Agreement, case and ergativity splits in Punjabi, compared to Kurdish

Abstract. The so-called ergativity split between perfect and progressive tenses is observed both in languages with a specialized ergative case (Punjabi) and in languages without (Kurdish). We propose that perfects are states/results corresponding to a VP projection; external arguments are introduced by means of an oblique case, namely an elementary functional head/predicate Q($\subseteq$) ('oblique') or Loc($\subseteq$) ('ergative') saying that the event is 'included by', 'located at' the argument. In a VP predicate the inflection picks up the internal argument, determining phi-feature identity ('agreement') with DPs lexicalizing it. Progressives have a more complex organization of the predicate/event, where the progressive head Asp projects a functional layer and can introduce the external argument, determining nominative type agreement. Punjabi further presents a canonical 1/2P vs. 3P Person split. Our proposal yields the syntactic Person split as a result of the intrinsic ability of 1/2P to serve as 'location-of-event'.

1. Empirical and theoretical background

In several Eastern Indo-European languages case alignment varies in progressive and perfect sentences, as illustrated in (1) with data from Punjabi (Doabi variety). [1] In the perfect of a transitive sentence, the internal argument is in the so-called absolutive case, the external argument bears the ergative case, and the perfect participle agrees with the internal argument, as in (1a). Since in Punjabi the so-called absolutive case coincides with the nominal base inflected for nominal class (gender) and for number, we will henceforth speak of the absolute form of the noun rather than of the absolutive case. In the progressive, both the external and the internal argument may occur in the absolute form and the verb agrees with the external argument, as in (1b). As an help to the reader,

[1] The relevant facts are familiar from the descriptive and theoretical literature, which will be quoted as the discussion proceeds. Our evidence does not modify the empirical record; however using primary data allows us to base the analysis directly on the intuitions of our native informants. The choice of Punjabi depends on its emblematic case organization (Bailey 1904, Bhatia 2000) and, naturally, on the availability of speakers, among our students. Data are transcribed in a broad IPA from the variety spoken in the Indian town of Hoshiarpur; in the transcription we leave out in particular tonal properties (Bhatia 2000). Some variability in the examples similarly reflects the native speakers' varying output (for instance as to whether the auxiliary is or is not realized). Analogously, our Kurdish data are obtained through interviews with native speakers. The Bahdini variety of Kurmanji Kurdish was elicited from Northern Iraqi speakers. The Sorani data are from two informants, one from the town of Mariwan and the other from Sanandaj, both in Iran. This research has benefited from PRIN 2012 funds, granted by the Italian MIUR. We take the opportunity to thank Miss Rajvir Kaur and her family for their collaboration.

we highlight (argument, participle) agreement pairs.

(1) a. o-ne (oval-e) muɳɖ-e dekkh-e
s/he-Erg (that-mpl.Abs) boy-mpl.Abs see.Perf-mpl
'S/he saw those boys'

b. o muɳɖ-a dekh-d-a/-i (a)
s/he.Abs boy-msg.Abs see-Progr-msg/-fsg be.Pres
'S/he is seeing a boy'

Punjabi

In Iranian languages the case system is more reduced than in Indo-Aryan languages – and there is no specialized ergative case. This does not prevent Kurmanji Kurdish in (2) from having a progressive vs. perfect split. In the perfect (2a) agreement is with the internal argument in the nominative form; the external argument is in the objective/oblique. In the progressive (2b) the external argument is in the nominative and agrees with the verb, while the internal argument bears the objective/oblique case.

(2) a. mən mez-a nəχoft
I.Obl table-Nom cover.Perf.3sg
'I covered the table'

b. ɛz jɑ: mez-e də-nəχɛv-ɪm
I.Nom Lkr.f table-Obl Progr-cover-1sg
'I(f.) am covering the table'

Kurmanji Kurdish (Bahdini dialect)

Given the twin postulates of the Faculty of Language (FL) and of Universal Grammar (UG) (in the sense of Hauser, Chomsky and Fitch 2002), much current theorizing assumes a picture whereby syntax includes interpretation, in the sense that all relevant semantic information finds itself encoded into syntactic structure. Under it, categories correspond to Platonic objects, entirely listed in UG. Language variation reduces to which categories are pronounced and which are not. Several authors, from different perspectives, consider this solution inadequate to capture for the extent of linguistic variation. We know that there exist languages that seem to cast a shadow over the more crucial tenets of FL/UG, like recursion/embedding (Evans and Levinson 2009, Pinker and Jackendoff 2009, Everett 2005), or fundamental categorial distinctions like noun and verb (Jelinek

1995). Evans and Levinson (2009) get to the point of arguing that linguistic diversity makes the existence of linguistic universals and in particular, the notion of UG into a myth, devoid of explanatory power. This conclusion is ideological, in turn.

Rather, we agree with Culicover and Jackendoff (2006: 416) that interpretation is "the product of an autonomous combinatorial capacity independent of and richer than syntax", "largely coextensive with thought", which syntax and syntactic categorization simply restrict in crucial ways. In this sense, the notion that UG is a container of a fixed list of categories must be revised, endowing UG with a more defensible characterization of categorial universals. Suppose that the lexicon is the locus of linguistic variation– in the presence of an invariant repertory of interface primitives, both phonological and conceptual. A non-trivial question arises: how can the lexicon vary on the basis of a universal inventory of properties? A possible answer which is pursued by various scholars is that variation is the result of the different ways of lexicalizing abstract categorial primitives – which in themselves form a universal repertory. We pursue a different picture. There is a conceptual space to be lexicalized and variation results from the different partition (categorization) of that space by the lexicon. Linguistic variation depends on which pieces of the universal conceptual space the language-specific lexicon/categories externalize and how. Both pictures are consistent with the idea that the 'externalization' process (Berwick and Chomsky 2011) creates the space of the variation. In the case study at hand, languages vary in the way they externalize states and events, depending on their specific lexical means and we aim at explaining this without necessarily assuming a unique underlying homogeneous categorial level from which every language constructs its morpho-syntax.

In their recent analysis of Kurmanji Kurdish, Baker and Atlamaz (2013) assume an abstract functional sequence Voice-v-V. Semantically Voice and v share the burden of expressing transitivity in that v "creates a transitive event" and Voice "theta-licenses the subject". Leaving aside the question whether the latter two notions are in fact distinct (they are not for Chomsky 1995), it is difficult to find lexical correlates for both of the heads v and Voice. The adoption of a rich abstract structure motivated by syntax internal or semantic reasons, without any regard for opacity at the morpholexical interface characterizes many generative models, most explicitly cartography (Cinque and Rizzi 2010). Yet it is not necessarily part of the minimalist program; in fact the minimalist postulate of projection of the syntax from lexical terminals would appear to be at odds with it.

In addition, Baker and Atlamaz adopt a conception of Agree roughly corresponding to Cyclic Agree in the sense of Bejar and Rezac (2009). How this operates can be most easily seen in the perfect. In (2a) the transitive verb agrees with the internal argument; however in unergative

contexts, for instance in (3), the verb agrees with the external argument. Assuming that the agreement probe is associated with Voice, downward probing yields a successful match when an internal argument is present, as in (4a). When no internal argument is present the probing goes upwards to the external argument, as in (4b). As outlined by Brody (2006), the novelty of minimalist Agree is that it introduces a probe-goal asymmetry, which brings it closer to movement, than to traditional symmetric agreement. If transferred to the domain of movement, the option of probing upward or downward would however mean that movement can go down as well as up, an option not normally entertained. In other words, while minimalist terminology survives, the deeper intuition behind minimalist asymmetric Agree is denied, once probing downwards and upwards are both licenced.

(3) tu nəvəst-i
you.Nom sleep.Perf-2sg
'You slept'

Kurmanji Kurdish (Bahdini dialect)

(4) a. EA [Voice$_{\varphi}$ [v [V IA$_{\varphi}$]
b. EA$_{\varphi}$ [Voice$_{\varphi}$ [v [V]

Finally, data like (1)-(3) involve the descriptive notion of case, for which Chomsky (2001) proposes a reduction to Agree. According to Chomsky, at least the two structural cases (accusative and nominative) are reflexes of agreement with v and T respectively. Beyond technicalities, the intuition that his model expresses, and that is fairly explicit in Chomsky (2001), is that case is not a primitive of the theory, since case dissolves into phi-features. Baker and Atlamaz's ostensibly support this model, to the extent that they propose that the nominative case of Kurmanji depends on agreement of either EA or IA with Voice in (4), while the objective/oblique case is a default. Yet the reduction of case to agreement cannot be effected in other languages. If, following Baker and Vinokurova (2010) on Sakha, we assume that accusative is assigned by the dependent case algorithm of Marantz (1991), we end up with a primitive notion of case all over again.

In the present article, we adopt a symmetric view of agreement (no uninterpretable probes) that departs from standard minimalism. In other respects, we uphold a conservative version of minimalist ideas, and we try to show that it is sufficient to account for the data. Specifically, we uphold projection of the syntax from the lexicon – and therefore exclude a realizational morphology of the type of Distributed Morphology. We also keep to Chomskyan conceptions of phrase structures (Chomsky 2013) and to a parsimonious repertory of heads. Finally, we try to provide an

implementation of the Chomskyan idea that case is not a primitive notion of grammar. We argue that in order to succeed, this program must enlarge the repertory of primitives in terms of which 'case' is defined beyond phi-features.

