompassing the accusative vs. dative distinction and gender distinctions). They also only optionally trigger perfect participle ( $\nu$ ) agreement. We argue that these behaviours do not involve low-level morphological readjustments – but correspond to core syntactic phenomena. In this respect, we reject not just descriptive accounts, but also accounts that require an independent morphological component within formal models.

Several properties distinguish 1/2P clitics from 3P clitics in Romance, which for ease of exposition we will illustrate with just one language, namely Italian. Leaving aside the locative/instrumental *ci*, the genitive *ne* and the middle-reflexive *si*, the inventory of Italian clitics is as in Table 19.1. What is immediately evident from the table is that 3P clitics are differentiated by gender (masculine/feminine) and by case (accusative/dative) – but 1/2P are insensitive to either distinction.

The classical approach to asymmetries like those in (1) is to postulate a single underlying phi-features and case system, namely a system rich enough to be able to account for 3P – and to assume that morphological mechanisms (perhaps impoverishment and underspecification, in the way of Distributed Morphology) are responsible for the surface syncretisms observed in 1/2P. However, there is a third phenomenon with respect to which 1/2P and 3P differ, which does not directly involve the morphology of the clitics, but rather their syntactic behavior. As shown by Kayne (1989), in Italian (and French, etc.) perfect participles Agree with D(P) complements moved to their left, hence with accusative clitics. Dative

<sup>&</sup>lt;sup>1</sup>Though our focus is on Northern Italian dialects (§2) and on Standard Italian (§1), the title refers to Romance varieties, in that the database of Manzini & Savoia (2005), which we use in particular in §2, includes Occitan, Franco-Provençal and Ladin (Rhaeto-Romance) dialects, spoken within the borders of Italy and Switzerland.

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	ACC.M	ACC.F		DAT.M	DAT.F
1sg			mi		
2sg			ti		
3sg	lo	la		gli	le
1pl			ci		
2pl			vi		
3pl	li	le		(loro)	(loro)

Table 19.1: Italian accusative and dative clitics

clitics do not Agree, even if they are associated with gender features in normative Italian. We may assume that this is due to the fact that they are embedded under an oblique case. The relevant contrasts with 3P clitics are illustrated in (1).

(1) Italian

a.	Lo / la / li / le ha aiutat-o / aiutat-a /
	him her them-м them-ғ he.has helped-м.sg talked-ғ.sg
	aiutat-i / aiutat-e talked-м.pL talked-ғ.pL
	'He helped him / her / them'
b.	* la / li / le ha aiutat-o
	her them-м them-F he.has helped-м.sg
	'He helped her / them'
c.	Gli / le ha parlat-o / *parlat-a
	to.him to.her he.has talked-м.sg talked-ғ.sg
	'He talked to him / her'
d.	Ha loro parlat-o / *parlat-i / *parlat-e
	he.has to.him/to.her talked-м.sg talked-м.pl talked-F.pl

'He talked to him / her'

Surprisingly, notionally accusative 1/2P clitics may not Agree in either gender or number, as in (2a), paralleling the dative clitic in (2c). Agreement of the 1/2P clitic with the perfect participle, as seen in (2b), remains possible, but it is optional. Free alternations of this type are standardly seen as pointing to the existence of two slightly different grammars. In the first one, 1/2P clitics Agree with the perfect participle; in the alternative grammar they do not. If two slightly different languages are involved in the free alternation of agreeing and nonagreeing participles in (3), we expect there to be languages where only agreement is allowed and languages where only invariable participial forms are. Indeed there are many Italian varieties where 1/2P never trigger agreement (contrary to 3P forms), as documented by Manzini & Savoia (2005: §5.1.2).

(2) Italian

- a. Mi / ti / ci / vi ha aiutato me you us you.pl he.has helped-м.sg 'He helped me / you / us'
- b. Mi / ti ha aiutata me you he.has helped-F.SG 'He helped me / you'
- c. Ci / vi ha aiutati / aiutate us you.PL he.has helped-м.PL helped-F.PL 'He helped us / you'
- d. Mi / ti / ci / vi ha parlato / \*parlata / to.me to.you to.us to.you.PL he.has talked-M.SG talked-F.SG \*parlati / \*parlate talked-M.PL talked-F.PL
  'He talked to me / you / us'

It is true that, as we have noticed at the beginning, 1/2P pronouns lack nominal class features, but they have overt number properties. Therefore, relating optionality in agreement to the lack of (overt) morphological features is not immediately possible. What is more, under a morphological analysis, we would expect 1/2P to always display optional agreement, while agreement is clearly obligatory in subject contexts, as in (3). The same incidentally is true in Northern Italian dialects where 1/2P subjects are obligatorily realized as clitics. This forces the view that the optionality of 1/2P object agreement depends not on the lexical content of the 1/2P forms, but rather on their structure of embedding.

(3) a. (Io<sub>F</sub>) sono arrivata / \*arrivato I.F am arrived-F.SG arrived-M.SG 'I have arrived'
b. (Noi) siamo arrivati / arrivate / \*arrivato we are arrived-M.PL arrived-F.PL arrived-M.SG 'We have arrived' The alternative option, taken by Manzini & Savoia (2005) and Kayne (2010), is embedding the analysis of clitics firmly within core syntax, including their apparently idiosyncratic syncretisms. As Kayne (2010: 144) argues, "syncretism of the sort under consideration is nothing other than a particular kind of syntactic ambiguity". Specifically, addressing the 1<sup>st</sup> pronoun plural *ci* (syncretic with locative) he proposes that "it is not that *ci* has multiple possible values. Rather, *ci*, the same *ci*, is compatible in Italian with a certain range of syntactic contexts, ... a silent PLACE, ... a silent 1PL", where silent constituents are constituents grammatically represented but not pronounced. Manzini & Savoia (2005), Manzini (2012), and Manzini & Franco (2016) provide partial discussions of the range of empirical data that interests us here, which we will pursue in a more systematic manner in what follows.

#### 1.1 Clitics and Case

We pointed to three respects in which 1/2P objects differ from 3P objects. Two of them involve relational notions, namely case and agreement. Before we turn to them, let us consider the different phi-features make-up displayed by the two series of pronouns. The absence of nominal class endings (gender) on 1/2P clitics is a pan-Romance characteristic. In fact, according to Siewierska (2004: 194), "gender oppositions are characteristic of third rather than first or second person. Of the 133 languages in the sample (33%) which have gender in their independent person forms, 129 (97%) have gender in the third person as opposed to 24 (18%) in the second and three in the first (3%)".<sup>2</sup> Furthermore 1/2P forms are differentiated for number via their lexical basis. Thus even in Romance languages in which number is factored away from nominal class and lexicalized by a specialized -s ending, it is impossible to have 1st plural formed by adding -s to 1st singular. This is not necessarily a consequence of the absence of gender inflections. For instance, Sardinian varieties which present a dative singular form not inflected for gender, of the type li 'to him/her', also regularly pluralize it as li-s 'to them' (Manzini & Savoia 2005).

By contrast, the generalization holds that in Romance languages 3P clitics have an internal structure comparable to that of lexical nouns. Simplifying somewhat, the consensus in the literature is that at least two functional projections are needed for Ns – corresponding roughly to gender and number. In homage to the cross-linguistic comparison with Bantu languages, the lower category is often labelled Class, the higher category is Num (Picallo 2008), i.e. [[ $\sqrt{Class}$ ] Num].

<sup>&</sup>lt;sup>2</sup>We thank Ludovico Franco for research and discussion on this point.

Extra complexity arises in Indo-European languages from the fact that there is no one-to-one mapping between the content of Class, which enters agreement with determiners and modifiers of N, and the inflections immediately following the root. We tentatively assign the inflectional vowel of Italian to an Infl position – which embeds both the root and the Class node. Transposed to the analysis of singular 3P clitics, this yields structures like (4).



Languages like Spanish have an independent lexicalization for the plural, namely -s; in Italian however pluralization is obtained by a change of the inflectional vowel. We may suppose that the plural 3P clitics, namely *li/le*, have the structure in (5), where the plural property is associated with the Class node. Note that this is in keeping with current ideas about Num not being a quantifier – but rather a divisibility predicate (Borer 2005).



