

OBLIQUE CASE AND INDO-EUROPEAN ERGATIVITY SPLITS¹

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Abstract. We argue that the fundamental oblique case of natural languages (the genitive/dative) corresponds to an elementary inclusion or part-whole predicate, whose internal argument (the whole, or possessor) is the DP which the case embeds, while its external argument is a DP (the part or possessum) coinciding either with the head of a genitive construction or with the theme of a ditransitive verb. In some languages, the all purposes oblique (as in Kurdish) or a specialized oblique, i.e. the ergative (as in Punjabi), lexicalizes the (transitive) subject of perfect sentences. We propose that (in these languages) perfect predicates correspond to a VP projection; external arguments are introduced by means of an oblique case, saying that the event is ‘included by’ (cf. ‘located at’) the argument. A more complex organization is found with imperfective/progressive predicates, where a head Asp projects a functional layer and can introduce the external argument, determining nominative type agreement.

Keywords: oblique case, dative, genitive, ergative, ergativity split.

1. INTRODUCTION: OBLIQUE CASE

We will begin by discussing the notion of case, in particular the indirect object case; our aim is to make the content of oblique case precise, trying to clarify its relation with the syntaxes based on the so-called split of ergativity. In this section, we briefly address the question of dative and genitive obliques in relation to Romanian, the only Romance language with overt case on DPs. In section 2, we address the issue of ergativity in connection with Punjabi and Kurdish, i.e. languages which present a perfectivity-based split between nominative and ergative alignments, allowing a comparison between nominative alignments in the imperfective and ergative alignment in the perfect. Based on our

¹ M. Rita Manzini, Università di Firenze, rmanzini@unifi.it, Leonardo M. Savoia, Università di Firenze, lsavoia@unifi.it. Data of Punjabi are transcribed in a broad IPA from the (Doabi) variety spoken in Hoshiarpur (India). We thank Miss Rajvir Kaur and her family for their collaboration. Kurdish data are obtained through interviews with Northern Iraqi native speakers of the Bahdini variety of Kurmanji. This research benefitted from PRIN 2012 funds, granted by the Italian MIUR. More detailed reports have been published by the authors on oblique cases in Latin and Romance (Manzini and Savoia 2011a, 2014a), on Albanian (Manzini and Savoia (2011a, 2011b), on ergativity splits in Punjabi and Kurdish (Manzini *et al.* 2015). The present article reflects in a particularly close way the conceptual path that has led us from the investigation of complement obliques to that of subject obliques, in the shape of ergative subjects.

conclusions in the preceding sections, in sections 3–4 we will argue that ergative is a bona fide oblique, and we will further provide a characterization for it that allows us to understand the common syncretism with ‘possessor’ cases (dative, genitive).

1.1. Genitive and dative

Within the minimalist approach (Chomsky 1995, 2001, 2013), properties such as gender (nominal class), number and person, which are intrinsically associated with nominal constituents, are features. However relations, for instance theta-roles, are not features, but correspond to syntactic configurations. From this perspective, it is potentially problematic to find that case is treated as a feature, i.e. as nominal class or as number rather than as theta-roles. The fact that case is the only feature in Chomsky (1995) which is radically uninterpretable (i.e. which does not have an interpretable counterpart) is a reflex of the deeper difficulty in reconciling the traditionally relational core of this notion with its feature status. The solution at which Chomsky (2001) arrives is that the real underlying relation between case assigner and case assignee is an agreement relation, involving phi-features; case is but a reflex of this relation which appears on nominal constituents.

Chomsky’s proposal only directly covers nominative and accusative (reflexes of phi-feature checking on T and *v* respectively). If we ask ourselves how Chomsky’s approach could be applied to obliques, the Applicative literature comes naturally to mind (Pylkkänen 2008; Cuervo 2003, on Romance). According to this literature a functional head Appl checks the descriptive dative. We could therefore say that dative is but the reflex of phi-feature agreement between Appl and a DP.

Yet the morphosyntactic reality of Indo-European languages is that cases are uniquely represented in the morphology of nouns (and nominal constituents) and not on the verb or verbal constituents. Therefore, at least for obliques we follow a different tradition, equally represented in formal approaches (cf. originally Fillmore 1968) – namely that they are inflectional counterparts of Ps – in other words elementary predicates mediating the attachment of DPs to the eventive core of the sentence. For example, in a French expression like *le livre de Jean* ‘the book of Jean’ the preposition *de* can be taken to introduce the ‘possession’ relation, between *Jean* (the possessor) and ‘the book’. Similarly, in the German expression *Johann-s Buch* ‘John’s book’, we take the *-s* case ending to realize the ‘possession’ relation as a morphological inflection. This does not contradict Chomsky’s (2001) conclusion as to the incompatibility of feature status with relational content – rather it derives different consequences from it, namely that (oblique) case is not a feature. In fact, though we reject the agreement for obliques, reduction of case to agreement, the present approach can be seen as an implementation of deeper insight of Chomsky (2001) that case is not a primitive category.

Our view of oblique is perhaps most intuitively apprehended starting from the syncretism between genitive and dative, widely attested in natural languages, including Romanian. Romanian displays a two case declension, contrasting nominative/ accusative and oblique; the latter covers sentential (dative) and nominal (genitive) embeddings. In (1a) we exemplify the dative plural with an embedding under ‘give’. In (1b) we show that the forms of the dative are identical to those of the genitive, illustrated by an embedding under N. Since the syncretism of genitive and dative is ‘absolute’ (in the sense of Calabrese 2008), one ordinarily speaks of a single oblique case.

- (1) a. (I) I-am dat băieṭ-i-l-or / fet-e-l-or
 him it.I.have given boy-mpl-def-obl/ girl-fpl-def-obl
 ‘I gave it to the boys/ girls.’
 b. pahar-ul băieṭ-i-l-or / fet-e-l-or
 glass-msg.def boy-mpl-def-obl/ girl-fpl-def-obl
 ‘the glass of the boys/ girls’ *Romanian*

The oblique forms in (1) have three separate layers of inflection. The leftmost layer is the nominal class morphology *-i* for the masculine plural and *-e* for the feminine plural. The second layer is an *-l* definiteness specification; though Romanian is often described as a language with post-nominal articles, here we assume that the definiteness morphology is generated as an inflection within the noun (cf. Dimitrova-Vulchanova and Giusti 1998). Finally the *-or* ending lexicalizes oblique (dative/genitive) case. The direct case form – nominative/ accusative – in (2) doubles the gender and plural number morphemes *-i/ -e* on the right of the verb base (masculine) or on either side of the *-l*- definiteness morphology (feminine). In other words, it lacks any specialized formative for case, as in (2).