This is specifically true of oblique cases. It is well-known that in Indo-Aryan languages Differential Object Marking (henceforth DOM, Aissen 2003 and literature quoted there) affects animate and definite internal arguments of transitives. This is true both in progressive sentences, as in Punjabi (5b), and in perfect sentences, as in Punjabi (5a). The DOM case is traditionally taken to be a (differential) accusative. However, as we will argue (section 3.1), the DOM case (of Punjabi) is not an accusative, but an oblique, exactly as it appears to be, coinciding in particular with the thematic dative (Manzini and Franco to appear).

(5) a. muɳḍ-e-ne roṯṯ-i-nu khadd-a ni
boy-Obl.msg-Erg bread-fsg-Obl eat.Perf-msg Neg
'The boy did not eat the bread'

b. o muɳḍ-e-nu dekh-d-a/-i (a)
s/he.Abs boy- Obl.msg-Obl see-Progr-msg/-fsg be.Pres
'S/he is seeing the boy'

Punjabi

Examples like (5a) are also notable because of their agreement patterns. The DOM case on the internal argument implies lack of agreement between it and the participle. Since the participle does not agree with the ergative external argument either, it surfaces in an invariable masculine singular form. Now, Punjabi has a Person split under which 1st/2nd person pronouns cannot be associated with ergative case, but surface in the absolute form even as the external arguments of perfects, as in (6). If the internal argument is in the DOM case, the invariable agreement pattern is observed, as in (6b). Suppose that following Anand and Nevins (2006) we stipulate that obliques cannot agree. Suppose further that an agreement probe which cannot find a goal in its c-command domain (e.g. the DOM/oblique object in (6b)) can search upwards, as under Cyclic Agree. We may expect the absolute 1st person argument to satisfy it in (6b), triggering agreement. There may of course be all sorts of independent reasons why this does not happen; yet we take the invariable form of the verb in (6b) as potential empirical evidence against optimization devices being part of Agree (hence against Cyclic Agree).

(6) a. mɛ: kita:b / kitabb-a pə'ɾ-i /-ĩã si

I.Abs book.fsg.Abs/book-fpl.Abs read.Perf-fsg/-fpl be.Past

'I read a book/books'

b. mɛ: kita:b-nu pə'ɾ-ea si

I.Abs book.fsg-Obl read.Perf-msg be.Past

'I read the book'

Punjabi

On ergative languages, we take the position of Kiparsky (2001: 371) that "an 'ergative language' is a language that has ergative case […] no more, no less". As for ergativity in the sense of case and agreement alignments involving the ergative case, Johns (1992) states that "there may be more than one set of features that can produce the constellation of facts that we label ergativity". In other words ergativity is too complex a notion to be a primitive of grammar and it is also unlikely that it can be reconstructed as a unitary notion by the formal system.

We single out for mention an important stream of literature, specifically on Iranian languages, that connects 'ergative' structure with 'possession' structures. Montaut (2004:39) quotes Benveniste's (1966: 176-86) 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)"[2]. In other words, in the ergative alignment, the external argument is treated as the possessor of a state/event – the relation of the external argument to the predicate is formally identical to that found with nominal predicates. Indeed in Kurmanji Kurdish the possessor in nominal expressions, for instance (7a), is associated with the same oblique case as the subject in perfect sentences, for instance (7b).

(7) a. dest-e ketʃk-e

hand-Lkr.m girl-Obl.f

'the hand of the boy/girl'

b. ʒəŋk-e zɔruk nəχoft / nəχoft-ən

woman-Obl.f child/children.Nom cover.Perf.3sg/ cover.Perf-3pl

'The woman covered the child/ the children'

Kurmanji Kurdish (Bahdini dialect)

[2] Benveniste's view has been subsequently criticized by Iranologists (e.g. Cardona 1970), who have revived the more traditional characterization of the past participle construction of (Old) Iranian as a "passive construction". Nevertheless Lazard (2005), Butt (2006), Haig (2008), Whitman & Yanagida (2014), among others, come out in favor of the possessive analysis.

This line of inquiry, relating ergativity to nominal structures, is not just relevant for Indo-European languages. 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". Thus for Johns a transitive declarative sentence "is constructed syntactically along the lines of 'The bear is the man's stabbed one'. Semantically of course it must have the meaning 'The man stabbed the bear'" (p. 61)[3].

Going back to the more general picture, recent works on case and agreement phenomena (including ergativity splits) require a considerable amount of technology which, while being routinely inscribed into what we may call the 'new minimalist synthesis', considerably enriches the original minimalist program. In the body of this article we will argue that data like those in (1)-(7) can be derived on the basis of more conservative assumptions, along the lines partially sketched.

2. Punjabi: The perfectivity split

In order to understand the Punjabi data, it is useful to have a sketch of Punjabi morphology at hand. There are two nominal classes, conventionally masculine and feminine. A sub-set of masculine nouns present the inflection *–a* in the absolute singular form (8a) and *–e* in the oblique singular and in the absolute plural (8b). The oblique plural masculine is in turn realized as*–ea* (8c). Case postpositions, like ergative *-ne*, or DOM *–nu* attach to the inflectional oblique. As for the feminine, at least some nouns present the inflection *–a* in the plural as in (9a). Another sub-set of them alternates between a singular with final *–i* and a plural with *–ĩã̃*, as in (9b-c).

(8)	a.	munɖ-a	'boy-msg.Abs',
	b.	munɖ-e	'boy-msg.Obl/boy-mpl.Abs'
	c.	munɖ-ea	'boy-mpl.Obl'
(9)	a.	kita:b/kitabb-a	'book.fsg.Abs/book-fpl.Abs'
	b.	kuɾ-i	'girl-fsg.Abs
	c.	kuɾ-ĩã	'girl-fpl.Abs

[3] The fact that the ergative case often coincides with the genitive has been noted in the typological literature (Allen 1964, Dixon 1979, Comrie 1978).

3rd person pronouns show a similar case organization to nouns, as indicated in (10a-d) for the pronoun *o/e* 'he/she', where the contrast is remote (*o*) vs. proximate (*e*). 1st/ 2nd person pronouns have a specialized form for genitive (11c) besides an absolutive and a dative/DOM form (11a-b); they lack ergative.

(10)	a.	o/e	3sg.absolute
	b.	o/e-nu	3sg-dative/DOM
	c.	o/e-ne	3sg-ergative
	d.	o/e-de	3sg-genitive
(11)	a.	mɛ:	1sg absolute
	b.	mi-nnu	1sg-dative/DOM
	c.	me-re	1sg-genitive

2.1 The perfect

The basic case and agreement of the perfect was already exemplified in (1a). As mentioned there, the internal argument of a transitive perfect appears in the absolute form, while the external argument takes the ergative. The verb is a participial form, bearing number and nominal class inflections; this participial form may be embedded under a 'be' auxiliary, which is however optional. The participle inflection agrees with the absolute internal argument, as illustrated in more detail in (12).

(12)	a.	ku'ɾ-ĩã-ne	dərvaddʒ-a	kolt-a	(a)
		girl-fpl-Erg	door-Abs.msg	open.Perf-msg	be.Pres
		'The girls opened the door'			
	b.	o-ne	rotː-i	khadd-i	si
		s/he-Erg	bread-Abs.fsg	eat.Perf-fsg	be.Past
		'S/he ate the/some bread'			
	c.	o-ne	kut't-e	peddʒ-e	
		s/he-Erg	dog-Abs.mpl	send.Perf-mpl	
		'S/he sent the dogs'			
	d.	una-ne	ki'tabb-a	dek'kh-ĩã	
		they-Erg	book-Abs.fpl	see.Perf-fpl	

'They saw the books'

Punjabi

Take (12b). The noun *roʈʈ-i* '(the) bread' consists of the predicative base *roʈʈ* 'bread' and of the nominal class inflection *–i* for the feminine. We could of course assume that the nominal class and number properties of the absolute, agreeing DPs in (12) conceal abstract case properties – say absolutive case. Yet Chomsky's (2001) proposal about case actually amounts to saying that case dissolves into phi-features. It is not obvious why one would want to implement this by saying that there are abstract case properties that are parasitically (hence invisibly) checked every time phi-features are checked, as one routinely does in, say, English. A much more direct way to proceed is admitting that number and nominal class properties of these elements are able to lexicalize argumental reference without need to resort to case specifications at all.

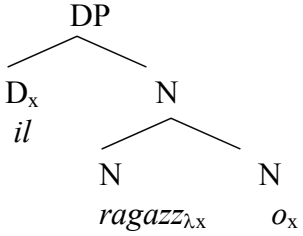
In fact, the basic role of the uninterpretable case feature on DPs in minimalist theory is to encode the Case Filter of GB theory, as originally proposed by Vergnaud (2008[1978]). The intuition is that chains (i.e. n-tuples of referential material ultimately satisfying an argument slot) must be 'visible' and that case satisfies visibility. Yet under Chomsky's (2001) proposal it is in fact agreement that ultimately gives visibility to a DP (since case depends on agreement). A difference between agreement features and their case reflex is that the latter, being uninterpretable, is deleted upon checking, so that checking of case yield a freezing or criterial effect (Rizzi and Shlonsky 2007), while agreement can be iterated. Yet once again the real difference seems to be between different types of agreement (criterial and iterable – or perhaps labelling and non-labelling in Chomsky's (2013) model), so that reference to case seems not to add any explanatory value.