The morphological structures in (4–5) map to a compositional semantics, essentially as outlined by Kratzer (2009: 221):

the alleged "3rd person" features are in fact gender features, a variety of descriptive feature ... If [a descriptive feature] is to grow into a pronoun, it has to combine with a feature [def] that turns it into a definite description. If [def] is the familiar feature that can also be pronounced as a definite determiner in certain configurations, it should head its own functional projection, hence be a D. It would then not originate in the same feature set as descriptive features, which are nominal, hence Ns.

In this perspective, the pan-Romance (near-universal) fact that 1/2P forms are not associated with gender morphology, far from being a morphological syncretism or other quirk of pronunciation, corresponds to a potentially interesting (morpho)syntactic generalization – namely that 1/2P are pure deictic forms, deprived of predicative restrictions, even as elementary as Class (gender, countability).

A notable characteristic of Italian 1/2P clitics, apart from the lack of nominal class inflections, is the absence of case differentiations or, if one wishes, the accusative/dative syncretism – which is also replicated by many languages (e.g. French, Spanish, Albanian), though not by all (e.g. Romanian, Greek). In fact, in Italian (2), the *m*-*i*, *t*-*i* 1/2P person forms have the same -*i* inflection as the 3P dative *gl*-*i*. This inflection contrasts with that of the accusative in (1), corresponding to gender morphology (-*o*, -*a*, -*i*, -*e*).<sup>3</sup> Now, obliquization and specifically dativization of highly ranked referents normally characterized differential object marking (DOM) in Indo-European languages (Manzini & Franco 2016). Specifically in Romance, DOM marking of lexical DPs generally takes the form of the preposition *a* 'to' (in Ibero-Romance, in Southern Italian dialects).

At the basis of DOM is the fact that in many languages, case assignment depends on the referential content of the argument DPs. This is often described in terms of an animacy hierarchy. The classical discussion by Dixon (1979: 85–86) is based on the "potentiality of agency" scale, i.e 1<sup>st</sup> person < 2<sup>nd</sup> person < 3<sup>rd</sup> person < 3<sup>rd</sup> person < proper name < human < animate < inanimate. According to Dixon,

it is plainly most natural and economical to "mark" a participant when it is in an unaccustomed role... A number of languages have split case-marking systems exactly on this principle: an ergative case is used with NPs from the right-hand end, up to some point in the middle of the hierarchy, and an accusative case from that point on, over to the extreme left of the hierarchy... Though the phenomenon is often referred to under the heading of split ergativity, it is evident that in the typological continuum it touches what we may call split accusativity.

Similarly, using a different terminology, Aissen (2003: 473) states that "the factors that favor differential subject marking will be the mirror image of those that favor DOM".

<sup>&</sup>lt;sup>3</sup>-*i* is the Latin inflection of the dative singular (in all declension classes excepting the II), also syncretic with the genitive (in the I class). Note further that though in Table 19.1, we have illustrated normative Italian, in colloquial Italian there is a single dative form for masculine and feminine, singular and plural, corresponding to gli (*l*-definiteness base + -*i* inflection).

The overt dative morphology of DOM objects suggests that these forms are not directly embedded as the internal argument of the event. Rather, their embedding requires the presence of a case layer, the dative, dedicated to the expression of possessors. We follow Belvin & den Dikken (1997: 170) in characterizing the possession relation in terms of zonal inclusion, i.e. "[e]ntities have various zones associated with them, such that an object or eventuality may be included in a zone associated with an entity without being physically contained in that entity". Following Manzini (2012), we label the dative case, carrying the relational inclusion content, as  $\subseteq$ .

In these terms, the structure of embedding of mi/ti in (2) remains constant despite the fact that two different structures of embedding are implied by the predicates *aiutare* 'help' and *parlare* 'speak (to)' with 3P clitics in (1). In the structure in (6) we propose that the two arguments of  $\subseteq$  are the 1/2P clitic and – we assume – the event itself, adopting and adapting in this respect an idea of the applicative literature (Pylkkänen 2008).



Intuitively, transitive predicates can be paraphrased by an elementary predicate associated with an eventive name. Thus *aiutare* 'help' alternates with *dare aiuto a* 'give help to'. Hale & Keyser (1993), Chomsky (1995) formalize this intuition about the complex nature of transitive predicates by assuming that they result from the incorporation of an elementary state/event into a transitivizing (typically causative) predicate. Within such a conceptual framework it becomes clearer what we mean when we say that in (6),  $\subseteq$  takes as its arguments the 1/2P pronoun and an elementary state/event. In other words, (6) can be informally rendered as 'He caused me to have help/talk'. We claim that the 1/2P pronoun in (6) is introduced as a possessor, taking in its "zonal inclusion" domain an elementary event – for instance *aiuto* 'help'. By contrast, 3P complements of *aiutare* 'help' (or rather 'cause help') are embedded in a canonical transitive (causative) structure comprising a nominative agent and an accusative theme. The fact 3P arguments of *parlare* 'talk (to)' require the  $\subseteq$  embedding must be considered a lexically governed alternation (subject to considerable cross-linguistic variation, see Svenonius 2002).

Manzini & Franco (2016) discuss potential problems for the present analysis in some detail. Specifically, the 1/2P argument of *aiutare* 'help' raises to the nominative position in the passive, while that of *parlare* 'talk (to)' does not, as in (7a) vs. (7b). The contrast in passivization is traditionally explained by the assumption that underlying cases are identical for 1/2P and 3P, though 1/2P are morphologically syncretic between dative and accusative. Thus the accusative object of *aiutare* 'help' can be passivized independently of whether it is 1/2P or 3P, while that of *parlare* 'talk (to)' cannot. Therefore the possible way to passivize *parlare* 'talk (to)' is an impersonal passive, as in (7b').

(7) Italian

- a. Sono stato aiutato
   I.am been helped
   'I was helped'
- b. \* Sono stato parlato I.am been spoken'I was spoken to'
- b'. Mi è stato parlato (di te) to.me it.is been talked of you 'It was talked to me (about you)'

Manzini & Franco (2016) propose a different explanation. They argue that the dative case with *parlare* 'talk (to)' is inherent, in the sense of Chomsky (1986), i.e. it is selected by the verb. Under passive, inherent dative case must be preserved, yielding an impersonal passive, as in (7b') but barring raising to nominative position as in (7b). On the contrary, the dative case with *aiutare* 'help' and 1/2P objects is structural, since it depends not on the selection properties of the verb, but on the DOM configuration. Passive voids the context for the application of DOM, since the internal argument is raised out of its VP-internal position to [Spec, IP]. Therefore, no dative need be present in the derivation and sentences like (7a) are well-formed.

Before turning to agreement, it is worth mentioning that independent evidence for the presence of 1/2P vs. 3P splits in Romance DOM comes also from full pronouns – though it can only be briefly reviewed here. The standardly recognized manifestation of DOM in the Romance languages is the so-called prepositional accusative, whereby in a large number of Romance varieties (Ibero-Romance, Central and Southern Italian dialects, Romansh, Corsican, Sardinian, Romanian) highly ranked objects are introduced by a preposition (with or without clitic doubling), most often *a*. The best known and most frequently attested pattern has DOM associated with definite/animate DPs, as in Standard Spanish (see Aissen 2003 for a typological survey, von Heusinger & Kaiser 2011 for a corpus study). However, as illustrated Manzini & Savoia (2005: §4.9), D'Alessandro (2015), other splits along the descriptive animacy/definiteness hierarchies are attested by Italian varieties. What is relevant for present purposes is that in some Center-South Italian varieties only 1/2P internal arguments require DOM, as in (8a). 3P pronouns and kinship terms (essentially functioning as proper names) undergo ordinary (bare) embedding, as in (8b).<sup>4</sup>

- (8) Italian Colledimacine (Abruzzi, Manzini & Savoia 2005: 505)
  - a. a camatə a mme / a nnu he.has called DOM me DOM us 'He called me / us'
  - b. a camatə frattə tiə / kwiʎʎə he.has called brother yours him 'He called him / my brother'

Importantly, though the evidence from Italian 1/2P clitics reviewed would traditionally be treated in terms of morphological syncretism, there is no question that facts like (8) are syntactic.