- (2) Au venit/ am văzut băieṭ-i-i/ fet-e-l-e
 have come/ I.have seen boy-mpl-mpl/ girls-fpl-def-fpl
 ‘There came/ I saw the boys/ girls’ *Romanian*

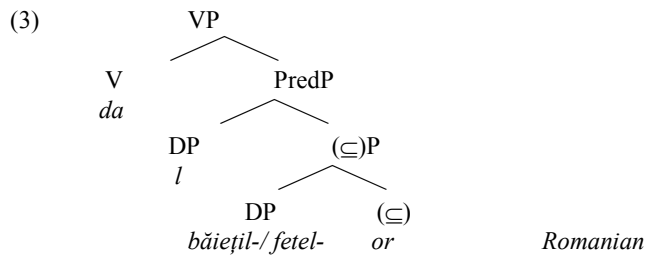
In minimalist approaches, Romanian *-or* in (1) would be the lexicalization of an uninterpretable feature, which is either checked against a similar uninterpretable feature of the head of the construct (verb or noun), as in Chomsky (1995), or is checked as part of an Agree process (Chomsky 2001, 2008). The conditional is necessary here to the extent that Chomsky only explicitly discusses direct cases. In present terms, *-or* in (1) is the inflectional equivalent of the prepositions *to* or *of*, i.e. a predicate introducing a ‘possession’ relation between the argument it selects and another argument.

An idea put forth in very similar terms by various strands of literature is that possession is a surface manifestation of the more elementary part-whole relation. Thus Manzini and Savoia (2007) propose that the Romance clitic *ne* (syncretic in some varieties between genitive and dative) introduces reference to a set which is a ‘superset-of’ some other argument of the sentence (the internal argument, cf. Burzio 1986). Belvin and den Dikken (1997: 170) define the relation introduced by ‘have’ as ‘zonal inclusion’ in the following terms: “the ‘meaning’ of have ... denotes a special kind of inclusion relation ... dubbed ‘zonal inclusion’ ... Entities 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... The type of zones which may be associated with an entity will vary with the entity”. Boneh and Sichel (2010) take the Part-Whole relation to be the conceptual core of partitives (*three of them*) and of inalienable possession (*John’s nose*).

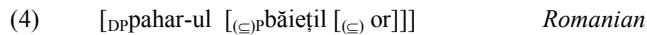
Let us consider for instance the dative. The line of analysis of ditransitive verbs initiated by Kayne (1984) is characterized by the assumption that verbs like ‘give’ take a predication as their complement; the content of this predication is a possession relation between the accusative direct object (the possessum) and the dative (the possessor)(cf. Pesetsky 1995, Beck and Johnson 2004, Harley 2002). We take ‘inclusion’ (part-whole) to

be the primitive content of the ‘to’ preposition; we take oblique case, for instance in Romanian (1a), to have the same content. We notate inclusion with (\subseteq), though as indicated by the discussion that precedes, the inclusion relation is to be construed not mathematically but as a looser zonal inclusion one.

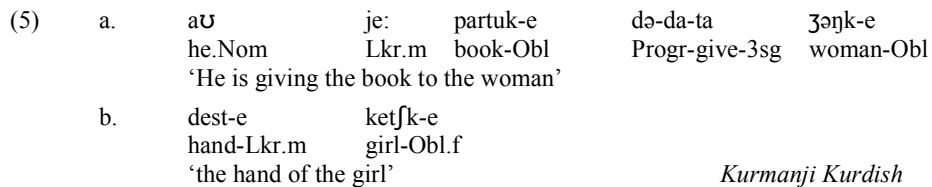
In (3) we provide a structure for Romanian (1a), where the (\subseteq) content is associated with the case ending *-or*. It has often been suggested that case ought to be recognized as a category unto itself, namely K; on the contrary Manzini and Savoia (2011b), who introduce the (\subseteq) notation suggest that Q, given its relational core is closest to case morphology. We simply label Romanian *-or* as (\subseteq) in (3). The (\subseteq) element takes as its complement its sister DP *băieții/-fetel-* ‘the boys/the girls’ and as its external argument the sister DP to its projection, i.e. *paharul* ‘the glass’, and says that ‘the glass’ is ‘zonally included’ by ‘the boys’ or ‘the girls’ (it is in their material possession, or in their vicinity, etc.).



The same oblique case illustrated in a sentential embedding (‘dative’) in (3), is also found in nominal embeddings (‘genitive’), as in (1b). Applying the same analysis as in (3), we obtain structure (4) for Romanian (1b). The interpretation is also the same, namely that ‘the glass’ is in the domain of inclusion of the possessor ‘the boys’.



Similarly in Kurmanji Kurdish the case inflections *-i* for masculine singular, *-e* for feminine singular and *-a* for plural, traditionally characterized as obliques can lexicalize goal (thematic) datives, as in (5a), and possessor genitives in the DP, as in (5b).²



The present approach, that unifies ‘genitive’ and ‘dative’ is not invalidated by

² Bahdini Kurmanji has a system of ‘tense ezafes’ (Haig 2011) in the non-perfect tenses, glossed ‘Linker’ (Lkr), which agree with the nominative subject (cf. Franco *et al.* 2015). An ezafe, i.e. a linker, is also present in (5b), agreeing with the head noun.

languages with specialized genitive and dative. In English itself *of* specializes for nominal embedding and *to* for sentential embedding. Simply the oblique content (\sqsubseteq) is lexicalized as *of* or as *to* depending on whether it is dominated by NP or VP. An example of distinct genitive and dative cases is provided by Punjabi, where we identify the *-nu* suffix with the dative in that it lexicalizes the second internal argument of ditransitives, i.e. the goal argument, as in (6a). The genitive in turn is realized as *d-* (on lexical nouns), as in (6b).³

- (6) a. mɛ: ti-nnu kita:b din-d-i (a)
 I.Abs(f) you-Obl book.Abs.fsg give.Progr.fsg be.Pres
 ‘I giveyou the book’
- b. muŋd-e-d-i-i-ā kita:b/ kitabb-a
 boy-Obl.msg-Gen-fsg/-fpl book.Abs.fsg/ book-Abs.fpl
 ‘the book/the books of the boy’ Punjabi

In (6a), the *-nu* dative case introduces a possessor/inclusion relation (\sqsubseteq), taking as its internal argument the DP to which it attaches, ‘you’, and as its external argument the local DP ‘book’. The genitive, as in (7b), which is canonically taken to correspond to possession, is also a candidate for (\sqsubseteq) content in present terms. We propose that the two different lexicalizations *-nu* and *-de* for the same (\sqsubseteq) category correspond to a contextual sensitivity of (\sqsubseteq) in Punjabi. Thus (\sqsubseteq) is lexicalized as *-nu* when attached to sentential projections (‘dative’), as in (7a), while it is lexicalized as *-de* when it is attached to nominal categories (‘genitive’), as in (7b).