Let us concentrate then on agreement. Higginbotham (1985) argues that a nominal base is a predicate with one argument to be saturated (the so-called R-role) and that in English the determiner is the referential material responsible for saturating it. Manzini and Savoia (2005, 2007) adopt and adapt this idea for Romance, proposing that the Nominal Class morphology overtly visible in these languages provides a descriptive content for the R-role of the predicative base.[4] Closure by a D operator yields a referential reading for the argument. This is illustrated in (13) for *il ragazz-o* 'the boy-NClass', where λx denotes the open place at the predicate 'boy' (a lambda-abstract), the *–o* nominal class morphology provides descriptive content for the x variable (here implying gender) and the D operator binds this descriptive content mapping it to an individual.[5]

[4] The idea that nominal class is not a purely morphophonological device, but rather a crucial component of the interpretation of NPs surfaces in different form in recent work by Fabregas (2012), who proposes that nominal class morphology is a type-shifting element, creating kinds (arguments) from predicate.

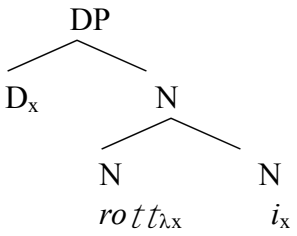
[5] As far as we can tell, Adger and Ramchand's (2005) feature system is largely compatible with the present proposal

(13)

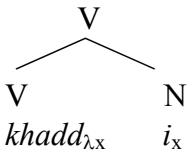


On the model of (13), *roʈʈi* in (12d) has the structure in (14), where the *–i* inflection is a morphological level argument of the predicative base 'bread'. Since it is reasonable to expect that to a similar morphology corresponds a similar syntax and semantics, the perfect participle *khadd-i* 'eaten' will consist of the V root, *khadd-* with has an argument to saturate, namely its internal argument and the *–i* inflection providing a morphological level saturation for it, as in (15).

(14)



(15)



As it turns out, in Punjabi, the inflection of the perfect is sufficient to lexicalize the internal argument of the verb with a pronominal 3rd person reference, as seen in (16). One may of course want to postulate an empty category DP agreeing with the inflection in (15), as in Rizzi (1982). However accounts of pro-drop have also been proposed where the inflection carries the entire referential burden (Manzini and Savoia 2005, 2007 and references quoted there).

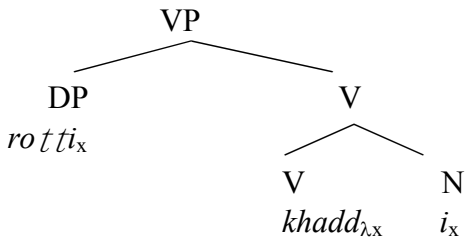
(16)	a.	oval-e	kut't-e-ne	dekkh-ea
		that-Obl.msg	dog-Obl.msg-Erg	see.Perf-msg
		'That dog saw him'		
	b.	oval-e	muɳɖ-e-ne	dekkh-e
		that-Obl.msg	boy-Obl.msg-Erg	see.Perf-mpl

(cf. also fn. 6). Their Λ feature translates into a lambda abstractor λx whose variable is introduced by a pronoun with a dependent value (I_D:dep in their notation).

'That boy saw them'

No matter how we account for the Punjabi pro-drop, merger of the substructure in (14) with the substructure in (15) yields the structure in (17) for the perfect predicate (12b). In (17), if we maintain that the *–i* inflection has pronominal-like content, the relation between *roṭṭi* and *–i* is akin to clitic doubling. In other words, (*roṭṭi, -i)* is a chain, i.e. a single discontinuous argument, where the elementary descriptive content of *–i* is bound by the referential DP *roṭṭi*, ultimately satisfying the internal theta-role of the verb.

(17)



In standard minimalist terms, Agree is responsible for matching the features of *roṭṭi* and the *–i* inflection in a structure like (17). The procedure is purely computational and is driven by the presence of uninterpretable phi-features on the verb, acting as probes for the interpretable phi-features of DP. We have already commented in section 1 on the general status of this asymmetric theory of agreement within current minimalist theorizing; in essence Cyclic Agree is a way to weakening the asymmetry in order to allow for downwards checking as well. At this point we make the single move in the present work that differentiates us from standard minimalism. We assume that grammar has positive (privative) properties only, and that as part of this, all represented features are interpretable and interpreted (Manzini and Savoia 2007, 2011a). Nothing prevents us from having a Minimal Search and Match (identity) rule that applies to identical, local pairs (or n-tuples) of phi-features clusters. Unlike Agree however, since all members of the n-tuple are interpretable the procedure cannot be driven by the need to eradicate uninterpretable features by LF. Rather it must be an interpretive procedure taking place at the LF interface, bundling together identical phi-feature cluster in that they (potentially) satisfy the same argument slot.[6]

The systematization we provided for the agreement and case alignments of transitive sentence in the perfective also makes predictions on intransitive sentences. Consider first verbs which on cross-linguistic grounds we may take to be unaccusative, i.e. to take only an internal argument (a theme). The argument appears in the absolute form and agrees with the verb, as shown

[6] The same is true for Adger and Ramchand (2005:fn.14), on whose framework cf. fn.5

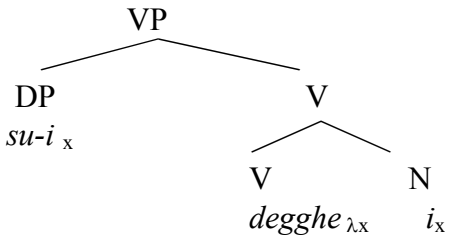
in (18).

(18) a. muɳɖ-a / muɳɖ-e depp-ea/-e
boy-Abs.msg/boy-Abs.mpl fall.Perf-msg/-mpl
'the boy/the boys has/have fallen'

b. su-i /su-ĩã degge-i/-ĩã
needle-Abs.fsg/needle-Abs.fpl fall.Perf-fsg/-fpl
'A/the needle/the needles has/have fallen'

The pattern in (18) is expected on the basis of the structure in (17). The verb inflection provides an (inflectional-level) lexicalization of the internal argument within the verbal constituent. This agrees with the DP, which is attached to V in its base form, the so-called absolute. Merger of the VP and of its internal argument DP yields a VP structure, as in (19).

(19)



By contrast, with unergative intransitives, the sole argument of the predicate is the external argument. Everything else equal, we expect it to be introduced by ergative case. Furthermore, in the absence of an absolute argument, we expect the perfect turns up in an invariable, non-agreeing form. These expectations are borne out by the data in (20); note that in (20b) the Participant argument presents the absolute form, according to the Person ergativity split generally holding in the perfect.

(20) a. muɳɖ-ea-ne dɔɾ-ea/ boll-ea si
boy-mpl.Obl-Erg run.Perf-msg /talk.Perf-msg be.Past
'the boys ran/ talked'

b. kuɾ-i-ne/ muɳɖ-e-ne/ tu: hass-ea si
girl-fsg-Erg/boy-Obl.msg- Erg/you.Abs laugh.Perf-msg be.Past
'the girl/ the boy / you laughed'

We will delay the discussion of ergative case – and of the invariable froms of the perfect –

till section 3. As far as the perfective VP in (17) is concerned, we can construct it bottom up from its elementary lexical components, interacting simply with morphosyntactic Merge (responsible for the creation of constituent structure) and with Full Interpretation (ultimately responsible for agreement). No abstract functional heads are necessary so far. Interpretively, the VP conveys a stative/ resultative aspect, i.e. a state resulting from an event and hence a past tense. Progressive verbs, like perfect verbs, are participial forms, which may or may not be associated with an auxiliary. However they present a more complex internal (morphological) organization which projects a more complex syntax, as we will see in the next section, and a process (progressive) rather than state interpretation.

2.2 The progressive

The progressive pattern, already exemplified by (1b) above, is more systematically illustrated in (21)-(22). Two case patterns are possible. One has both the internal and the external argument in the absolute form as in (21). The second pattern is observed when the internal argument is animate and definite (or at least one of the two), including of course pronouns. If so the DP is inflected by the *–nu* postposition, as in (22), which is a Differential Object Marker (DOM) in the sense of Plank (1984), Aissen (2003). This attaches (like all postpositional cases) to the oblique inflection, where available. The agreement pattern is the same in both (21) and (22), namely the progressive verb agrees with the external argument of transitives in the absolute form. In past auxiliary contexts, the progressive participle yields a past progressive interpretation, as in (21c).