#### 1.2 Clitics and Agree

Let us then turn to agreement. Consider first 3P clitics. Under Chomsky's (2000; 2001) model of Agree, we may say that transitive verbs (i.e. verbs with an external argument and a *v* structural layer) include a probe on *v*, which attracts the closest

 (i) Trieste, Venezia Giulia (Ursini 1988: 548) el te ga bastonado a ti he you has beaten DOM you 'He beat you up'

<sup>&</sup>lt;sup>4</sup>Other varieties displaying the same pattern are Cagnano Amiterno (Abruzzi) and Borbona (Lazio); optionality of DOM in the 3P characterizes a few more dialects in the corpus, specifically Avigliano Umbro (Umbria), Torricella Peligna (Abruzzi), Canosa Sannita (Abruzzi). In fact, in contexts involving 1/2P pronouns, or in any event pronouns, DOM and clitic doubling can also surface in Northern Italian. In (i) we reproduce an example from Trieste (an anonymous reviewer suggests data from the dialectologically close variety of Padua).

argument (by Minimal Search), namely the object of V. Agree (i.e. Match/Identity) then goes through, yielding (9a); for the sake of exposition we have assumed that the clitic has a base position inside the VP. Otherwise, the perfect participle turns up inflected with the invariable masculine singular ending, as in (9b). The traditional assumption in this respect is that some sort of morphological default repairs the lack of syntactic agreement.

(9) a. [<sub>vP</sub> aiutata [<sub>D</sub> la]]
 b. [<sub>vP</sub> parlato [<sub>⊆</sub> [<sub>D</sub> gli/le]]]

For ease of exposition, we have assumed that the perfect participle is an unanalyzed unit, associated with a probe in the form of a feature matrix, essentially as in Chomsky (1995). In reality, the perfect participle consists of a lexical base (inclusive of a so-called thematic, or inflectional class, vowel, which will be disregarded here), followed by a perfect ending *-t*, followed in turn by a suffix containing gender and number information (*-o, -a, -i, -e*), as in (10). The  $\varphi$  constituent is presumably to be identified with the agreement probe.

(10)



Classical theories of null subjects hold the view that the finite inflection of languages like Italian is pronominal-like (Rizzi 1982), hence it represents a lexicalization of the subject. In fact, in some models the *pro* empty category is dispensed with altogether (Borer 1986 for an early statement, Manzini & Savoia 2005; 2007). Suppose we generalize this idea to all agreement inflections. The perfect participle inflection, seen in Italian (9), will be construed as an elementary lexicalization of the internal argument within the morphological structure of the verb, as schematized in (10). Classical theories of pro-drop hold the view that the finite inflection of languages like Italian is pronominal-like (Rizzi 1982); in fact, some models treat it as satisfying the EPP, so that the pro empty category becomes redundant (Borer 1986; Manzini & Savoia 2005; 2007). Suppose we generalize this idea to all agreement inflections. The perfect participle inflection will then be construed as an elementary lexicalization of the internal argument, as schematized in (11).



In (11), the  $\varphi$  constituent endowed with gender and number (i.e. nominal class) specifications needs a 1/2P or D closure in order to achieve referential status. This can only be obtained via the application of Agree. According to Chomsky (2000: 122) "the simplest assumptions for the probe–goal system" are formulated as in (12). Matching, namely feature identity according to (12a), "is a relation that holds of a probe P and a goal G. Not every matching pair induces Agree. To do so, G must (at least) be in the domain D(P) of P", defined as in (12b). Furthermore, "a matching feature G is closest to P if there is no G' in D(P) matching P such that G is in D(G')" as in (12c).

- (12) Chomsky (2000: 122)
  - a. Matching is feature identity.
  - b. D(P) is the sister of P.
  - c. Locality reduces to closest c-command.

Our proposal (see also Manzini & Savoia 2005; 2007; 2011) holds on to these "simplest assumptions", but revises their standard implementation, in keeping with the need to interweave morphological and syntactic analysis. Specifically, we may expand the schematic structure in (9a) as in (13). We translate the classical idea that  $\varphi$  features percolate to the head level v by assuming that labelling creates a (v,  $\varphi$ ) projection. At this point Agree proceeds along the lines in (12) creating a pair ordered by c-command and obeying locality, normally taken to be (*aiutata*, *la*). We may equally, and more perspicuously, pare the Agree sequence down to (*-a*, *-a*).



We know that in Chomsky's (2000; 2001) conception, Agree is a matter of deleting the uninterpretable features of the probe, with the result that a single copy of an agreement pair survives, namely the interpretable copy of the goal. But this is simply a technical implementation. One may keep closer to the morphological reality of agreement and assume that agreement is a matter of feature unification. Thus the agreement pair for (13) unifies the feminine features instantiated by the -*a* inflections of *v* and D. As a result, the D features morphologically instantiated by *l*-provide the necessary and sufficient referential closure for the internal argument of *aiutare* 'help'. In this perspective, the satisfaction of Full Interpretation at the conceptual-intentional (CI) interface depends on the fact that the operation of Agree creates an equivalence set, interpreted as a single argument with multiple occurrences (what Manzini & Savoia 2007 call agreement chains).

Let us then consider the 3P non-agreeing pattern in (9b). The internal structure of the perfect participle is as already indicated in (9), except that *parlare* 'speak (to)' does not introduce an internal argument. Rather, it selects the dative preposition or case, i.e. an element with ( $\subseteq$ ) relational content, introducing a possessor. As a consequence, the  $\varphi$  node is externalized by the invariable *-o* ending, as in (14); the latter could be the realization of an empty  $\varphi$  node, i.e. what is traditionally called a default.<sup>5</sup>



At this point, we are in a position to consider the crucial 1/2P data. Specifically, with *aiutare* 'help' two alternatives are possible. In present terms, the first alternative consists in the partial saturation of the internal argument of the participle by a gender and number inflection, as in (15). The  $\varphi$  probe can be matched with the 1/2P content as a goal, creating an agreement pair. The operation requires that the 1/2P constituent is visible despite the presence of  $\subseteq$  oblique morphology; in other words the  $\subseteq$  case morphology must be transparent. We already suggested in the discussion surrounding (13) that the right way to think about

 $<sup>^{5}</sup>$ In a less stipulative way, in the absence of an internal argument, we could take the  $\varphi$  node to realize the abstract event argument. Note that in Romance languages where productive neuter gender is available (Central Italian dialects, Manzini & Savoia 2005; 2017), the latter is associated with mass and eventive contents and also with invariable perfect participles.

agreement pairs is not in terms of feature deletion (à la Chomsky), but rather of feature unification. Hence the descriptive gender and number properties of the *-a* inflection are unified with the 1/2P deictic properties of the clitic *m*-/*t*- under non-distinctness. More conventionally, we may add to the structure of the *m*-/*t*- clitic an abstract  $\varphi$  node, and assume that the content of this abstract  $\varphi$  node gets identified with that of the participle; the deictic content of 1/2P provides the required referential closure.



Next, consider the non-agreeing 1/2P structure in (16). With *parlare* 'talk (to)', as already reviewed in relation to the 3P clitic in (13),  $\subseteq$  is selected by the verb, and an agreement probe cannot be generated; rather the  $\varphi$  slot of the participle is empty, i.e. a default (but see footnote 5). With *aiutare* 'help' the agreement probe may be generated and satisfied along the lines of (15). We now propose that the agreement probe may equally not be generated, since the structure includes an oblique  $\subseteq$  object, albeit a structural (non-selected) one as in (17).