- (7) a. [VP [PredP ti[\sqsubseteq]nu] kita:b] dindi]
 b. [DP[\sqsubseteq]muŋde [\sqsubseteq] di]] kita:b Punjabi

Before concluding this paragraph, let us briefly consider the status of direct case in Romanian, coinciding with the simple morphology of gender and number (nominal class properties, N), as illustrated in (2). Manzini and Savoia (2007) adopt the analysis in Higginbotham (1985) in proposing that nominal bases are predicates, whose obligatory argument is ultimately saturated by Definiteness and other quantifiers. The nominal (gender/number) morphology overtly visible in Romance languages provides a descriptive content for the argument. Thus, in (8) the lexical base ‘*fet*’ denotes the property ‘girl’, and the nominal class (feminine)/ plural morphology *-e* and definiteness morphology *-l-* provide a descriptive content and quantificational closure for the argument of the predicative base.

- (8)
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- Romanian

³ The genitive also bears an inflection agreeing with the head noun.

We could of course assume that the nominal class and number properties of the noun conceal abstract case properties. It seems to us that a much more direct way to proceed is admitting that the number and nominal class properties are able to satisfy both the EPP context (nominative) and the internal argument (accusative) without need to resort to case specifications at all.

1.2. The question of ergative case

Let us summarize so far. We take the fairly traditional view that oblique cases such as genitive or dative have the same content as elementary Ps – thus the Romanian oblique and the English Ps *to* or *of* provide alternative lexicalizations of the same fundamental content, namely (\subseteq). The presence of an essentially unified content can lead to languages having a single oblique for both contexts, as in the more elementary case systems of Romanian or Kurdish; or the DP-internal and VP-internal occurrences of (\subseteq) may have different lexicalizations as genitive and dative respectively.

What initially led us to investigate ergative languages, or languages which allow ergative alignments, was the observation that in two-case systems such as Kurmanji Kurdish, the oblique turns up as the case of the (transitive) subject in the perfect (9a). In the progressive (9b) the external argument is in the nominative and agrees with the verb, while the internal argument bears the oblique case. In the perfect (9a) agreement is with the internal argument in the nominative form.

- (9) a. Zənk-e zərək nəxoft-ən
 woman-Obl children.Nom cover.Perf-3pl
 ‘The woman covered the child/ the children’
- b. Zənək jə: kamis-i də-fut
 woman.Abs Lkr.f shirt-Obl Progr-wash-3sg
 ‘The woman is washing the shirt’ *Kurmanji Kurdish*

In Punjabi the perfect of a transitive sentence has the internal argument in the so-called absolutive case, while the external argument bears the ergative case, and the perfect participle agrees with the internal argument, as in (10a). In the progressive, both the external and the internal argument may occur in the absolutive form and the verb agrees with the external argument, as in (10b).

- (10) a. o-ne (oval-e) muŋd-e dekkh-e
 s/he-Erg (that-mpl.Abs) boy-mpl.Abs see.Perf-mpl
 ‘S/he saw those boys’
- b. muŋd-e dərvaḍḍ-a khol-d-e
 boy-Abs.mpl door-Abs.msg open-Progr-mpl
 ‘the boy/the boys is/are opening the/a door’ *Punjabi*

In reality, in Punjabi the so-called absolutive case coincides with the nominal base inflected for nominal class (gender) and for number. Similarly in Kurmanji, the nominative form coincides with the lexical base. We extend to these languages the conclusions

sketched for Romanian (8), namely that the number and nominal class properties of the so-called absolutive/nominative DPs in (9)/(10) are sufficient to lexicalize the direct arguments of the verb (the internal argument, i.e. sister of V, and the external argument, i.e. Spec, vP). For descriptive purposes we will keep referring to the nominative in Kurdish, while following Bayley (1904), we will speak of the absolute form of the noun rather than of absolutive case in Punjabi⁴.

The research question we want to ask is what relation there is, if any, between the subject oblique in (9a) and the complement obliques that we have studied in section 1.1. We are prompted to ask this question by the existence of an important stream of (formal and historico-typological) literature which connects ‘ergative’ structure with ‘possession’ structures. Montaut (2004: 39) quotes Benveniste’s (1966: 176–186) conclusion that “the Old Persian structure ... is intrinsically possessive in its meaning, and is analogical with the periphrastic perfects in Latin (*mihi id factum*, me-DAT this done)”. In other words, the external argument is treated as the possessor of a state – the relation of the external argument to the predicate is formally identical to that found with nominal predicates. In the words of Johns (1992: 68), “similarities in case and agreement between transitive clauses and possessive phrases is a long-standing issue in Eskimo linguistics... The first of these similarities is that the case assigned to the specifier (possessor) of a possessed noun is the relative case, the same case that is assigned to the actor in the transitive construction”.

Before we can come back to our proposal on the matter we need however to investigate in some detail the aspectual split – on which the presence of oblique/ergative subjects depends.

2. THE ASPECTUAL SPLIT

Recent generative work has explored the idea that ergative alignments correspond to a somewhat more elementary organization of the predicate, or of the sentence than nominative alignments. For Baker and Atlamaz (2013), the perfect is passive-like and differs from the imperfective in that it involves a non-phasal v. Laka (2006) proposes that nominative alignment implies a biclausal structure in Basque. Coon (2013) has a similar analysis of Chol (Mayan). In Coon’s analysis, both perfectives and imperfectives have the same underlying predicate structure. Imperfectives however are embedded under an aspectual auxiliary, determining the switch in alignment. Based on Georgian, Nash (2014) adopts a two-layered structuring of both perfective and imperfective predicates, namely v-V. Aorist aspect is characterized just by the v-V structure and all arguments are introduced within this structure. By contrast, imperfective aspect is introduced by a specialized aspectual node Event, which is also responsible for licensing the external argument of transitives; in this respect Nash thinks of the Event node as akin to Voice in the sense of Harley (2013). Nash concludes that: “the deficient perfectivity of sentences in Georgian aorist... is rather a result of the absence of any Aspect category in the clausal functional structure”. In the perfect “the event is just named without referring to the specifics of its internal temporal organisation as if it were “nominalised” in some sorts”. In what follows, we will provide a different implementation of the same basic idea – which in our view has certain empirical and theoretical advantages.

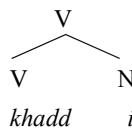
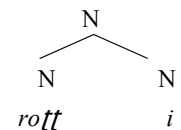
⁴ A rejection of abstract case has precedents in generative grammar, specifically in Marantz (1991) who proposes a morphological algorithm for case.

2.1. The perfect

In Punjabi (Bhatia 2000), the perfect verb is a participial form, bearing number and nominal class (i.e. gender) inflections; this participial form may be embedded under a ‘be’ auxiliary, which is however optional. In the transitive sentences in (10a) above or in (11), the internal argument is in the absolute form, the external argument bears the ergative case, and the perfect agrees with the internal argument.