(21) a. o muɳɖ-a dekh-d-a/-i (a)
s/he.Abs boy-Abs.msg see-Progr-msg/-fsg be.Pres
'S/he is seeing a boy'

b. muɳɖ-a /muɳɖ-e dərvaddʒ-a khol-d-a/-e
boy-Abs.msg/boy-Abs.mpl door-Abs.msg open-Progr-msg/-mpl
'the boy/the boys is/are opening the/a door'

c. o kut't-a dekh-d-a/-i si
s/he.Abs dog-Abs.msg see-Progr-msg/-fsg be.Past
'S/he was seeing a/the dog'

(22) a. aval-i tʃabb-i dərvaddʒ-e-nu khol-d-i a
that-Abs.fsg key-Abs.fsg door-Obl.msg-Obl open-Progr-fsg be.Pres

‘That key opens the door’

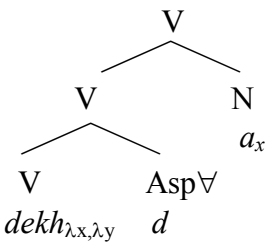
b. mɛ: muɳɖ-e-nu/ bill-i-nu/ti-nnu dekh-d-i a
I.Abs(f) boy-Obl.msg-Obl/cat-fsg-Obl/you.-Obl see-Progr-fsg be.Pres
‘I am seeing the boy/the cat/you’

c. mɛ:/ tu: o-nu dekh-d-a/i
I.Abs/you.Abs him-Obl see-Progr-msg/fsg
‘I/you(m./f.) am/are seeing him’

Let us begin with the examples in (21). In the discussion of the perfect, we only introduced the VP layer of structure involving the verb and its internal argument; we delay the issue how the external argument is introduced in the perfect (namely by ergative case), till we consider oblique cases. The question is how the external argument is introduced in the progressive. The standard minimalist model, developed for English, 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*. In reality, we already briefly mentioned in section 1, that it is very difficult to provide an independent characterization for v, besides the fact that it introduces an external argument; note that the external argument can be a causer/agent, but also an experiencer/goal. Therefore it seems fair to conclude that *v* has no further explanatory content than encoding (in a simple and elegant way) the application of the external argument.

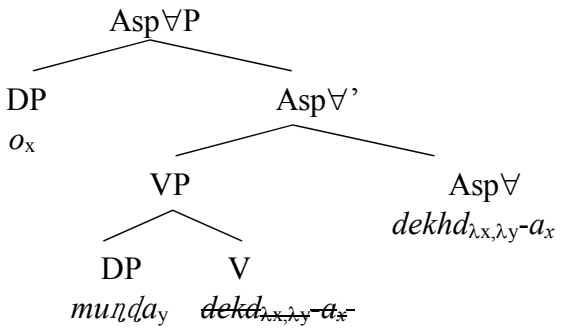
Going back to Punjabi, we note that the progressive participle has a complex internal structure, as detailed in (23) for *dekh-d-a* ‘see-Progr-msg’. Specifically, the lexical base combines with the aspectual specification *–d-* for the progressive, as well as with a phi-features inflection, which in the progressive picks up the external argument. What we notate as Asp in (24) ultimately corresponds to a quantification over the event, represented as a sequence of similar actions. According to Bonomi (1997), writing on Romance (Italian), imperfective aspect is akin to a universal/generic quantification, whereas perfective aspect corresponds to an existential closure. We therefore employ the Asp∀ label as a reminder of the actual quantificational content of Asp (whether the universal/generic construal is correct or requires some refinement).

(23)



Mapping the morphological structure in (23) onto syntactic constituent structure we obtain the tree in (24) for example sentence (21a). The presence of Asp∀ (i.e. progressive) morphology projects a two-tiered syntactic structure Asp∀P [vP]. The lower VP tier is similar to that postulated for perfects, with *muɳɖa* 'a boy' satisfying the internal argument slot of the predicate. However the extra Asp∀ structure allows a further argument to be introduced as Spec of Asp∀P, namely *o* 'he' in (24). This is interpreted as the external argument, i.e. as the argument (causer or other) applied to the elementary VP event/state, defined by the predicate and its internal argument. The phi-features inflection *–a*, which is directly attached to Asp, concurs to the lexicalization of the same argument slot. This interpretation is licenced by the fact that the two elements are in a local identity, i.e. agreement, relation.[7]

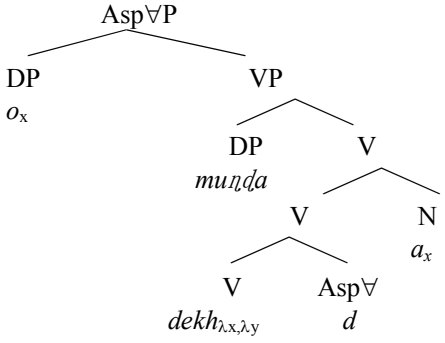
(24)



As we may expect on the basis of the perfect examples in (16), the verb inflection alone in Punjabi is sufficient to carry reference to the 3rd person as indicated in (25). Under the present account of the phi-features inflection, which makes it effectively into a bound pronoun in (24), pro-drop in (25) need not involve any empty category DP.

[7] Here, as elsewhere in this work, reasons of space prevent us from discussing theoretical alternatives (except in passing, cf. for instance fn. 5 above). In the text we adopt a representation that is familiar from both Chomsky's minimalism and from cartography. Both V and Asp project a syntactic head and the verbal form moves from one position to the other. This view is far from unproblematic. Chomsky (2001) enumerates several problems with head movement, while Chomsky (2013) points to the stipulative nature of the endocentricity principle, which is at heart both of X-bar theory and of cartography. Alternatives are available in the theoretical literature, including in particular the 'mirror theory' of Brody (2003) (recently revived by Adger 2013). Under this model it is possible to generate a simplified tree of the type in (i), where morphological heads like Asp∀ can direct label (in a mirror fashion) the constituents created by the merger of successive specifiers (i.e. phrasal constituents).

(i)



(25) a. kita:b paɾ-d-a/i a
book.sgf.Abs read-Progr-msg/fsg be.Pres
'S/he is reading the book'

b. sɔn-d-a/i a/si
sleep-Progr-sgm/sgf be.Pres/ Past
'S/he is/was sleeping'

Among intransitive verbs, unergatives reproduce in essence the transitive pattern in all relevant respects. Thus in (26), their only argument, which is the external argument, agrees with the verb and surfaces in the absolute form.

(26) a. muɳḍ-a/ muɳḍ-e hassə-d-a/-e si
boy-Abs.msg/boy-Abs.mpl laugh-Progr-msg/-mpl be.Past
'The boy/the boys was/were laughing'

b. ku'ɾ-i / ku'ɾ-ĩã ron-d-i/- ĩã (a)
girl-Abs.fsg/ girl-Abs.fpl cry-Progr-fsg/-fpl be:Pres
'a/the girl/ the girls cries / cry'

c. mɛ: / appa bol-d-i/-e a
I.Abs(f)/we.Abs talk-Prog-fsg/-mpl be.Pres
'I/we am/are talking'

On the other hand, unaccusatives also behave like unergatives in progressive tenses. Thus as illustrated in (27), the sole argument of the verb in the absolute form agrees with the verb, unlike the internal argument of the transitive in (24).

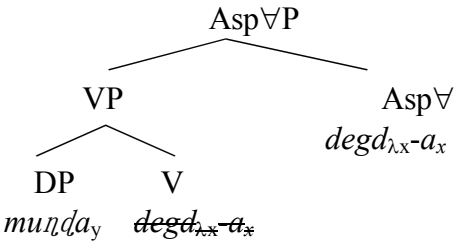
(27) a. muɳḍ-a /muɳḍ-e deg-d-a/-e
boy.Abs.msg /boy.Abs.mpl fall-Progr-msg/-mpl
'a/the boy/ the boys is/ are falling'

b. mɛ: auŋg-i/-a
I.Abs come.Progr-fsg/-msg
'I(m/f) am coming'

The presence of progressive morphology motivates an AspP layer in the predicate structure,

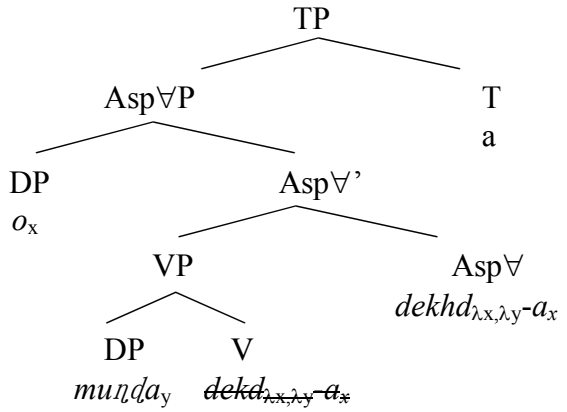
which we assume to be always present in the progressive, including with unaccusatives. On the other hand, the single argument of unaccusatives is discharged within the VP. Therefore the Asp layer does not introduce any argument. Under these circumstances, nothing prevents local identity ('agreement') to apply between the phi-features inflection of the progressive and the internal argument DP the verb inflection represent a morphological level saturation of the internal argument, as in (28). Alternatively the relevant relation between DP and Asp∀ may be expressed via raising of DP to Asp∀P.

(28)



In our discussion, we have imputed case and agreement patterns in Punjabi directly to the internal organization of the predicate, without calling the TP layer into play (and we will continue to do so in addressing ergative subjects in the perfect in section 3). The TP layer is fairly obviously realized in Punjabi by the 'be' auxiliary. Since, as far as we can tell, the auxiliary itself does not determine either case or agreement, we will leave it out of the picture. It is possible that the most external argument within the predicate raises to TP to provide the subject of the sentence (see again section 3 on the notion of subject); it simply seems to us that this doesn't matter for case and agreement alignments.

(24')



2.3 Conclusions on the perfectivity split

In this section, we suggested a formalization of the ergativity split that maintains the basic intuition that perfects reflect a somewhat more elementary organization of the predicate.[8] However, the contrast between the perfect and the progressive alignments is ascribed directly to the overt morphological constituency of the participles involved as they project to the syntax, without the mediation of abstract functional sequences.