(16)  $[_{\nu P} aiutato/parlato [\subseteq [_{1/2P} m - /t-] [\subseteq i]]]$ 

Let us summarize so far. We propose that a verb like *parlare* 'talk (to)' selecting an inherent  $\subseteq$  oblique, never generates a  $\varphi$  probe on the participle. A verb like *aiutare* 'help' generates a  $\varphi$  probe, when it is construed with an internal argument. However if DOM changes the internal argument to an  $\subseteq$  oblique, two possibilities are available. The first one is that the  $\varphi$  probe is generated on the participle and matched to the DOM object – in other words the latter is treated like a direct object and unlike an inherent oblique. Alternatively, the structural oblique is treated like an inherent (i.e. selected) oblique, resulting in empty/default agreement.

An analysis along these lines is supported by the observation that agreement is optional also with 3P clitics, if they are associated with structural oblique case, i.e. oblique case which is not inherently assigned by the verb. Thus the *ne* genitive clitic in (17) licences agreement in the plural (masculine or feminine); however the invariant (masculine singular) form of the perfect participle is equally allowed in the relevant idiolects. We assume that genitive represents an instantiation of the same predicative content ( $\subseteq$ ) as dative – except that dative predicates possession/inclusion between two arguments of a VP, while genitive predicates possession/inclusion between a D(P) and a modifier it embeds. In (17) the genitive *ne* clitic refers to a larger set including the two (*due*) objects I bought. On this basis, an agreement alternation is as expected depending on whether the ( $\subseteq$ ) argument is treated along the lines of (14) or (15).

(17) Italian

Ne ho comprat-i / comprat-e / comprat-o due of.them I.have bought-M.PL bought-F.PL bought-M.SG two 'I have bought two of them'

The facts that we have considered so far involve an extremely limited portion of the lexicon of just one language, essentially Italian clitics. Yet we have sought to explain them in terms of syntactic macrocategories, such as the Participant/ non-Participant Person split and specifically its interaction with DOM phenomena. We must therefore briefly pause to consider whether these proposals are tenable with respect to available crosslinguistic evidence.

Importantly, the optionality of agreement with 1/2P clitics in Italian simply replicates at a smaller scale a well-known independent parameter affecting DOM obliques. The Indo-Aryan languages are a case in point. On the one hand, these languages present agreement of the perfect participle with the internal argument, for instance in Hindi (18a), where the internal argument is absolutive (and the external argument ergative). On the other hand the relevant languages are characterized by DOM, generally opposing animates to inanimates, realized by means of a postposition, which in Hindi is *-ko*, as in (18b). What is relevant here is that the DOM object does not Agree with the perfect participle, which shows up in the default masculine singular.

- (18) Hindi (Mohanan 1995: 83; Ahmed 2006: 3)
  - a. Anil-ne kitaabẽ becĩi
     Anil-ERG book.F.PL sell.PFV-F.PL
     'Anil sold (the) books.'
  - b. Anjum-ne saddaf-ko dekhaa Anjum.F.SG-ERG Saddaf.F.SG-DOM see.PFV.M.SG 'Anjum saw Saddaf.'

Though the Hindi pattern is robustly attested, in some Indo-Aryan languages DOM objects, also realized by an oblique postposition Agree with the perfect participle exactly as absolutive objects do. Thus in Marwari, a Rajasthani language the perfect participle "always agrees with O whether it is [DOM] marked or not" according to Verbeke (2013: 234). Crucially "agreement with an IO or an experiencer, marked with the same postposition is out of the question" (Verbeke 2013: 234). In (19) we illustrate just agreement of the perfect participle with DOM objects (*-nai*).

 (19) Rajasthani (Khokhlova 2002) RaawaN giitaa-nai maarii hai Rawan.м Gita.F-DOM beat.PFV.F be.PRS.3sG 'Rawan has beaten Gita'

Recall that our thesis is that it is not possible to explain the case and agreement patterns of 1/2P clitics in Italian in terms of morphological idiosyncrasies. Rather, 1/2P clitics are targeted by DOM, hence they are externalized by oblique case. This in turn yields two possible grammars for agreement, one in which agreement probes characterize bare objects and DOM objects – and an alternative grammar in which agreement probes are restricted to bare objects. The data from Indo-Aryan languages are introduced here to confirm that these two options characterize DOM (of the Indo-European type) quite generally.

Thus, given any language in which we have evidence for both object agreement and DOM (on a person split basis, on an animacy basis), we expect optionality of DOM agreement (Italian) or obligatoriness of DOM agreement (Rajasthani/Marwari) or impossibility of DOM agreement (Hindi). These predictions are quite weak, but the data do not seem to warrant any stronger analysis; in other words we only predict that we will not find agreement with DOM objects to the exclusion of bare objects – which is correct.<sup>6</sup>

In conclusion, Italian (and Romance) object pronouns (clitic and full) provide evidence for the presence of 1/2P vs. 3P splits. Some of the facts we observed could in principle be handled in terms of morphological idiosyncrasies. Here we

<sup>&</sup>lt;sup>6</sup>We do not have data on how DOM interacts with perfect participle agreement in varieties like Colledimacine in (8) or Trieste in fn 4. In any event, the analysis in the text excludes only the possibility that 1/2P agrees while 3P does not; this state of affairs is not attested in any Italian dialect, to the best of our knowledge. Note also that we do not make predictions on languages with no DOM. In principle we do not expect any asymmetries (for instance between 1/2P and 3P) in (object) agreement – but there may be reasons independent of DOM why such asymmetries are found.

argued instead that their lack of gender/number inflections may points to a genuine difference in constituent structure with 3P pronouns, which are effectively definite Ds. More to the point, the so-called accusative/dative syncretism in Italian 1/2P clitics and their optional activation of perfect participle agreement are connected with the DOM treatment of 1/2P clitics in the core syntax.

# 2 1P vs. 2P: Northern Italian subject clitics

In this section we address the issue of whether the Romance languages display evidence for a 1P vs. 2P split. To this end we consider subject clitics in Northern Italian varieties and specifically patterns of partial pro-drop. The microparametric variation involved (in the sense of Kayne 2000) will ultimately lead us to discuss recent proposals as to the nature of parameters and specifically their relation to macrocategorial splits such as 1P vs. 2P or, going back to §1, 1/2P vs. 3P.

#### 2.1 Partial pro-drop in Northern Italian dialects

Manzini & Savoia (2005: §2.3) provide subject proclitic paradigms for 187 Northern Italian varieties (as counted by Calabrese 2008). Many of these dialects are characterized by partial pro-drop, namely the presence of no lexicalization for certain forms of the paradigm. The interest of the phenomenon is that only a minority of the logically possible patterns are actually attested. To begin with, 3P clitics (or a subset of them) are lexicalized in the quasi totality of Northern Italian dialects. Because of this, we illustrate first variation in the P(erson) paradigm, keeping the presence of D (i.e. 3P) forms constant.

The logical possibilities for combining four person denotations with two choices for lexicalization (P vs. zero) are sixteen. In the absence of further constraints, we expect to find all of them. However Manzini & Savoia (2005), Manzini (2015) tabulate only six possible proclitic patters, as shown in (20). This result remains constant if instead of considering null subjects slots, we consider slots taken by syncretic clitics lacking specialized P morphology.

(20)

)			1st	2nd	3rd	4th	5th	6th
	1.	Prali	_	Р	D	Р	Р	D
	2.	Corte/Sief	_	Р	D	_	_	D
	3.	Càsola	—	Р	D	—	Р	D
	4.	*	—	Р	D	Р	—	D
	5.	*	Р	_	D	Р	Р	D
	6.	*	Р	_	D	—	—	D
	7.	*	Р	_	D	—	Р	D
	8.	*	Р	_	D	Р	_	D
	9.	French	Р	Р	D	Р	Р	D
	10.	Sillano	Р	Р	D	—	—	D
	11.	*	Р	Р	D	_	Р	D
	12.	*	Р	Р	D	Р	—	D
	13.	Livo	_	_	D	_	_	D
	14.	*	_	_	D	Р	Р	D
	15.	*	_	_	D	_	Р	D
	16.	*	_	_	D	Р	_	D

French in line 9 is the best-known Romance language that lexicalizes all P and D subject clitics. A language like Livo in line 13 further implies a 1/2P vs. 3P split. Apart from French and Livo, the other existing languages of (20) externalize subject clitics along a finer fault line, that between speaker and hearer. This may result in the externalization of just hearer reference, as in line 3 (Càsola); however, the lexicalization of just speaker is unattested. In order to account for the speaker/hearer asymmetry, Manzini & Savoia (2011), Manzini (2015) formulate the split between speaker and hearer (1P vs. 2P) as in (21), in terms of the salience of speaker reference.