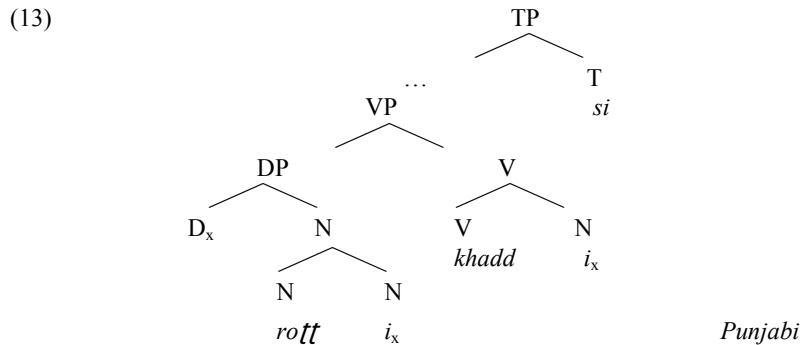
- (11) o-ne roṭṭ-i khadd-i si
 s/he-Erg bread-Abs.fsg eat.Perf-fsg be.Past
 ‘S/he ate the/some bread’ Punjabi

In (11), the noun *roṭṭ-i* ‘(the) bread’ consists of the predicative base *roṭṭ-* ‘bread’ and of the nominal class inflection *-i* for the feminine, as in (12b). As discussed for Romanian (8), we assume that the lexical base ‘bread’ has predicative content, and the nominal class (feminine) morphology *-i* provides a descriptive content for the argument of the predicative base (ultimately bound by an abstract D); we postulate no abstract case (section 1.2). The perfect participle *khadd-i* ‘eaten’ consists of the V root, *khadd-* and the *-i* inflection, which, we assume, provides a morphological level saturation for the internal argument of the verb, as in (12a).

- (12) a.  b.  Punjabi

In standard minimalist terms, Agree is responsible for matching the features of *roṭṭi* with the *-i* inflection of the verb in (11). The procedure is computational and is driven by the presence of uninterpretable phi-features on the verb, acting as probes for the interpretable phi-features of N/DP. We consider that uninterpretable features are a potentially unrestricted device. Their very lack of interpretation allows any uninterpretable feature to be associated with any category – nor do we accept Chomsky’s (1995) conclusion that they are empirically forced (see Manzini and Savoia 2007 on subject-verb agreement). Correspondingly, we call into question the role of uninterpretable features in agreement, as a technical tool conceived to force derivation (Chomsky 1995), and therefore as an acquisition device (Biberauer 2014).

In present terms, the *-i* inflection has pronominal-like content, capable of contributing towards the satisfaction of the open argument slots of predicative bases, as in (13). Agreement is a byproduct of the fact that the elementary semantic content of both *-i* elements in (11) is bound by the same referential material, to be identified with the (abstract) D definite determiner of *roṭṭi*. The latter ultimately satisfies the internal theta-role both of the noun and of the verb. Note that (13) includes the TP layer as well, realized by the ‘be’ auxiliary, though as far as we can tell, the auxiliary does not determine either case or agreement. For the time being, the ergative external argument is missing from the structure.



The analysis of transitive sentences in (13) makes predictions on intransitive sentences. With verbs which on cross-linguistic grounds are unaccusative, i.e. take only an internal argument, this argument appears in the absolute form and agrees with the verb, as shown in (14a) – as expected on the basis of what happens to the internal argument in (13). By contrast, the sole argument of unergatives is introduced by ergative case, i.e. it behaves like the external argument of transitives, as in (14b). In the absence of an absolute argument, the perfect turns up in an invariable, non-agreeing form, confirming that the perfect inflection lexicalizes the internal argument.

- (14) a. su-i degge-i
 needle-Abs.fsg fall.Perf-fsg
 ‘A/the needle/the needles has/have fallen’
- b. kur-i-ne / muṅḍ-e-ne hass-ea si
 girl-fsg-Erg/boy-Obl.msg-Erg laugh.Perf-msg be.Past
 ‘the girl/the boy laughed’
- Punjabi*

2.2. The progressive

The progressive participle agrees in person and number with the external argument of transitives, in the absolute form, as illustrated in (10b) above and here in (15).

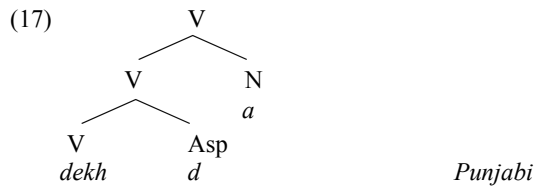
- (15) o muṅḍ-a dekh-d-a/-i (a)
 s/he.Absboy-Abs.msg see-Progr-msg/-fsg be.Pres
 ‘S/he is seeing a boy’
- Punjabi*

With unergatives and unaccusatives, the sole argument surfaces in the absolute form and agrees with the verb, as in (16). Therefore (15)–(16) taken together display the nominative alignment also seen in English or Romance.

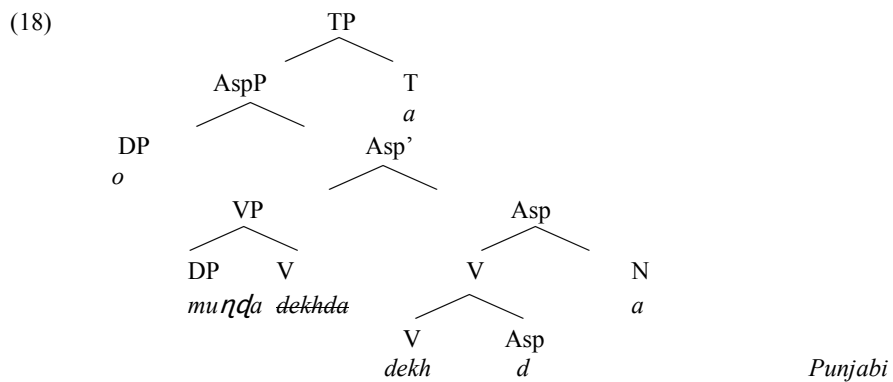
- (16) a. kur-i ron-d-i (a)
 girl-Abs.fsg cry-Progr-fsg be:Pres
 ‘A/the girl is crying’

- b. $\mu n\eta d$ -e deg-d-e
 boy.Abs.mpl fall-Progr-mpl
 ‘(The) boys are falling’ *Punjabi*

As stated at the beginning of this section, ergative alignments are often taken to correspond to a more elementary organization of the sentence than nominative alignments, in generative work. The main point that we want to make in this section is that in Punjabi the added complexity of progressives consists in an Asp layer of structure which is not projected in perfects, cf. the discussion in section 2.1. Consider first the internal structure of the Punjabi progressive participle, as detailed in (17) for *dekh-d-a* ‘seeing-msg’. The lexical base combines with the aspectual (Asp) specification *-d-* for the progressive, and with the phi-features inflection *-a*. Following the discussion of the perfect, the inflection contributes to the saturation of an argument of the verb, but in this instance the external argument is involved (rather than the internal argument, as in the perfect).