In the next section we will complete the picture of the perfect alignment, which has only partially been presented so far, by introducing our conception of the so-called ergative case (as a locator of this simplex state/result). In the meantime, we surmise that the perfect participle is a a VP predicate, which exactly like a DP predicate or an AP predicate is necessarily read as a state, a result. We take this to be the essence of perfective aspect. This is true even when the event depicted is an activity like 'walking' – the perfect participle 'walked' depicts the resulting state of the activity of walking. Therefore we propose that languages like Punjabi require a bare VP predicate (eventually embedded under a TP auxiliary layer) in order for the perfective reading (i.e. the reading associated with the perfect participle even in a language like English) to be obtained. Ergativity – i.e. the case (and agreement) alignment depending on a simplex VP predicate – is predicted to be found with the perfect even if it not found in the progressive, but not vice versa.

By contrast, the progressive participle has a more complex internal configuration including an Asp head introducing the external argument. In essence transitivity in the perfect is introduced by the ergative *–ne* 'case' (of which more in section 3). In the progressive however transitivity is built into the structure of the VP/AspP– which means that subject and object can be introduced as bare DPs, inflected only for nominal class. Importantly, even in structures like (24) or (28), which present an internal articulation of the predicate, we have adopted a categorial organization which reflects the overt morphological structuring of the language, so that the external argument is introduced by the (universal/generic) quantification over the event represented by progressive Aspect, not by some *v* category dedicated as an external argument introducer.

Since our theoretical assumptions are almost entirely shared with standard minimalism,

[8] Keine (2010) and Keine and Muller (2009) analyze split ergativity in Hindi, Punjabi and Marathi (among other languages) in a Distributed Morphology framework. They assume that the abstract case features on all kinds of subjects are identical, i.e. [-oblique, +subject]. The alternation between surface case forms only arises as a consequence of post-syntactic impoverishment which deletes [+subject] in certain contexts, in particular [-perfective]. Furthermore impoverishment feeds agree in the sense that 'The verb agrees with the subject if it is zero marked. If not, it agrees with the object if it is zero marked. If not, the verb exhibits default agreement' (Keine 2010:41). To account for the person split of Punjabi and Marathi, Keine assumes a further impoverishment operation, which deletes [–oblique] for participant subjects regardless of aspectual features. Such impoverishment rule leads to zero exponence in the perfective but does not affect phi-transparency in Keine's model, due to the fact that [+subj] prevents a DP from controlling phi-agreement. This account has the same problems generally imputed to impoverishment based analyses (Manzini and Savoia 2007, Kayne 2010) – namely that the matching of underlying and surface forms is arbitrary. For instance, the framework is powerful enough to allow for [+subj] deletion to be matched to imperfective aspect or [+obl] deletion to be matched to non participant subjects.

there is nothing in our analyses in principle incompatible with a universal *v* category. However, it seems to us that not only there is no morphological category of Punjabi that corresponds to *v*, but also that the interpretation does not need such an abstract category either. Note that it is part of the present outlook on language universals, and language variations (essentially two names for a single classical issue in linguistics), that other types of languages may indeed present PF and LF motivation for a category identifiable with *v*.

Whether UG includes a universal template of invariable functional categories is an empirical issue. Here for instance we have suggested that the application of the external argument needs the support of an eventive layer of structure – but not necessarily a layer defined by an invariant category crosslinguistically (and see section 3 on ergative external arguments). From a strictly theoretical point of view, it is easy to see what the appeal of universal invariant sequences of categories is (the 'Platonic' view of categories referred to in the introductory section). From a learnability point of view one could argue in particular that the task of the child who learns a language is considerably facilitated, to the extent that s/he only needs to figure out which part of the structure to pronounce. This argument however only holds as long as the PF interface is disregarded; the realizational view of the lexicon that this schema of explanation requires creates opacity at the morphophonological interface that arguably impedes rather than facilitating the learner's task. What we propose here is a different picture of acquisition where categorization and syntax are not necessarily universal, allowing for a degree of transparency at the PF interface (and a projectionist view of the lexicon). Syntax does not build interpretation but only restricts it; the universality of the cognitive component determines the universality of LF representations (syntax disambiguated and enriched).

3. Punjabi: Oblique cases and the ergative

3.1 The dative/DOM and the genitive

The nature of ergative case depends on the larger issue of how to treat oblique cases. Rather than address ergative case directly, let us go back to the examples in (22) which display a second possible alignment of cases in the progressive, beside the one analyzed in (24) of section 2.2. The alignment in (22) becomes necessary if the internal argument is animate and definite, i.e. if the typical conditions for DOM hold; if so, the internal argument shows up with the *–nu* postposition/case. In the masculine, which has a residual case inflection (cf. (10) above), *-nu*

attaches to the oblique stem, like all other postpositions. Importantly, the same *–nu* form that marks DOM in (22), also lexicalizes the second internal argument of ditransitives, i.e. the goal dative. This is independent of perfect vs. progressive alignment, as shown in (29) (progressive) and (30) (perfect).

(29) a. mɛ: ti-nnu/o-nu kita:b din-d-i (a)
I.Abs(f) you-Obl/ him-Obl book.Abs.fsg give.Progr.fsg be.Pres
'I give you the book'

b. tu: kəmidʒə o-nu pe:dʒ-d-a/-i a
you.Abs(m/f) shirt.Abs-fsg he-Obl send-Progr-msg/-fsg be.Pres
'You are sending the shirt to him'

c. o mi-nnu/una-nu kita:b din-d-i/-a a
s/he.Abs me-Obl/they-Obl book.Abs.fsg give-Progr-fsg/-msg be.Pres
'S/he is giving the book to him/me/them'

(30) o-ne kita:b ditt-i (si) un-a-nu
s/he-Erg book.Abs.fsg give.Perf-fsg be.Past they-pl-Obl
's/he gave a/the book to them'

For obliques in general, we embrace the classical view that cases are relations, i.e. elementary predicates, essentially equivalent to Ps, as originally proposed within a formal model by Fillmore (1968). Indeed elements like Punjabi *–nu* or *–ne* are routinely referred to as (case) postpositions. Let us then begin by considering dative, as the second internal argument of ditransitives in examples of the type in (29)-(30). This has been connected to possession in the formal literature, at least since Kayne (1984). In other words, 'I give John a book' is roughly 'I give [John HAS a book]' (cf. Pesetsky 1995, Beck and Johnson 2004, Harley 2002). Following Belvin and den Dikken (1997), we construe possessors as 'zonally including' the possessee. Following Manzini and Savoia (2011a), we notate the 'inclusion' (or part-whole) relation as (⊆), and since relational content is generally carried by Q elements in DPs (as in generalized quantifier theory), we label dative as Q(⊆). In terms of the Q(⊆) characterization of datives, the structure of a sentence like (29a) will take the form in (31). The *–nu* dative postposition introduces a possessor/inclusion relation which takes as its internal argument the DP to which it attaches, 'you' in (31), and as its external argument a DP in its immediate domain, 'book' in (31). What the dative case, or more properly the dative elementary predicate says is that 'the book' is in the inclusion zone (possession) of the hearer 'you'.

(31) mɛ: ti_y [$_{Q(\subseteq)}$ $nnu_{\lambda x \lambda y}$] kita:$b_x$ dindi

As one may expect on the basis of the analysis in (31), Punjabi *–nu* provides not only the lexicalization of dative possessors in ditransitive sentences, but also in possessive sentences proper, like (32). Thus 'I have a fever' is literally rendered as 'to me is a temperature' (cf. Freeze 1992).

(32) muɳɖ-e-nu / ku'ʃ-i-nu/ mi-nnu / ti-nnu bukhar/ pokh/ dhar a
boy.msg.Obl-Obl/girl-fsg.Obl /I-Obl/ you-Obl fever/ hunger/ fear be.Pres
'The boy/the girl/I/you is/are feverish/hungry/afraid'

Note that the preceding discussion imputes a primitive content to the descriptive 'dative case', namely (⊆). However this primitive content is predicative and does not in any way configure the existence of a primitive 'case' – on the contrary it denies it. For, the primitive predicate (⊆) can be realized by prepositions (English 'to'), by verbs (English 'have') and by nominal inflections (Punjabi *–nu*). The inflectional realization of a primitive predicate (connecting the argument to which it attaches to the main predicative core of the expression) is conventionally called a case. But it is evident that in the present account the traditional notion of case is definable at most as the crossing of the more elementary notions of atomic predicate and inflectional status. This is a fairly traditional stance – which crucially however denies that there is anywhere a primitive property 'case' inscribed in the phi-feature bundles of a D(P) or other. In this sense, it complies with the minimalist reduction of case as outlined in section 1.

Now, as already mentioned, *–nu* also shows up as the lexicalization of the DOM case, in sentences like (22). One may think this to be a mere matter of morphophonological coincidence – except that across the Indo-European languages the expression of DOM systematically coincides with that of the dative. This is true in the Romance languages, where dative and DOM are introduced by the preposition *a* 'to', or of many Iranian varieties, where DOM and dative are both expressed by the postposition *–ra*/*–re* (e.g. Mazandarani, Lecoq 1989), in Hindi, where the relevant postposition is *–ko* (e.g. Mohanan 1994). Following Manzini and Franco (to appear) we therefore propose the structure in (33) for a sentence like (22b), where the animate and definite DP *muɳɖe* 'the boy' is attached to the core of the sentence by the Q(⊆) elementary predicate, lexicalized by *–nu*. Interpretively, the argument that *–nu* attaches to has in its domain of inclusion not another DP but the VP event *dekh(da)* 'see(ing)'. In other words, the DOM case introduces the animate/specific internal argument essentially as what the Applicative literature calls a high Appl, i.e. a relation

between an argument and a VP elementary event (Pylkkännen 2008). Instead of the representation in (26) we could therefore use a representation including an abstract Appl head, which would however add nothing to our comprehension of the sentence.