#### (21) Speaker reference is (pragmatically) salient

(21), interacting with a universal rule/principle of grammar, namely Recoverability (22), explains why Càsola in line 3 of (20) is a possible language, while its mirror image in line 8 is impossible. Recoverability is standardly conceived as a principle constraining the deletion operation. Equivalently one may construe it as a constraint on the enrichment of L(ogical)F(orm), as in (22); in either case its content remains constant, i.e. that of licensing lack of Externalization. The salience of 1P in (21) makes it (pragmatically) recoverable, in the sense of (22), independently of any other syntactic or semantic condition being satisfied – licensing its lack of externalization. This is not the case for 2P, which must therefore be lexicalized. Therefore (21) crossed with Recoverability yields the prevalence of 2P lexicalizations over 1P ones in (20). To be more precise, rows 1-3 are allowed because 1P is not lexicalized and 2P is; rows 5 to 8 are excluded because 1P is lexicalized and not 2P; rows 4, 12 and 16 are excluded because this latter pattern holds in the plural.

#### (22) Recoverability Recover non-externalized LF content (referential etc.)

Nevertheless, there are patterns in (20) which are excluded even though 2P is lexicalized, including rows 11 and 15. Descriptively, what seems to be relevant is that the speaker vs. hearer split is defined in the plural but not in the singular. We may therefore assume that (21) either applies to the singular, i.e. to speaker proper, or it cannot apply at all, as in (23). In other words, it is possible for it to be defined in the singular of a given language, and not in the plural– but not vice versa. A point to which we will return is that (23) is a statement about a value of a given categorial split (singular vs. plural) blocking another categorial split, namely the salience or prominence of speaker (vs. other referents).

(23) (21) is not defined in the plural.

Recall next that (20) records the attested variation in P lexicalization in languages where 3P (D) is invariably lexicalized. It is implicit in the way data are tabulated that the lexicalization of 3P is assumed to define an independent parameter. Thus in (20) there are varieties, for instance Livo, where the D series is lexicalized, but there is no exponent for P, defining a categorial split along the lines of (24), i.e. the 1/2P vs. 3P split also dealt with in §1.

(24) P (Participant) vs. D (Definiteness) referent

One may then expect the reverse situation to (20) to be attested, where 3P pronouns are not lexicalized, while on the contrary P pronouns are. Specifically, we may expect six languages to be generated, where 3P is zero and P slots vary along the lines discussed for (20) – i.e. lexicalization only of 2P is possible, and plural is not more differentiated than singular. If D is not lexicalized and P is not either we obviously have a classical pro-drop language like Italian (pattern 13). Pattern 2, with 2P as the sole lexicalized Participant form is also found. Pattern 9 is possible in turn – but it should be noted that in the dialect of Faeto (and the similar dialect of Celle, cf. footnote 5), the 3P form is undifferentiated/syncretic,

rather than zero.<sup>7</sup> These facts are depicted in (25), where pattern numbers refer back to corresponding patterns in (20). Evidently, our analysis overgenerates three patterns, namely 1, 3, 10. However, the sample of dialects missing 3P is very small (cf. footnote 7). This means that the conclusions we can infer from it are not necessarily significant when it comes to overgeneration. In any event, the analysis does not undergenerate.

(25)			1st	2nd	3rd	4th	5th	6th
	1.	*	_	Р	_	Р	Р	_
	2.	Tetti	_	Р	_	_	_	_
	3.	*	_	Р	_	_	Р	_
	9.	Faeto	Р	Р	_	Р	Р	_
	10.	*	Р	Р	_	_	_	_
	13.	(Italian)	_	_	_	_	_	_

We should also consider the possibility that 3P singular splits from 3P plural. The lexicalization of the 3P plural to the exclusion of the 3P singular is not attested; this may be due to the fact that the plural cannot be more highly differentiated (via lexicalization) than the singular. In other words, the proposal we put forth in (23), saying that the 1P vs. 2P split may not be instantiated in the plural, should really be generalized to the possibility that any given split may be instantiated in the singular and the plural, along the lines in (26), but not vice versa. Thus, since 3P singular will have nominal class properties, along the lines of §1, we may conclude that it is possible to have them represented in the singular and not in the plural (pro-dropped) but not vice versa.

(26) Categorial split x is not defined in the plural.

By combining a lexicalized 3P singular, a zero 3P plural and the attested P configurations in (20), we may expect six patterns, as in (27). Only two of them are found, namely pattern 13, where only the 3P singular is lexicalized, and pattern 2 where 2P singular and 3P singular are lexicalized.<sup>8</sup> We observe that in all possible patterns the plural is consistently zero, suggesting that patterns 1, 3

<sup>&</sup>lt;sup>7</sup>Besides Tetti (Dronero, in the Occitan Val Maira) other varieties that display the pattern in line 2 are Sarre (Franco-Provençal), and Bonifacio (at the southern tip of Corsica). Celle San Vito and Faeto, exemplifying the pattern in line 9, are Franco-Provençal varieties of Southern Italy (Franco-Provençal colonies).

<sup>&</sup>lt;sup>8</sup>Besides Olivetta (West Ligurian, on the Occitan borders), other varieties that display the pattern in line 2 are Olivetta San Michele (Western Liguria, on the Occitan borders), Varese Ligure (Liguria), Calasetta (Ligurian dialect of Sardinia) and Como (Lombardy). Acceglio (in the Occitan Val Maira) is the only representative for the pattern in line 13 present in the corpus.

and 9 ought to be excluded because of the presence of plural P forms. Again the relevant idea seems to be that the plural cannot be more highly differentiated than the singular, excluding a person split in the plural (zero 3P vs. lexicalized 1/2P) where there is none in the singular. This would mean that our approach overgenerates only pattern 10 – though the disclaimer about the small number of dialects with the desired 3P configuration (cf. footnote 8) applies here as well. Importantly, the approach does not undergenerate.

(27)			1st	2nd	3rd	4th	5th	6th
	1.	*	_	Р	D	Р	Р	_
	2.	Olivetta	_	Р	D	_	_	_
	3.	*	_	Р	D	_	Р	_
	9.	*	Р	Р	D	Р	Р	_
	10.	*	Р	Р	D	_	_	_
	13.	Acceglio	_	_	D	_	_	_

Moving away from the finer empirical details and on to the overall theoretical picture, we assume that a rule of Externalization, in the sense of Berwick & Chomsky (2011) pairs a CI content with a sensory-motor (SM) content, as in (28). Parameter values are the SM choices that (28) brings into effect, by interacting with C-I categorial splits such as Participant vs. Definite/Demonstrative, 1P vs. 2P, singular vs. plural. Similarly the 1P vs. 2P categorial split may interact with Recoverability, determining a fundamental asymmetry in Externalization. If so, the parameters are effectively the categorical splits themselves.

(28) Externalization Pair a CI content x with a SM content y

Activating a yes value of a parameter implies activating the categorial split – otherwise the split remains inactive, corresponding to the zero value of the parameter. Generalizing from statements like (23), (26) one may further surmise a schema for the interaction between parameters, as in (29). In other words, when parameters cross, one of them may remain undefined for one value of the other. Thus the Speaker vs. other referents parameter (or categorial split) may remain undefined for value plural of the singular vs. plural parameter.

(29) Parameter (i.e. categorial split) A is not defined for value 0/1 of parameter (i.e. categorial split) B

In the next section we try to clarify our conception of the relation between categorial splits and parametrization, by comparing it to the notion of parameter proposed within the *Rethinking comparative syntax* (ReCoS) project. Before doing so, we will briefly turn to alternative analyses of the Northern Italian partial pro-drop patterns, in terms either of cartographic hierarchies or of a Distributed Morphology-type component.