The mapping from the morphological structure in (8) onto syntactic constituent structure can be implemented in several ways. Chomsky (1995) has syntactic head-movement, Brody (2003) argues for Mirror Theory; Chomsky (2001) assumes that there is a single V position of merger, and different positions where the verb can be pronounced (‘PF-movement’). In any case, the presence of Asp (i.e. progressive) morphology requires the projection of a two-tiered syntactic structure [Asp [V]]. Thus following for instance Chomsky (1995), we obtain the tree in (18) for sentence (15).



In (18), the VP structure is similar to that postulated for perfects, with *muηda* ‘a boy’ satisfying the internal argument slot of the predicate. However the extra Asp structure

allows a further level of structure to be projected, namely AspP, and a further argument to be introduced as Spec of AspP, namely *o* ‘he’ in (18). This is interpreted as the external argument, i.e. as the argument (causer or other) applied to the elementary VP event, defined by the predicate and its internal argument. The phi-features inflection *-a* in turn composes not with the verb base V, but with the V-Asp complex – which means that it picks up the argument introduced by Asp, here the external argument (or the sole argument of intransitives in (16)). In the configuration so created, the *o* pronoun and the *-a* inflection therefore agree, which in present terms means that they concur to the lexicalization of the same argument slot of the predicate

2.3. The aspectual split

According to section 2.1, the perfect participle in languages like Punjabi is a VP predicate, essentially displaying the same internal complexity as an NP or AP predicate. By contrast, the progressive participle has a more complex internal configuration including an Asp head. In the progressive, therefore, transitivity is built into the structure by Asp – which means that both subject and object can be introduced as bare DPs, as we just saw in (18). Standard minimalism assumes a two-layered verbal structure where the internal argument is introduced by the V predicate, while the external argument is introduced by the transitivizing predicate *v*. For Punjabi we propose a categorial organization reflecting the overt morphological structuring of the language, so that the external argument is introduced by progressive Aspect, not by some more abstract *v* or Voice category. The absence of the Asp layer of structure that characterizes perfects according to present assumptions means that a causer/agent is not licensed by a functional projection of V and can only be introduced via an oblique case, namely the ergative to which we return in section 3.

As mentioned at the beginning of this section, we share the idea that ergative alignments corresponds to a more elementary organization of the predicate than nominative alignments with several recent generative works (Laka 2006, Coon 2013, Baker and Atlamaz 2013, Nash 2014). At the same time here the contrast between the various alignments is ascribed directly to the overt morphological constituency of the participles involved as they project to the syntax (VP vs. AspP). In present terms, progressive aspect introduces an eventive organization of the sentence, corresponding to the projection of a further Asp level of structure. On the contrary, the perfect denotes a property. Thus perfects introduce the internal argument of the predication; any additional argument, and specifically the external argument, can only be introduced as an oblique. In this respect we share the same outlook as Alexiadou (2001: 172-173) namely that “nominalizations and ergative patterns ... are reflections of the same structure: one that involves a single theme argument that appears as sister of the lexical root, and an adjunct type of phrase that introduces the agent”. Section 3 will be devoted to making the oblique characterization of the external argument more precise.

3. THE ERGATIVE

Ergative is a morphologically oblique case – of which it displays the typical morphological makeup. In Punjabi oblique case suffixes, or postpositions, attach to a stem inflected for phi-features, but also (in the masculine) for the absolute vs. oblique distinction. Thus the absolute form of the masculine singular ‘boy’ is *muṛḍ-a*, as in (15); however oblique cases such as dative *-nu*, genitive *-de* attach to the oblique stem *muṛḍ-e*, cf. for instance the genitive *muṛḍ-e-di* in (6b) (cf. also fn. 3). The *-ne* ergative suffix attaches not to the absolute stem, but to the oblique-inflected stem, cf. *muṛḍ-e-ne* in (14b).

A considerable amount of external evidence is available on the Indo-European ergative. The historical literature often connects the *-ne* ergative suffix to the Sanskrit instrumental. Nevertheless Butt and Ahmed (2011), Verbeke and de Cuypere (2009) argue that a much better origin is to be sought in the *-ne* dative, still preserved in some Indo-Aryan languages. Thus in Haryani (Butt and Ahmed 2011), *-ne* externalizes both the ergative and the goal dative (cf. Punjabi *-nu*). More to the point, we can argue against ergative as an instrumental/agent case on internal grounds as well. Consider Punjabi necessity constructions, based on a non-finite form of the verb traditionally called the infinitive (optionally followed by the auxiliary ‘be’). The case and agreement alignment of transitives and unergatives is the same as in the perfect. Thus, the internal argument is in the absolute form and the infinitive agrees with it in number and nominal class; the external argument is in the ergative, as in (19a). However, the sole argument of unaccusatives (an internal argument) is also in the ergative, as in (19b); the verb agreement is in the invariable masculine singular – as always when only oblique arguments are present.

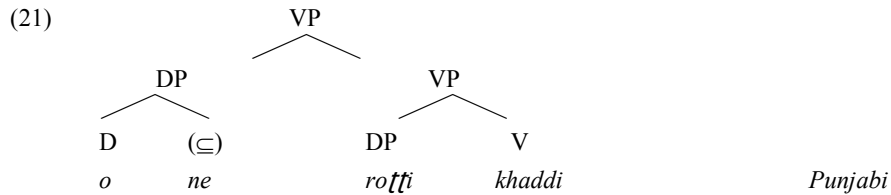
- (19) a. *muṛḍ-e-ne* *roṭṭ-i* *kha-n-i* *a/ si*
 boy-Obl.msg-Erg bread-Abs.fsg eat-Inf-fsg be.Pres/be.Past
 ‘The boy is/was to eat the bread’
- b. *kur-i-ne* *ɔ-n-a/* *dʒa-n-a*
 girl-fsg-Erg come-Inf-msg/ go-Inf-msg
 ‘The girl was to come/go’ *Punjabi*

The evidence in (19) is sufficient in itself to exclude that *-ne* is connected to the expression of external arguments, since it covers the internal argument in (19b) as well. Furthermore, the idea that ergative may be an instrumental/agent case strictly connects to the traditional idea that the perfect is passive-like (cf. Baker and Atlamaz 2013 for a recent endorsement). Yet, apart from other consideration, in Punjabi, perfect and passive have different lexicalizations, since the verb in the passive in (20) is in the root form, not in the perfect. Furthermore, the agent is introduced by the post-position *-to*, excluding a link between ergative *-ne* and *by*-phrases.