(33) mɛ: $\text{mu}\eta\text{ɖe}_y$ [$_{Q(\subseteq)}$ $\text{nu}_{\lambda x,\lambda y}$] [$_{VPx}$ dekhda]

Informally, what the DOM phenomenon amounts to (in Punjabi and crosslinguistically) is the requirement that animate/definite DPs cannot be introduced within VP as themes. Therefore a definite/animate DP is either VP-external supported by an (aspectual or other) layer of structure external to VP or by oblique case, in particular by the dative/possessor case. We provide a schematic representation of this generalization in (33'). Note that in (33') we stipulate among other things that the oblique embedding of definite/animate DPs only holds in structures with an external argument (causer, experiencer, etc.). This suggests that DOM is not a condition on the embedding of definite/specific internal arguments per se – but a condition on the embedding of highly ranked arguments relative to one another. In other words, the gist of DOM is not to insure that specific/animate arguments do not have a theme attachment – rather it is to insure that specific/animate arguments have an attachment as high (or higher) in the sentence as any other argument. Therefore internal arguments of unaccusatives couldn't show up as DOM obliques, when they are animate/definite. The theme of unaccusative verbs, despite being an internal argument, is also the highest argument in its structure and is therefore excluded from the necessity to undergo DOM.

(33') *DOM (Punjabi)*
EA [[*(⊆) definite/animate] V(P)]

The proposal in (33) as to the oblique nature of the DOM case makes the strong prediction that DOM structures will behave as unergative rather than as transitive with respect to phenomena which differentiate the two alignments. One instance of this is the perfect, where transitive verbs agree with their sister theme DPs – while unergatives have an invariable agreement. We will see how our prediction is borne out in section 3.4. In the meantime, we also expect that datives may introduce experiencer arguments and other high Applicatives in the sense of Pylkkännen (2008). This expectation turns out to be correct. In particular, dative can introduce experiencer arguments of transitive VP (verb – theme) structures, as exemplified in (34).

(34) oval-i kita:b mi-nnu pəsand a-i
that-fsg book-Abs.fsg me-Obl like come.Perf-fsg
'I came to like that book'

As far as we can tell, apart from dative/DOM *-nu* there are only two other postpositional elements in Punjabi that are associated directly with the nominal stem (eventually specified as oblique in the relevant masculine subclass) – namely the ergative *–ne,* which will be considered in the next section, and the genitive. The latter yields a person split of sorts, since it is realized as *d-* on lexical nouns, but as *r-* on Participant pronouns. In either instance the genitive element bears an inflection agreeing with the head noun, as illustrated in (35).

(35) a. muɳɖ-e-d-i/-ĩã kita:b / kitabb-a
boy-Obl.msg-Gen-fsg/-fpl book.Abs.fsg/ book-Abs.fpl
'the book/the books of the boy'

b. te-r-i/-ĩã kəmiddʒ / kəmiddʒ-a
you-Gen-fsg/-fpl shirt.Abs.fsg/ shirt-Abs.fpl
'your shirt(s)'

Other postpositions of Punjabi do not attach directly to the (absolute or oblique form of) the (pro)noun, but rather to the (pro)noun followed by the genitive morphology, which surfaces in the invariable form–*de/-re*. For instance, the *–to* 'by/from' postposition directly selects lexical nouns, but it must attach to the genitive with Participant pronouns, as in (36a). The postposition *-nal* 'with' in (36b) attaches the genitive form both with Participant and non-Participant referents.

(36) a. me-re-to / saɖɖ-e-to
I-Gen-by/from/ we-Gen-by/from
'by/from me/ us'

b. o-de-nal / me-re-nal
he-Gen-with/ I-Gen-with
'with him/me'

According to the discussion that precedes the dative *–nu* element is a Q(⊆) element, introducing a part/whole or possession relation between the DP to which it attaches (the possessor) and a theme DP (the possessee). Needless to say, the genitive canonically corresponds to

possession, as in (35) and is therefore a candidate for (⊆) content and Q(⊆) categorial status as well. Cross-linguistically, this conclusion is strengthened by the observation that dative/genitive syncretisms are widespread, specifically in Indo-European languages (modern Greek, Albanian, Romanian, I class of Latin, Kurdish as quoted in (7) above). Nevertheless in Punjabi 'dative' is lexically different from 'genitive' facing us with the problem of differentiating the various types of Q(⊆) obliques. We propose that the two different lexicalizations *–nu* and *–de/-re* correspond to a contextual sensitivity of the category Q(⊆) in Punjabi. Thus Q(⊆) is lexicalized as *–nu* when attached to sentential projections, while it is lexicalized as *–de/-re* when it is attached to nominal categories. This characterization is consistent with the occurrence of the genitive in postpositional contexts like (36). Indeed recent literature on the internal structure of complex PPs brings out the existence of both case components (here the genitive *–de/-re*) and of components with lexical/interpretive affinity to nouns, namely the Axial Parts of Svenonius (2006).[9]

3.2 The ergative

Let us consider next ergative *–ne*. The historical literature debates the etymology of *–ne* ("obscure" for Montaut 2004), connecting it most often to the Sanskrit instrumental. However Butt and Ahmed (2011, and references quoted there) argue that a much better origin is to be sought in the *–ne* dative still preserved in some Indo-Aryan languages, for instance Haryani as in (37). The *–ne* postposition is seen to lexicalize the external argument of the perfect (the ergative) in (37a), the goal dative in (37b) and the DOM case in (37c). The cooccurrence of an ergative subject with a DOM object in the perfect yields a double *–ne* pattern in (27c). In fact Butt and Ahmed mention the similarity of Punjabi *–nu* and *–ne* as suggestive of a common origin.

(37) a. sad:h nae bud:hiaa ki jhu˜pr:ii kii kun mae laat maaryi
Sadhu Erg old.lady Gen cottage Gen corner in leg hit
'The Sadhu kicked the corner of the old lady's cottage.'

b. yaah bi raam pyaarii nae e de diye

[9] A final component of genitive embedding can be seen in (35), namely the phi-feature morphology closing the genitive DP and agreeing with the head noun. A similar structure is seen in Kurmanji Kurdish (7a), though the fact that the language is head-initial (rather than head-final) may conceal the similarity. The enclitic on the head noun in (7a) (the so-called ezafe), that agrees with it, forms in fact a syntactic constituent with the genitive phrase (Larson and Yamakido 2008 among others). While much literature on the ezafe and analogous linker material cross-linguistically connects them to copulas (den Dikken and Singhapreecha 2004) or to case assigners (Larson and Yamakido 2008), we side with a stream of recent literature argues that treats them as agreements (Philip 2012, Franco et als. 2013 for different approaches).

this.Pl too Ram Piyari Dat Prt give give.Imp
'Give these to Ram Piyari too.'

c. mAn-ne sAhAb-ne mar-a
I-DOM Sahib.msg-Erg hit.Perf-msg
'The Sahib hit me.'

Haryani (Butt and Ahmed 2011 561-2)

If we maintain that dative/DOM instantiates Q(⊆), we are led to conclude that in a language like Haryani in (37), ergative is nothing else than a 'possessor' (of the event) in turn, recalling proposal made for Iranian languages by Benveniste (1966), Montaut (2004) among others (see section 1 and the discussion of Kurdish varieties in section 5). For the time being let us focus on languages like Punjabi where the ergative is a specialized oblique. Since we have proposed that oblique cases reduce to elementary predicates, a tempting hypothesis is that in the perfect, the ergative element is a counterpart of the *v* functional head, responsible for introducing transitivity/the external argument. Two main reasons militate against this. First, such a conception leaves us without any obvious connection to dative potentially losing the continuity between, say, Haryani and Punjabi.

More to the point, consider modal constructions expressing necessity, which in Punjabi are built from a non-finite form of the verb traditional 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, as seen in (38) 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. What is not expected is that these constructions also present the sole argument of unaccusatives (an internal argument) in the ergative, as illustrated in (39); the verb agreement is in the invariable masculine singular – as always when only oblique arguments are present. The evidence in (39) is sufficient in itself to exclude that *–ne* is connected to the expression of external arguments (hence to *v*).

(38) a. muɳɖ-e-ne roʈʈ-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. una-ne dərwaddʒ-a/-e kol-n-a/-e
they-Erg door-Abs.msg/-mpl open-Inf-msg/-mpl
'They must open the door(s)'

c. muɳɖ-e-ne / o-ne dər-n-a / sɔ-n-a (a/si)

boy-Oblmsg-Obl/ he-Obl run-Inf-msg/ sleep-Inf-msg be.Pres/be.Past
'The boy/he has/had to run/sleep'

(39) a. muɳɖ-e-ne / muɳɖ-ea-ne ɔ-n-a / dig-n-a
boy.Oblmsg-Erg/ boy- Obl.mpl-Erg come.Inf-msg/ fall-Inf-msg
'The boy/the boys must come/fall'

b. kur-i-ne/ kur-ĩã-ne ɔ-n-a / dʒa-n-a
girl-fsg-Erg/girl-fpl-Erg come-Inf-msg / go-Inf-msg
'The girl/the girls must come/go'

Tessitori (1913), as quoted by Butt and Ahmed (2011), shows that Old Rajasthani has a form *kanhaï* (with various allomorphs) alternating in the same contexts with newer *n-* forms (*naï*) with the same locative meaning 'aside, near'. According to Butt and Ahmed, Tessitori further motivates a process by which initial syllables with *k-* could be deleted, thus leading from earlier *kanhaï* to modern *naï*. What this etymological sequence points to is an essentially locative characterization of the ergative *-ne*. We will argue that such a characterization is best suited to capturing the data on internal grounds as well.