#### 2.2 Competing views of parametrization

The data tabulated in (20) have attracted at least two types of analyses, besides the one defended here. Cardinaletti & Repetti (2008) argue that Person implicational hierarchies of the type proposed by typological work translate into structural hierarchies of Person positions. As the empirical basis of their work, they adopt Renzi & Vanelli's (1983) generalizations, which are based on a relatively restricted set of 30 dialects. These generalizations yield an implicational hierarchy  $2^{nd}$  singular  $< 3^{rd}$  singular  $< 3^{rd}$  plural. Thus a language may lexicalize only  $2^{nd}$ singular; it may lexicalize  $2^{nd}$  singular and  $3^{rd}$  singular, or it may lexicalize  $2^{nd}$ singular,  $3^{rd}$  singular and  $3^{rd}$  plural – but other possibilities are excluded. Cardinaletti & Repetti map this implicational hierarchy to the structural configuration in (30). They propose that in (30) the 2sg position is licenced by verb movement to it. In turn, both the 3sg and the 2sg positions are licenced by verb movement to the 3sg, and so on. This means that no position can be licences unless 2sg is; 3sg can be licences only if 2sg is; and so on.

#### (30) [3pl [3sg [2sg

Cardinaletti & Repetti's (2008) proposal is typical of a range of cartographic responses to microparametric variation, under which a relatively simple computational component is maintained, while the underlying structures on which it operates are finely articulated. This response is empirically inadequate for the Northern Italian subject clitic data. The larger database of Manzini & Savoia (2005) brings out a few systematic counterexamples to Renzi & Vanelli (1983) and hence to Cardinaletti & Repetti; notably in varieties like Livo in (20), 3P subject clitics are realized, but not the 2P clitic.

A different approach is taken by Calabrese (2008), who concludes that the correct level of analysis at which to account for the intricate microvariation illustrated by Northern Italian subject clitics is not syntax but morphology. Recall that in introducing (20) we have noticed that the absence of subject clitics for a given set of forms is attested if and only if syncretic realizations are attested for the same set. It is therefore syncretisms, rather than partial pro-drop, that Calabrese sets out to account for. Calabrese's analysis is again based on a person hierarchy, namely 2SG < 3SG < 3PL < 1SG < 2PL < 1PL. For Calabrese, this

hierarchy corresponds to a set of constraints, each of which blocks the realization of the relevant forms, as in (31). For instance, the activation of constraint (31f) means that the feature cluster [+speak, +augm], i.e. 1<sup>st</sup> plural, is excluded. This in turn triggers morphological readjustment, in order to allow for lexicalization, yielding syncretism. Alternatively, the activation of a constraint can lead to obliteration, i.e. lack of the relevant lexicalization, hence to partial pro-drop.

(31)	Int	In the context [[AgrS ] +V				
	a.	*[+part, -speak, -augm]	2sg			
	b.	*[–part, –augm]	3sg			
	c.	*[-part, +augm]	3pl			
	d.	*[+speak, -augm]	1sg			
	e.	*[+part, -speak, +augm]	2pl			
	f.	*[+speak, +augm]	1pl			

Despite the wealth of detail present in Calabrese's analysis, the initial step of the hierarchy, i.e. 2P > 3P is violated by all languages where only 3P is lexicalized, like Livo in (20). Furthermore, Calabrese also notes that his system does not deal with the proclitics of a language where only the  $1^{st}$  singular is missing and all other forms are specialized – such as Prali in (20). From a theoretical point of view, the morphological repairs that Calabrese assumes to be at work require Late Insertion, in the sense of Distributed Morphology; these postulates violate minimalist principles such as Inclusiveness and no backtracking. It is possible that these minimalist principles hold in syntax and not in morphology for some reason, but the result is in any case an enrichment of the grammar.

It is also interesting to note that for Calabrese (2008) the conceptual basis for lexicalizing 2P but not 1P in Northern Italian subject proclitic paradigms is that marked forms such as 1P "shy" away from lexicalization. Technically, in his filter hierarchy in (31), the more marked a form is, the less likely it is that the constraint blocking it will be deactivated. Therefore, it is it the marked status of 1P that determines its lack of lexicalization. The present approach is the reverse – it is the inexpensive status of 1P in terms of Recoverability that determines its lack of lexicalization. Importantly, under this latter approach there is no special 2 < 1 markedness hierarchy for Italian dialect proclitics, but only the prominent status of speaker reference, corresponding to the classical 1 < 2 animacy ranking.

In conclusion, both the cartographic approach of Cardinaletti & Repetti (2008) and the morphological approach of Calabrese undergenerate in one crucial respect – i.e. they do not provide for the existence of languages with 3P (i.e. D)

clitics and no P clitic. Similarly, Calabrese's approach undergenerates with respect to pattern (21), line 1; the approach in Cardinaletti & Repetti does not really address 1P, so that the issue remains indeterminate. The crucial assumption in Manzini & Savoia (2005), Manzini (2015) that allows the correct results to be obtained in this respect is that the P vs. D split in (24) is independent of the 1P vs. 2P split in (21) – and in fact the singular vs. plural split is independent of both.<sup>9</sup> Vice versa the model overgenerates, at least as far as our empirical basis goes. The order of magnitude of overgeneration is 4 patterns over 64 (2<sup>6</sup>), namely one in (27) and three in (25). The large majority of non-existing patterns is correctly excluded (49 of them) and more importantly all existing patterns are correctly generated (11 altogether) – i.e. the model does not undergenerate.

The absence of undergeneration (and the presence of some overgeneration) correlates with the fact that the present model is weaker than its competitors. Empirically, we have just argued that this represents an advantage – but the same conclusion holds from a theoretical point of view, since both cartographic hierarchies and a morphological filtering component are expensive devices and best avoided (see also Chomsky et al. 2019).

Let us then turn to the notion of parameter. According to Berwick & Chomsky (2011), parameters are not an external addition to the faculty of language, but are coevolved with it. In other words, parameters simply correspond to degrees of freedom open within Universal Grammar (UG), specifically in what concerns Externalization. As a consequence, the idea that parameter values are associated with lexical items (the so-called Borer–Chomsky conjecture, Baker 2008) takes on better defined contours – since the lexicon is the main locus of externalization, pairing CI and SM content.

Studies like the present one further argue that it is at best descriptively useful to refer to micro- and macro-variation – the former affecting very closely related languages and/or a small extension of the lexicon/grammar, while the latter covers comparison between different families and a considerable extension of their grammar. However, there is no sense in which one can define an opposition between macroparameters and microparameters. Manzini & Savoia (2011), discussing auxiliary selection (*be* vs. *have*) in Italian varieties, have this to say:

The distinction between microparametric and macroparametric approaches to variation has been so often discussed that the contours of the debate

<sup>&</sup>lt;sup>9</sup>There is further dimension of variation, discussed by all of the works quoted – namely the fact that enclitic paradigms differ from proclitic ones. Enclitic paradigms are largely irrelevant for the issue at hand, since it appears that essentially all of the logically possible patterns in (20) are instantiated (Manzini & Savoia 2005; Manzini 2015).

have become somewhat blurred. It is evident that, to the extent that the primitives manipulated by variation are macrocategories like transitivity or voice, we could describe our approach as macroparametric – though the fact that the unit of variation can be as small as a single lexical item qualifies it as microparametric

Transposing this discussion to the case study in §2.1, Speaker, Plural, Participant, etc. are macrocategories capable of influencing the global forms of a grammar; at the same time, they can be seen to determine the microvariation in subject clitic systems in (20). Going back to §1, the same holds for DOM, which may determine macroalignment phenomena but also microphenomena restricted to the sole clitic domain.