- (20) *aval-i* *kita:b* *sar-e* *muṛḍ-ea-to* *hameɟapar*
 that-fsg.Abs book.fsg.Abs all-mpl boy-mpl.Obl-by always
hun-d-i *a*
 read-Inf-sgf be.Pres
 ‘That book is always being read by all the boys’ *Punjabi*

If the ergative case is connected to the dative (Butt and Ahmed 2011 and related literature), in present terms this is tantamount to connecting it to possession/inclusion. This leads us back to the stream of literature, both historical (Benveniste's 1966) and generative (Johns 1992, Alexiadou 2001), that connects 'ergative' structure with nominal possession structures – as briefly discussed in section 1.2. Suppose that this literature is substantially correct. We have already seen that the inclusion category (\sqsubseteq) is externalized as *-de* (the conventional genitive) when embedded in DPs, as in (7b), and as *-nu* (the conventional dative) when embedded under VP, as in (7a).

We now are lead to conclude that the same (\sqsubseteq) content characterizes *-ne*, i.e. the descriptive ergative, in perfects. Combining this characterization for ergative case with the structure of the perfect VP in (13), we obtain (21) as the structure for example (11). We again treat (\sqsubseteq) as a predicate, with two argument places. Its internal argument, namely 's/he', to which (\sqsubseteq) morphologically attaches, is interpreted as including (or locating etc.) not another DP, as in the genitive and dative contexts in (7), but rather a state/event, represented by the VP ('eaten the bread'), which is the second argument of (\sqsubseteq).

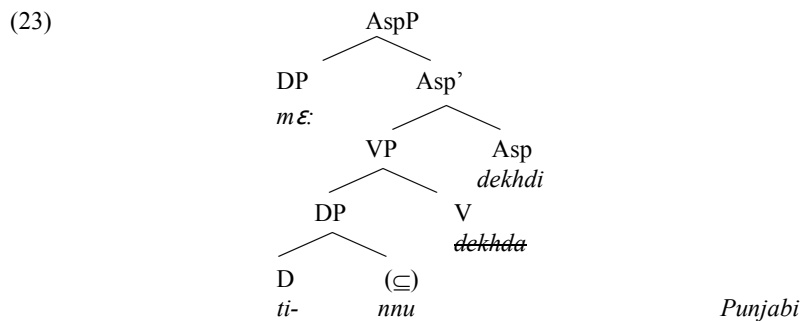


In other words, identifying the ergative with the fundamental oblique relation (\sqsubseteq) implies assuming that this relation may hold not only between two DPs but also between a DP and a predicate. The idea that an oblique head may relate two DPs, but also a DP and an event/state has precedents in the generative literature, specifically in the characterization of low and high Appl by Pylkkänen (2008). Low Appls, corresponding roughly to goal datives, introduce a relation between the goal DP and the theme DP; high Appls, corresponding for instance to experiencer datives, introduce a relation between the experiencer DP and the predicate. We apply the same idea to Differential Object Marking (DOM, Plank 1984, Aissen 2003), as illustrated below by Punjabi, where the DOM alignment is necessary if the internal argument of transitives is animate and definite (or at least one of the two), including of course pronouns.

In Punjabi, DOM is lexicalized by the same *-nu* inflection as the goal dative, as illustrated in (22a) for the progressive and in (22b) for the perfect. In the progressive (22a), the verb agrees with the external argument in the absolute form, as already illustrated in (18). In the perfect (22b), the DOM case on the internal argument determines lack of agreement between it and the participle (a point we shall come back to). Since the participle does not agree with the ergative external argument either, it surfaces in an invariable masculine singular form, as in (22).

- (22) a. mɛ: muŋd̪-e-nu/ti-nnu dekh-d-i a
 I.Abs(f) boy-Obl.msg-Obl/you-Obl see-Progr-fsg be.Pres
 ‘I am seeing the boy/you’
- b. o-ne mi-nnu/ti-nnu dekkh-ea
 s/he-Erg me-Obl/you-Obl see.Perf-msg
 ‘S/he saw me/you’
- Punjabi*

Though the DOM case is traditionally glossed as an accusative, its coincidence with the dative is not a matter of mere homophony. A syntactic argument in favour of its oblique status is provided precisely by the fact that it is incompatible with agreement in the perfect, as in (22b). Furthermore, the expression of DOM systematically coincides with that of the dative across the Indo-European languages, including Romance languages, Hindi, and many Iranian varieties. Manzini and Savoia (2014b), Manzini and Franco (to appear) therefore take the lexical coincidence with dative at face value and propose that DOM introduces a (\sqsubseteq) relation between the animate/specific internal argument to which it attaches and the V elementary event. Consider structure (23) for sentence (22a). The deictic DP *ti*-‘you’ is attached to the core of the sentence by the (\sqsubseteq) case, lexicalized by *-nu* – as if one were to say ‘I give/have (a) sight to/of you’ where the internal argument ‘you’ is in an abstract possessor/inclusion to the elementary state/event ‘see/sight’.⁵



Summarizing our core proposal, under the account of Punjabi resulting from the progressive structure in (18) and the perfect structure in (21), the same predicate-argument complex can be introduced by a two-layered predicate or by a one-layered predicate plus an oblique ‘case’ on one of the arguments (in reality an elementary part-whole predicate). Therefore even within the same language, the same argument-predicate complex can be conveyed by different syntactic configuration, supporting the idea that there isn’t a universal categorial template (e.g. v-V) whose pronunciation is the only possible dimension of variation.

⁵ Other aspects of the syntax of Punjabi cannot be dealt with here, in particular the person split. In the perfect, 1st /2nd person (1/2P) external argument are found in the absolute form, rather than in the ergative case obligatory with 3rd person referents. On the face of it, the attachment of 1/2P in the structure takes place by simple argument application (via a lambda-operator). In other words, Participants denotation, anchored to the universe of discourse, seems to dispense with specialized means of attachment to the structure of the event.

4. 'ERGATIVITY' IN KURDISH

We can now go back to Kurmanji Kurdish briefly introduced in section 1.2 as characterized by a contrast between a nominative alignment in the present and an ergative one in the perfect. As we saw Kurmanji has a two-case declension opposing a nominative/absolute form to an oblique one. The latter lexicalizes the goal argument of ditransitives ('dative') in (5a), the possessor of nouns ('genitive') in (5b) and the external argument of transitives/sole argument of intransitives in the ergative alignment. Therefore it provides *prima facie* support for our central analysis, that ergative is essentially a (contextual) differentiation of the basic 'possessor' (inclusion/location) oblique of natural languages.