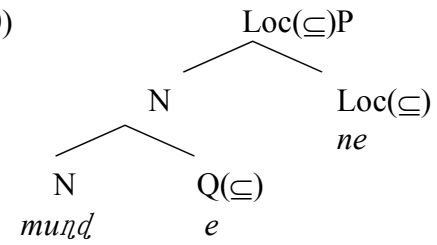
Though we have adopted here Manzini and Savoia's proposal that the fundamental oblique of Punjabi, responsible in particular for datives and genitives, is the 'part/whole' (or 'inclusion') relation, possession is often identified with a location, cf. in particular Freeze (1992), Lyons (1967). Boneh and Sichel (2010), take the part-whole relation to be the conceptual core of partitives (*three of them*) and of inalienable possession (*John's nose*) – however they factor out alienable possession (*John's car*), treated as a locative relation, since in the languages they consider (Palestinian Arabic), material possession is lexicalized by a locative preposition. The same variation that characterizes datives also surfaces with DOM arguments; for instance in Romanian DOM obliques are introduced by a *pe* preposition, which is locative.

Every account of natural language must address the proximity of dative and locative specifications, also corresponding to frequent syncretic lexicalizations of dative and locative. Following Manzini and Savoia (2011a) on Albanian, we construe locative as a specialization of the part-whole relation, roughly 'x included by y, y a location', where different locatives introduce of course different (locative) restrictions on inclusion. On these grounds we may expect that possession in a given language may be construed as locative inclusion rather than as pure inclusion – or that different types of possession may be split between pure inclusion and locative inclusion, as in Palestinian Arabic.

As for ergative case, we take it that the literature drawing a close parallel between ergativity

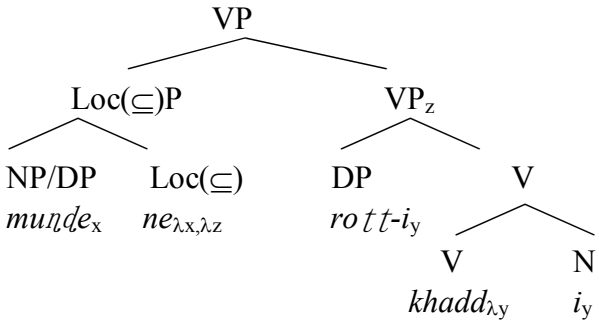
and possession is substantially correct. We have seen that Punjabi realizes a pure inclusion/possessor category Q(⊆), corresponding to the traditional dative case in sentential contexts, and to genitive in DP contexts (section 3.1). We now propose also that it realizes a locative inclusion category, which we notate Loc(⊆), which corresponds to the descriptive ergative case both in perfects and in necessity contexts. Let us focus on the former. As discussed in section 2.1, we associate a sentence like (12b) with the partial (VP) structure in (17). In the brief morphological sketch at the beginning of section 2, we have seen that a form like *muɳḍ-e-ne* 'boy-msg.Obl-Erg' includes an oblique morphology *–e* between the lexical base and *-ne*. We assign to it a Q(⊆) value; *-ne* specifies a locative Loc(⊆) restricting (⊆), as in the structure in (40).

(40)



If we combine the proposed structure for the ergative argument in (40) with the structure of the perfect VP in (17), we obtain (41) as the structure for example (12b). As for the interpretation of (41), following the discussion of (⊆) in section 3.1, we treat Loc(⊆) as an elementary predicate, with two argument places. The internal argument 'the boy' is interpreted as the location of an event/state, represented by the VP ('having eaten the bread').

(41)

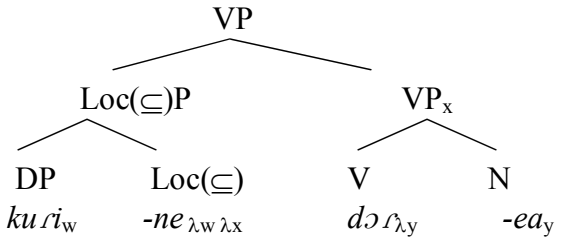


The configuration underlying unergative perfects, as exemplified in (20), is essentially the same as in (41). In particular the external argument is attached to the predicative core via the ergative postposition *–ne*, corresponding to Loc(⊆). At the same time, as already noted in the discussion surrounding (20), in the absence of any internal argument the perfect participle of unergatives surfaces with an invariable masculine singular inflection *–(e)a*. We have all reasons to believe that the morphological structure of the non-agreeing participle is the same as for the

agreeing participle. In other words *dɔɾ-ea* 'run.Perf-msg' in (20a) has the same morphological make-up as agreeing *dekhd-a* 'see.Perf-msg' in (23). In a richer model of the PF interface than the one adopted here it may be possible to treat the masculine singular inflection as just a morphophonological default. However this is not possible within the present projectionist model, where the perfect inflection must be inserted by syntactic merger.

We assume, as is fairly routinely done, that an unergative predicate is in fact a concealed transitive resulting from the incorporation of a nominal constituent into a verbal head (Hale and Keyser 1993). In the structure in (42), for example (20a), we represent this as the unergative verb having an internal argument slot – which is understood to be internally saturated. The invariable inflection is therefore a double of this incorporated nominal element. In order to account for its specific morphological shape (namely masculine nominal class), we may make the assumption that masculine is the Elsewhere nominal class. In other words, the incorporated argument is associated with the masculine nominal class by Elsewhere and the invariable inflection may in fact be understood as agreeing with these specifications.

(42)



In Punjabi, the distribution of the invariable inflection includes not only the perfect of unergatives, as in (42), but also the perfect of transitives where not only the external argument is introduced as an oblique (the ergative) – but also the internal argument. Recall that animate/specific internal arguments are introduced in the oblique (dative) case; in what precedes, we studied the phenomenon with progressives, but it generalizes to perfects, yielding double oblique structures of the type in (43). As a subcase of this, since pronominal internal arguments obligatorily have the oblique inflection *–nu*, they always combine with the invariable form of the perfect participle. In the preceding section we mentioned that our treatment of DOM as an oblique leads us to expect that any predicate associated with a DOM argument behaves like an unergative. This is obviously true of the invariable inflection of examples like (43). We therefore tentatively extend to these examples the formal treatment in (42).

(43)	a.	munɳḍ-e-ne	roʈʈ-i-nu	khadd-a	ni
		boy-Obl.msg-Erg	bread-fsg-Obl	eat.Perf- msg	Neg

'The boy did not eat the bread'

b. o-ne mi-nnu / ti-nnu dekkh-ea
s/he-Erg me-Obl / you-Obl see.Perf-msg
'S/he saw me/you'

c. kut't-e-ne mi-nnu dekkh-ea
dog-Obl.msg-Erg I-Obl see.Perf-msg
'The dog saw me'

3.3 The ergative and subjecthood

In (38)-(39) we used data from necessity sentences to argue that *–ne* (the ergative case) could not simply be identified with some postpositional counterpart of *v*, introducing external arguments (causers, etc.). For the sake of completeness we shall consider whether the data are instead compatible with the Loc(⊆) characterization proposed above. It is important to note that the necessity meaning is not intrinsically associated with the lexical verb form in (38)-(39), i.e. the so-called infinitive. In particular, the infinitive appears in control environments where it simply introduces an irrealis modality, as in the examples in (44), where it is introduced by 'want'. Its distribution in these examples is indeed reminiscent of an English (or Romance) infinitive. For ease of processing we have enclose the relevant 'infinitival' portion of the sentence between square brackets. With transitive infinitives, the internal argument may be introduced in the absolute form and the verb agrees with it, as in (44a-b). Alternatively, the internal argument is introduced as the oblique *–nu* and the infinitive is associated with the invariant masculine singular inflection, as in (44c). In the unergative and unaccusative contexts in (45) the infinitive has the masculine singular inflection. This points to an underlying organization of the control ('infinitive') sentence completely parallel to that seen in necessity contexts (38)-(39).