In the recent ReCoS model (Roberts & Holmberg 2010; Biberauer & Roberts 2012; 2015; Sheehan 2014; Biberauer et al. 2014), microparameters and macroparameters simply represent different levels of application of a given parameter. The internal organization of parametric space is determined by general processing/economy principles, specifically feature economy (FE, Roberts & Roussou 2003) and input generalization (IG, Roberts 2007). These "general cognitive optimisation strategies" determine the general form of parameter hierarchies by interacting with the schema  $Qhh \in P$  [F(h)] regarding "generalised quantification over formal features". In this schema h stands for head(s) belonging to set P, of which feature(s) F are predicated. Universal negative, universal and existential quantification over h are ranked in this order by feature economy and input generalization. The passage from larger to smaller sets of restrictor heads yields the descending hierarchy of macroparameters, mesoparameters, microparameters (Biberauer et al. 2014 and references quoted there).

Biberauer et al. (2014) exemplify their model with several different hierarchies. Here, since we have discussed null subjects and subject clitics, we exemplify their null arguments hierarchy (cf. Roberts & Holmberg 2010: 49), which we reproduce in Figure 19.1.

The macroparametric region of the schema in Figure 19.1 corresponds to Figure 19.1a–c. In Figure 19.1a, lack of attestation for a particular type of features, here uninterpretable phi-features, counts as the least marked value in the parametric hierarchy, namely radical pro-drop languages (languages of the Chinese/ Japanese type). In Figure 19.1b, the universal value of the parameter, corresponding to pronominal argument languages, in the sense of Jelinek (1984), already implies the restriction of the domain of application of the quantificational statement to certain categories, namely functional heads. Figure 19.1c, which posits



Figure 19.1: Null arguments hierarchy

the existence of uninterpretable phi-features sets on some functional heads, triggers the next set of statements (mesoparameters), concerning the association of uninterpretable phi-features with all T heads Figure 19.1d, and presumably further down with some T heads, and then on to microparameters etc.

Note that from mesoparameters down, what drives the construction of the hierarchy is a progressive domain restriction. We already mentioned that this is relevant for the head set h of which feature F is predicated; for instance, in the macroparametric steps (Figure 19.1a–c), the uninterpretable phi-features property is evaluated in relation to functional heads, while in the mesoparametric steps from Figure 19.1d down it is evaluated in relation to T heads. But if so, parameters are structured by something altogether more elementary than quantificational schemas and processing/economy principles, namely the existence of a Boolean superset/subset organization in the categorial domain. In the specific case at hand, this conclusion is strengthened by the observation that in the passage from Figure 19.1b to c, the query switches from "is present" to "is fully specified". This means that restrictions down the scale apply not only to the head set h, but also to the property F in the quantificational schema.

Informally, the basic aim behind the ReCoS approach is the integration of the microparametric scale with the macroparametric one. This seems eminently compatible with the views expressed by Manzini & Savoia (2011) and here on microvariation and macrocategories (macroparameters). There are, however, differences between the position articulated by ReCoS and that expressed by Manzini & Savoia (2011) and endorsed here. The ReCoS model sees macroparameters and microparameters as applications of the same property in progressively smaller domains. Indeed much of the discussion of the ReCoS model is devoted to the progression down such hierarchies, like Figure 19.1. Manzini & Savoia (2011) take a weaker position, under which no such hierarchy holds, or at least not necessarily. In their terms, categorial splits between 1/2P (Participant) and 3P (Demonstrative/Definite), between Speaker and Hearer, and so on may become externalized in small areas of the lexicon (Northern Italian subject clitics) or may have systemic consequences (ergativity splits) – but this difference has no theoretical import.

In fact, Manzini & Savoia (2011) make a stronger point, namely that "macrophenomena can be decomposed into the same elementary conceptual components that determine local lexical variation – and in fact the latter is the true matrix of perceived macroparameters". In other words, let us keep to the idea that (micro)parameters are binary choices (categorial splits), applying to minimal units such as a single category or in the limit a single lexical item. Manzini & Savoia propose that macroparameters may have a purely logical existence, as extrapolations from microparameters (e.g. if category x has property P, x a functional category, then all functional categories have property P). This second point goes against the grain of the ReCoS models, as can be seen more clearly if we translate the two approaches in terms of acquisition or markedness

Suppose with Manzini & Savoia that the learner fixes lexical choices such as those concerning partial pro-drop in Northern Italian dialects locally. In their terms, this "local lexical variation" is "the true matrix of … macroparameters". This means that the differential treatment of 1/2P vs. 3P (or 1P vs. 2P etc.) in the lexicalization of subject clitics triggers the activation of the relevant categorial splits in the grammar of the language – leading the child to look out for these splits in other areas of the lexicon/grammar. In this sense, the microparametric (i.e. lexical) setting has a macroparametric (i.e. systemic) consequence in the acquisition process. Vice versa in the ReCoS model, if we understand it correctly, the learning path is strictly downwards, proceeding from macroparametric default to actual microparametric settings.

Similarly, for Biberauer et al. (2014) languages that are highest in the hierarchy in Figure 19.1, i.e. Chinese-style "radical pro-drop" languages or Jelinek's (1984) pronominal argument languages, are least marked. But it does not seem to be true that unmarked status corresponds to relative frequency of these languages or other similar independent criteria for default status. In fact, the choice of treating all 1/2P clitics alike by lexicalizing all of them, or by not lexicalizing any of them (as opposed to 3P clitics) is certainly possible in Northern Italian dialects, but unpopular. More than half of the dialects in the corpus present a pattern whereby 1P singular and 1/2P plural are associated either with subject clitic drop (39/187) or with an uninflected subject clitic (65/187). In other words, on statistical grounds alone, one can legitimately conclude that the supposedly more marked mixed bag choice is in fact the default one.

#### 3 Conclusions

In this contribution, we have argued for the existence of 1/2P vs. 3P splits, and 1P vs. 2P splits in important areas of the lexicon/syntax of Romance languages. On the one hand 1/2P vs. 3P splits (or 1P vs. 2P) interact with core grammar properties of case and agreement. On the other hand, in so far as certain split may or may not be activated, they yield parametric variation.

In the first part of the article, we noted that in many Romance languages, including Italian, 1/2P object clitics have a simplified morphology with respect to 3P clitics, namely a single gender- and case-neutral object form, as opposed to the accusative vs. dative distinction, and the gender distinctions found in 3P. 1/2Pclitics also only optionally trigger perfect participle (*v*) agreement, which is obligatory with 3P accusative clitics. We have argued that these behaviours do not involve low-level morphological readjustments, but correspond to core syntax phenomena. Specifically, 1/2P clitics trigger DOM, which in the Romance (and Indo-European) languages takes the form of obliquization. Therefore, the special behaviours of 1/2P clitics with respect to 3P clitics (specifically the optionality of agreement) are to be imputed to the fact that the former are DOM obliques.

Our second case study is partial pro-drop patterns in Northern Italian dialects – which in our terms involves the 1P vs. 2P split, interacting with the Externalization process and the Recoverability principle. Though the possible parametric values individuate a microvariation set (including only subject clitics), the parameters are best identified with the categorial splits themselves (such as 1/2P vs. 3P etc.), which involve macrocategories of grammar.