In the nominative alignment, seen in the present, the nominative/absolute form of the noun lexicalizes the external argument of transitive verbs, as in (24a), and the sole argument of intransitives, as in (24b). The verb agrees with this absolute argument in person and number. The internal argument of transitives in (24a) is in the oblique.

- (24) a. εz kurk-(æk-)i ja: də-bin-Im
 I.Nom boy-(indef)-Obl Lkr.f Progr-see-1sg
 'I(f) am seeing the/a boy'
- b. ʒənək ja: də-nəv-it
 woman.Nom Lkr.f Progr-sleep-3sg
 'The woman is sleeping' *Kurmanji Kurdish*

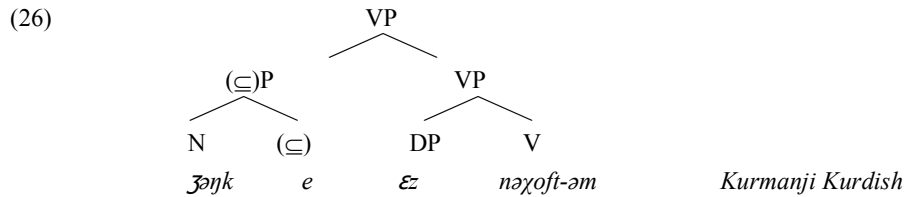
In the ergative alignment, seen in the past, the absolute form characterizes the internal argument of transitives as in (25a), and the sole argument of intransitives (both unaccusative and unergative), as in (25b), with which the verb agrees in person and number. The external argument of transitives in (25a) is lexicalized by the oblique.

- (25) a. ʒənək-e εz nəχoft-əm
 woman-Obl I.Nom cover.Perf-1sg
 'The woman covered me'
- b. tu nəvəst-i
 you.Nom sleep.perf-2sg
 'You have slept/he has slept' *Kurmanji Kurdish*

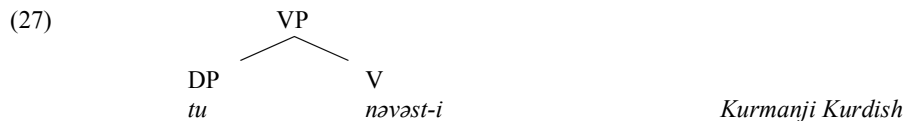
We tentatively assume that the ergativity split of Kurmanji has the same basic shape as that of Punjabi.⁶ We maintain that the organization of the predicate is simpler in the

⁶ The forms of the verb in (24) and (25) are traditionally described as present and past. However the T category is too high in the sentence to be able to determine different internal shapes of the predicate. Therefore here we assume that the split is aspectual, opposing imperfective and perfective. It should be noted that there is an empirical difficulty with the identification of the past with a perfective, namely that it can combine with the *di-* prefix with progressive interpretation. Nevertheless, Thackston (2006) shows that *di-* is in complementary distribution with the subjunctive prefix *bi-* and with the negative prefix in the present, leading him to label *di-* as a 'modal prefix'. In structural terms, the interaction with negation and subjunctive morphology, which is external to the predicate (VP/AspP), supports the conclusion that the *di-* (*də-*) morphology is introduced when the basic shape of the predicate, either VP or AspP, is defined.

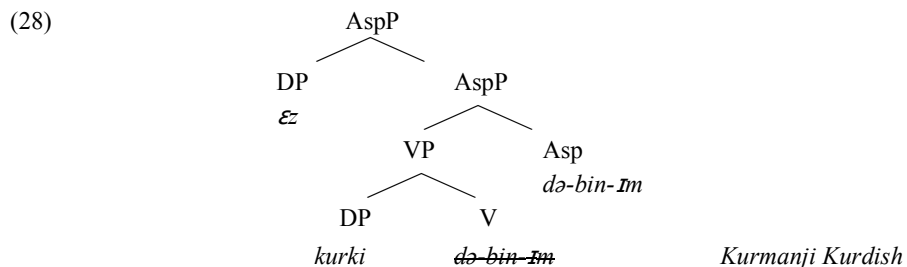
perfect, which in present terms corresponds to a VP. In the absence of an Asp layer, the external argument is introduced by the oblique case/elementary predicate ($\underline{\subseteq}$), denoting a relation between the argument itself and the V(P) event, as in (26). The agreement on the verb targets the internal argument, which correspondingly surfaces in the absolute form.



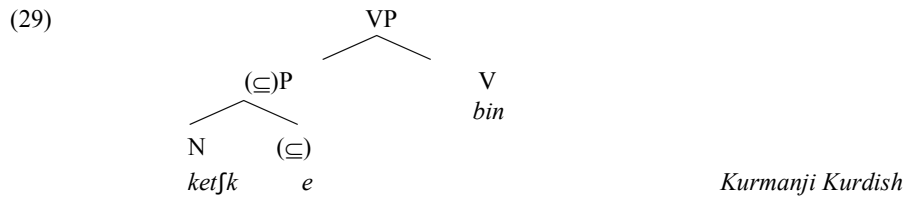
In comparison with Punjabi, and differently from it, Kurmanji presents a classical ergative alignment, which opposes the external argument of transitives to other arguments (the internal argument of transitives and the sole argument of all intransitives); the alignment of Punjabi is what is more properly characterized as active/inactive. In practice, ergative and active alignment differ with respect to how they treat the sole argument of unergatives. We model Kurmanji unergatives by assuming that the verb inflection lexicalizes the first argument (internal or external) to be syntactically merged. The structure of the unergative sentence in (27), cf. example (25b), is similar to that of an unaccusative, since the sole argument of intransitives is the first syntactically merged argument.



Let us turn to imperfective sentences. If we apply to them the same analysis as for the Punjabi progressive, we obtain structures like (28) for the transitive example (24a). Assuming that the verb inflection composes with Asp, we expect that it will agree with the outer argument of the predicate, i.e. the external argument in a transitive or unergative structure or the internal argument if the verb is unaccusative. In this respect, therefore, Kurmanji poses no difficulty, replicating the pattern already studied for Punjabi.



A notable property of Kurmanji is that oblique case marking of the internal argument in structures like (28) is the only admissible option. Extending previous proposals on Punjabi DOM, the internal argument in (28) is attached through the (\subseteq) case, as in (29).



The interpretation that we impute to the structure in (29) is the one already outlined for Punjabi DOM objects, in the sense that the internal argument is treated as a possessor of the predicate (included in) V. The alternative is to say that the oblique case in Kurmanji is the default case, as Baker and Atlamaz (2013) propose. However note that it is neither a morphological default (the morphological default is obviously the absolute form) – nor the semantic default (an empty feature matrix), since it can alone support the dative/genitive interpretation, as illustrated in section 1.1.

5. CONCLUSIONS

In the first part of this article we proposed that oblique complement cases, like dative and genitive, have a predicative content. Specifically they introduce an inclusion or part/whole relation whereby the DP they attach to is taken to include (hence possess) a local DP. We illustrated this point with data from Romanian. We link this analysis of obliques to the analysis of ergative alignments, in Punjabi and Kurdish. Our core conclusion with respect to the latter is that while progressive sentences have structures where the external argument is attached to an Asp verbal layer of structure, in perfect sentences the external argument is attached to the main sentential spine via the ergative case, in reality an elementary predicate denoting inclusion-of-the event. Perfects denote properties; therefore, while they introduce the internal argument of the predication, the external argument can only be introduced as an oblique, i.e. ultimately as a possessor, if we take (\subseteq) to be the fundamental characterization of obliques. On the contrary, the progressive aspect introduces an eventive organization of the sentence, corresponding to the projection of an Asp level of structure. Given these assumptions, we predict the basic shape of the aspectual split, whereby the progressive presents a nominative-accusative alignment (i.e. two direct cases) – while the perfect presents the ergative alignment (an oblique and a direct case).

REFERENCES

- Aissen, J., 2003, “Differential object marking: iconicity vs. economy”, *Natural Language and Linguistic Theory*, 21, 435–483.
- Alexiadou, A., 2001, *Functional Structure in Nominals: Nominalization and Ergativity*, Amsterdam, John Benjamins.

- Baker, M., Ü. Atlamaz, 2013, "On the Relationship of Case to Agreement in Split-Ergative Kurmanji". Ms. Available at: http://www.rci.rutgers.edu/~ua46/assets/pdf/mb_ua_draft.pdf
- Bailey, T. G., 1904, *Panjabi Grammar*, Lahore, Saaddi Panjabi Academy.
- Beck, S., K. Johnson, 2004, "Double objects again", *Linguistic Inquiry*, 35, 97–124.
- Belvin, R., M. Den Dikken, 1997, "There, happens, to, be, have", *Lingua*, 101, 3–4, 151–183.
- Benveniste, É., 1966, *Problèmes de linguistique générale 1*, Paris, Gallimard.
- Bhatia, T. K., 2000, *Punjabi. A Cognitive-Descriptive Grammar*, London, Routledge.
- Biberauer, T., 2014, "Reconciling Emergentism and Universalism: a new minimalist approach to language acquisition", variation and change. Handout, *Current issues in linguistic variation*, Bucharest, 28-29 November.
- Brody, M., 2003, *Towards an Elegant Syntax*, Routledge, London.
- Burzio, L., 1986, *Italian syntax*, Dordrecht, Kluwer.
- Butt, M., T. Ahmed, 2011, "The redevelopment of Indo-Aryan case systems from a lexical semantic perspective", *Morphology*, 21, 545–572.
- Chomsky, N., 1995, *The Minimalist Program*, Cambridge, MA, MIT Press.
- Chomsky, N., 2001, "Derivation by phase", in: M. Kenstowicz (ed.), *Ken Hale: a life in language*, Cambridge, MA, MIT Press, 1–52.
- Chomsky, N., 2013, "Problems of Projection", *Lingua*, 130, 33–49.
- Coon, J., 2013, *Aspects of split ergativity*, Oxford, Oxford University Press.
- Fillmore, C. J., 1968, "The Case for Case", in: E. Bach, R. T. Harms (eds), *Universals in Linguistic Theory*, New York, Holt, Rinehart and Winston, 1–88.
- Franco, L., M. R. Manzini, L. M. Savoia, 2015, "Linkers and agreement", *The Linguistic Review*, 32, 277–332.
- Haig, G., 2011, "Linker, relativizer, nominalizer, tense-particle: On the Ezafe in West Iranian", in: F. H. Yap, K. Grunow-Härsta, J. Wrona (eds), *Nominalization in Asian Languages*, Amsterdam, John Benjamins, 363–390.
- Harley, H., 2002, "Possession and the Double Object Construction", *Linguistic Variation Yearbook*, 2, 29–68.
- Harley, H., 2013, "External arguments and the Mirror Principle: On the distinctness of Voice and v", *Lingua*, 125, 34–57.
- Higginbotham, J., 1985, "On semantics", *Linguistic Inquiry*, 16, 547–621.
- Johns, A., 1992, "Deriving ergativity", *Linguistic Inquiry*, 23, 57–87.
- Kayne, R. S., 1984, *Connectedness and Binary Branching*, Dordrecht, Foris.
- Laka, I., 2006, "Deriving split ergativity in the progressive: the case of Basque", in: A. Johns, D. Massam, J. Ndayiragije (eds), *Ergativity: Emerging Issues*, Dordrecht, Kluwer, 173–196.
- Manzini, M. R., L. Franco, to appear, "Goal and DOM datives", *Natural Language and Linguistic Theory*.
- Manzini, M. R., L. M. Savoia, 2007, *A Unification of Morphology and Syntax*, London, Routledge.
- Manzini, M. R., L. M. Savoia, 2011a, *Grammatical Categories*, Cambridge, Cambridge University Press.
- Manzini, M. R., L. M. Savoia, 2011b, "Reducing 'case' to 'agreement': Nominal inflections in the Geg Albanian variety of Shkodër", *Linguistic Variation*, 11, 76–120.
- Manzini, M. R., L. M. Savoia, 2014a, "From Latin to Romance: case loss and preservation in pronominal systems", *Probus*, 26, 217–248.
- Manzini M. R., L. M. Savoia. 2014b. "Person splits in the case systems of Geg Albanian (Shkodër) and Arbëresh (Greci)", *SILTA-Studi italiani di linguistica teorica e applicata*, 43, 7–42.
- Manzini M. R., L. M. Savoia, L. Franco, 2015, "Ergative case, Aspect and Person splits: two case studies", *Acta Linguistica Hungarica*, 62, 3, 1–55.
- Montaut, A., 2004, "Oblique Main Arguments in Hindi/Urdu as localizing predications. Questioning the Category of Subject", in: P. Bhaskararao, K.V. Subbarao (eds), *Non-nominative Subjects* (Vol. 1), Amsterdam, John Benjamins, 33–56.
- Nash, L., 2014, "The structural source of split ergativity and ergative case in Georgian", Ms. Université de Paris 8.
- Pesetsky, D., 1995, *Zero Syntax*, Cambridge, MA, MIT Press.

- Plank, F. (ed.), 1984, *Objects: Towards a Theory of Grammatical Relations*, London, Academic Press.
- Pylkkänen, L., 2008, *Introducing Arguments*, Cambridge, MA, MIT Press.
- Thackston, W.M., 2006, *Kurmanji Kurdish: A Reference Grammar with Selected Readings*, Harvard University.
- Verbeke, S., L. De Cuypere, 2009, “The rise of ergativity in Hindi. Assessing the role of grammaticalization”, *Folia Linguistica Historica*, 30, 367–390.