1	first person	F	feminine
2	second person	FE	feature economy
3	third person	IG	input generalisation
ACC	accusative	М	masculine
CAUS	causative	PFV	perfective
CI	conceptual-intentional	PL	plural
DAT	dative	PRS	present
DOM	differential object marking	SG	singular
EPP	extended projection principle	SM	sensory-motor
ERG	ergative	UG	Universal Grammar

## Abbreviations

# References

- Ahmed, Tafseer. 2006. Spatial, temporal and structural uses of Urdu *ko*. In Miriam Butt & Tracy Holloway King (eds.), *Proceedings of the LFG2006 conference*, 1–13. Stanford, CA: CSLI Publications.
- Aissen, Judith. 2003. Differential object marking: iconicity vs. economy. *Natural Language & Linguistic Theory* 21(3). 435–483. DOI: 10.1023/A:1024109008573.
- Baker, Mark C. 2008. The macroparameter in a microparametric world. In Theresa Biberauer (ed.), *The limits of syntactic variation*, 351–373. Amsterdam: John Benjamins. DOI: 10.1075/la.132.16bak.
- Belvin, Robert & Marcel den Dikken. 1997. *There*, happens, *to*, *be*, *have*. *Lingua* 101(3–4). 151–183. DOI: 10.1016/S0024-3841(96)00049-6.
- Berwick, Robert C. & Noam Chomsky. 2011. The biolinguistic program: The current state of its evolution. In Anna Maria Di Sciullo & Cedric Boeckx (eds.), *The biolinguistic enterprise: New perspectives on the evolution and nature of the human language faculty*, 19–41. Oxford: Oxford University Press.
- Biberauer, Theresa, Anders Holmberg, Ian Roberts & Michelle Sheehan. 2014. Complexity in comparative syntax: The view from modern parametric theory. In Frederick J. Newmeyer & Laurel B. Preston (eds.), *Measuring grammatical complexity*, 103–127. Oxford: Oxford University Press.
- Biberauer, Theresa & Ian Roberts. 2012. Towards a parameter hierarchy for auxiliaries: Diachronic considerations. *Cambridge Occasional Papers in Linguistics* 6. 267–294.
- Biberauer, Theresa & Ian Roberts. 2015. Clausal hierarchies. In Ur Shlonsky (ed.), Beyond functional sequence (The cartography of syntactic structures 10), 295– 313. Oxford: Oxford University Press.

Borer, Hagit. 1986. I-subjects. Linguistic Inquiry 17(3). 375-416.

- Borer, Hagit. 2005. *The normal course of events* (Structuring sense 2). Oxford: Oxford University Press.
- Calabrese, Andrea. 2008. On the shyness of the first person: Investigations on markedness and underspecification in morphology. Ms., University of Connecticut, Storrs.
- Cardinaletti, Anna & Lori Repetti. 2008. The phonology and syntax of preverbal and postverbal subject clitics in Northern Italian dialects. *Linguistic Inquiry* 39(4). 523–563. DOI: 10.1162/ling.2008.39.4.523.
- Chomsky, Noam. 1986. Barriers. Cambridge, MA: MIT Press.
- Chomsky, Noam. 1995. The Minimalist program. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In Roger Martin, David Michaels & Juan Uriagereka (eds.), *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, 89–155. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.), *Ken Hale: A life in language*, 1–52. Cambridge, MA: MIT Press.
- Chomsky, Noam, Ángel J. Gallego & Dennis Ott. 2019. Generative grammar and the faculty of language: Insights, questions and challenges. *Catalan Journal of Linguistics*. DOI: 10.5565/rev/catjl.288.
- D'Alessandro, Roberta. 2015. Merging probes: A typology of person splits and person-driven differential object marking. Ms., Leiden University.
- Dixon, R.M.W. 1979. Ergativity. Language 55(1). 59-138. DOI: 10.2307/412519.
- Hale, Kenneth L. & Samuel Jay Keyser (eds.). 1993. Cambridge, MA: MIT Press.
- Jelinek, Eloise. 1984. Empty categories and non-configurational languages. *Natural Language & Linguistic Theory* 2(1). 39–76. DOI: 10.1007/BF00233713.
- Kayne, Richard S. 1989. Facets of Romance past participle agreement. In Paola Benincà (ed.), *Dialect variation and the theory of grammar*, 85–103. Dordrecht: Foris.
- Kayne, Richard S. 2000. *Parameters and universals*. Oxford: Oxford University Press.
- Kayne, Richard S. 2010. *Comparisons and contrasts*. Oxford: Oxford University Press.
- Khokhlova, Ludmila. 2002. Syntactic peculiarities of Rajasthani. Paper presented at the 17th European Conference on Modern South Asian Studies, Heidelberg, September 2002.
- Kratzer, Angelika. 2009. Making a pronoun: Fake indexicals as windows into the properties of pronouns. *Linguistic Inquiry* 40(2). 187–237. DOI: 10.1162/ling. 2009.40.2.187.

- Manzini, M. Rita. 2012. From Romance clitics to case: Split accusativity and the person case constraint. In Irene Franco, Sara Lusini & Andrés Saab (eds.), *Romance languages and linguistic theory 2010*, 1–20. Amsterdam: John Benjamins. DOI: 10.1075/rllt.4.01man.
- Manzini, M. Rita. 2015. On the substantive primitives of morphosyntax and their parametrization: Northern Italian subject clitics. In Marc van Oostendorp & Henk C. van Riemsdijk (eds.), *Representing structure in phonology and syntax*, 167–194. Berlin: De Gruyter.
- Manzini, M. Rita & Ludovico Franco. 2016. Goal and DOM datives. *Natural Language & Linguistic Theory* 34(1). 197–240. DOI: 10.1007/s11049-015-9303-y.
- Manzini, M. Rita & Leonardo M. Savoia. 2005. I dialetti italiani e romanci: Morfosintassi generativa. 3 vols. Alessandria: Edizioni dell'Orso.
- Manzini, M. Rita & Leonardo M. Savoia. 2007. A unification of morphology and syntax: Studies in Romance and Albanian dialects. London: Routledge.
- Manzini, M. Rita & Leonardo M. Savoia. 2011. *Grammatical categories: Variation in Romance languages*. Cambridge: Cambridge University Press.
- Manzini, M. Rita & Leonardo M. Savoia. 2017. N morphology and its interpretation: The neuter in Italian and Albanian varieties. In Anna Bloch-Rozmej & Anna Bondaruk (eds.), *Constraints on structure and derivation in syntax, phonology and morphology*, 213–236. Frankfurt am Main: Peter Lang.
- Mohanan, Tara. 1995. Wordhood and lexicality: Noun incorporation in Hindi. *Natural Language and Linguistic Theory* 13(1). 75–134. DOI: 10.1007/BF00992779.
- Picallo, Carme. 2008. Gender and number in Romance. *Lingue e Linguaggio* VII. 47–66.
- Pylkkänen, Liina. 2008. Introducing arguments. Cambridge MA: MIT Press.
- Renzi, Lorenzo & Laura Vanelli. 1983. *I pronomi soggetto in alcune varietà romanze*. Paola Benincà, Manlio Cortelazzo, Aldo Prosdocimi, Laura Vanelli & Alberto Zamboni (eds.). Pisa: Pacini. 120–145.
- Rizzi, Luigi. 1982. Issues in Italian syntax. Dordrecht: Foris.
- Roberts, Ian. 2007. Diachronic syntax. Oxford: Oxford University Press.
- Roberts, Ian & Anders Holmberg. 2010. Introduction: Parameters in minimalist theory. In Theresa Biberauer, Anders Holmberg, Ian Roberts & Michelle Sheehan (eds.), *Parametric variation: Null subjects in minimalist theory*, 1–57. Cambridge: Cambridge University Press.
- Roberts, Ian & Anna Roussou. 2003. *Syntactic change: A minimalist approach to grammaticalization*. Cambridge: Cambridge University Press.
- Sheehan, Michelle. 2014. Towards a parameter hierarchy for alignment. In Robert
   E. Santana-LaBarge (ed.), *Proceedings of the 31st West Coast Conference on Formal Linguistics*, 399–408. Somerville, MA: Cascadilla Proceedings Project.

Siewierska, Anna. 2004. Person. Cambridge: Cambridge University Press.

- Svenonius, Peter. 2002. Icelandic case and the structure of events. *Journal of Comparative Germanic Linguistics* 5(1–3). 197–225. DOI: 10.1023/A:1021252206904.
- Ursini, Flavia. 1988. Varietà venete in Friuli Venezia Giulia. In Günter Holtus, Michael Metzeltin & Christian Schmitt (eds.), *Lexikon der Romanistischen Linguistik*, vol. IV: Italienisch, Korsisch, Sardisch, 538–550. Tübingen: Niemeyer.
- Verbeke, Saartje. 2013. *Alignment and ergativity in new Indo-Aryan languages*. Berlin: De Gruyter.
- von Heusinger, Klaus & Georg A. Kaiser. 2011. Affectedness and differential object marking in Spanish. *Morphology* 21(3-4). 593–617. DOI: 10.1007/s11525-010-9177-y.