(44) a. o [ku'ɾ-i dekh-n-i] tʃɔn-d-a/i
s/he.Abs girl-fsg.Abs see-Inf-fsg want-Progr-msg/fsg
'S/he wants to see a girl'

b. ku'ɾ-i [dərvaddʒ-a kollə-n-a] tʃɔn-d-i a
girl-fsgAbs door-msg.Abs open-Inf-msg want-Progr-fsg be.Pres
'The girl wants to open the door'

c. mɛ: [muɳḍ-e-nu/ku'ɾ-i-nu dekh-n-a] tʃɔn-d-i a

I.Abs(f) boy-msg.Obl-Obl/ girl-fsg-Obl see-Inf-msg want-Progr-fsg be.Pres
'I want to see the boy/ the girl/ you'

(45) a. ku'ɾ−i [dʒa-n-a/ ɔ-n-a/ dɔr-n-a] tʃɔn-d-i a
girl-sgf.Abs go-Inf-msg/come-Inf-msg/ run-Inf-msg want-Progr-fsg be.Pres
'The girl wants to go/ to come/run'

b. muɳɖ-e [dig-n-a/ dɔr-n-a] tʃɔn-d-e a
boy-mpl.Abs fall-Inf. msg/ run-Inf-msg want-Progr-msg be.Pres
'The boys want to fall/ run'

It is worth recalling also that a fairly familiar Western Indo-European language like Latin, has a series of adjectival forms of the verb very similar to Punjabi. The present participle (e.g. *ridens* 'laughing', *moriens* 'dying') has the same aspectual properties and agreement alignment of the Punjabi progressive, since it agrees with the external argument of transitives and the internal argument of unaccusatives. The perfect participle (e.g. *captus* 'taken', *mortuus* 'dead'), as in Punjabi, agrees with the internal argument. Finally Latin has a so-called gerundive, which is an irrealis, with a necessity reading, deontic or epistemic in examples like (46). Like the Punjabi infinitive, the Latin gerundive agrees with the internal argument of a transitive as in (46a), while it is in an invariable form with intransitives (46b). As in Punjabi, the external argument of transitives and the internal argument of unaccusatives appear in an oblique case. Lacking the specialized ergative, Latin resorts to the all-purpose oblique, i.e. the dative.

(46) a. Carneadea nobis adhibenda divisio est
Carneades' us(dat) to.be.used division is
'We must use Carneades' division'

Cicero, De Finibus 5.16.4

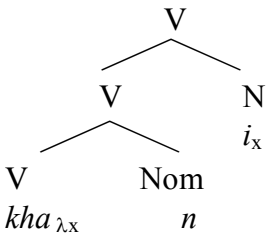
b. hominibus moriendum est enim omnibus
men(dat) to.die is indeed all(dat)
'All men must indeed die'

Cicero, Tusculanae Disputationes 1.9.15

Recall that the basic descriptive problem posed by modal constructions of the type in (38)-(39) is that they imply the lexicalization of ergative case not only in transitive structures, where ergative case is associated as usual with the external argument, cf. (38), but also in unaccusative structures like (39), where ergative case is associated with the internal argument. In fact, a fair

comparison with this state of affairs is provided by the English gerund (despite it having an aspectual, rather than modal interpretation). Thus English has *The boys's eating the bread,* where the external argument turns up in the oblique (genitive) and *The boys' falling (to the ground)* where it is the internal argument that turns up in the genitive. We take English as the basis for our account, to the extent that it is standardly assumed that English gerunds involve a nominalizing suffix (Abney 1987). Similarly, we adopt for the Punjabi infinitive a structure very similar to that of the progressive (23). Where the progressive has an Asp layer, however, the infinitive has a Nominalizing layer (with a modal reading), as in (47).

(47)



In present terms, the Nom layer of structure triggers the obligatory expression of an argument as a location-of-the-event (namely the so-called ergative case). This forces the highest argument in the structure to be externalized as a *–ne* oblique, as schematized in (48) for the transitive example (38a) and in (49) for the unaccusative examples in (39a). If there is an internal argument appearing in the absolute form, this is licenced by verb agreement, as in (48). Otherwise, if there is no internal argument the verb inflection takes the invariable (expletive) masculine singular form, as in (49).[10]

[10] The nominal character of Punjabi infinitives is confirmed by the fact that they can bear their own case marking (with masculine singular invariant inflection) – normally taking their internal argument in the absolute form. Thus control examples like (44) alternate with examples like (i) below; cf. also example (50) in the perfect and (ii) below.

(i) o(ho) tʃɔn-d-e a kita:b paɾ-n-e-nu
they want-Progr-mpl be.Pres book.Abs.fsg read-Inf-msg.Obl-Obl
'They want read the book'

(ii) o-ne sottʃ-ea (a) kita:b paɾ-n-e-nu
s/he.Erg think.Perf-msg be.Pres book.Abs.fsg read-Inf-Obl.msg-Obl
'S/he thought of reading the book'

The parallelism with Latin again holds. The same verb form that appears in the 'gerundive' examples in (44) can be construed with its own (oblique) case in examples like (iii)-(iv), where it takes accusative complements (this is traditionally called a 'gerund').

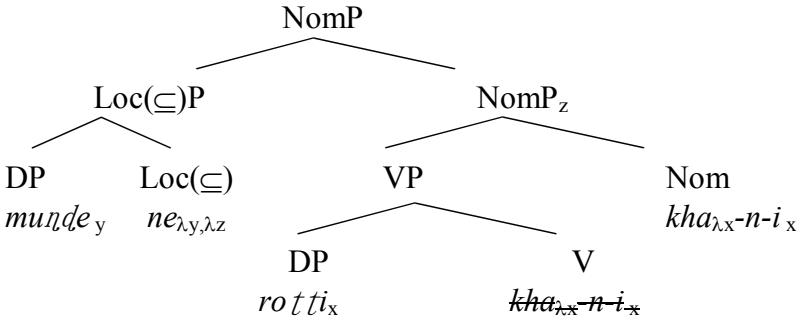
(iii) consilium aliquid faciend-i
counsel something doing-Gen
'the decision of doing something'

Cicero, De Inventione, 1.36.12

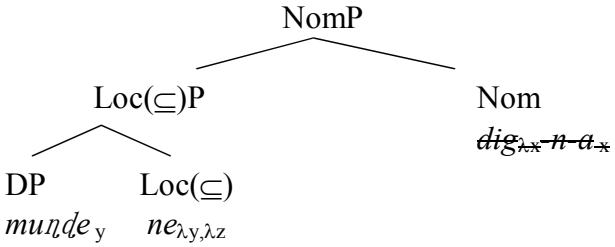
(iv) furor aliena vastand-i
fury alien.things wasting-Gen
'the fury to devastate the things of others'

Seneca, Epistulae Morales ad Lucilium, 94.62.1

(48)



(49)



Finally, mention of the control structures in (44)-(45) brings to the fore an issue that is prominent in the literature on ergativity, as discussed in the survey by Aldridge (2008), but has essentially been avoided so far, namely that of subjecthood and of the tests that are routinely deployed to ascertain it. Tests concerning the ability to bind reflexives or embedded PRO's typically return the same results for nominatives in the progressive tenses and ergative in the perfective tenses in ergativity split languages of the Indo-European type. This is true also of Punjabi. The examples in (44)-(45) display control by the absolute argument of progressive sentences; in (50) we provide an example of control by an ergative. Incidentally, since the overt subject of infinitives (here Nom verbal forms) is ergative (here a specialized Loc), it appears that the ergative can also be controlled.

(50)	o-ne	sottʃ-ea	(a)	kita:b	paɾ-n-i
	s/he.Obl	think.PastPart.msg	be.Pres	book.Abs. fsg	read.Inf.fsg
	'S/he thought of reading the book'				

As it may be expected, reflexives return the same results as control, i.e. the reflexive in (51) can equally be controlled by the absolute external argument in (51a-a') or by the ergative in (51b). Note that in the progressive (51a-a') the reflexive agrees in phi-features with the absolute form, while with ergative external arguments in (51b), the reflexive appears in an invariable form coinciding with the feminine singular.

(51)	a.	kuɾ-i	appe-i	kita:b	par-d-i	a

girl-fsg.Abs self-fsg book. fsg.Abs read-Progr-fsg be.Pres
'The girl is reading the book by herself'

a'. mund-a app-e kita:b par-d-a a
boy-msg.Abs self-msg book. fsg.Abs read-Progr-msg be.Pres
'The boy is reading the book by himself'

b. mund-e-ne / kuṛ-i-ne appe-i idd-a kitt-a
boy-msg.Obl-Erg/ girl-fsg-Erg self-fsg this-Abs.msg do.Perf-msg
'The boy/the girl did this by her/him-self'

What appears to be relevant for reflexive binding and control, then, is some notion of outer argument in predicate structure (external argument of transitive, internal argument of unaccusatives), independently of the particular case and agreement alignment may be determined by aspectual or other factors. As we already commented in relation to example (24'), nothing in the present discussion stands in the way of some more rigid structural encoding of subjects in structural terms, say as [DP, TP]. Under usual locality (phases or other) considerations, it will be precisely the outer argument (in the sense just defined) that raises to such position.

3.4 Conclusions on ergativity

Our core proposal concerning ergative case is that while progressive sentences have structures like (24), where the external argument is attached to an Asp verbal layer of structure, perfect sentences have the structure in (41), where the external argument is attached to the main sentential spine via the 'ergative' elementary predicate, in reality a location-at-the event. Baker and Atlamaz (2013), writing on Kurmanji Kurdish, revive the traditional idea that the perfect is passive-like (cf. also fn.2), in that its *v* is not a phase, while the progressive is active, involving a phasal *v*. This determines the different distribution of agreement and case, as briefly summarized in section 1. Yet, the connection between perfect and passive is assumed – rather than explained, i.e. reduced to some common (more elementary) property.

Apart from this, in Punjabi the passive, illustrated in (52), has quite a different organization from the perfect.[11] In particular, the lexical verb is in the root form (from which the infinitive is formed) – so that perfect and passive are seen to have lexicalizations that are not even partially overlapping. Furthermore, the agent is introduced by the post-position *–to*, excluding any semantic

[11] Passives in Punjabi typically involve the auxiliary *ge-* 'went'. In (52) we display an especially elementary example, sufficient to make the point in the text.

link between ergative *-ne* and agentivity.

(52) aval-i kita:b sar-e muɳɖ-ea-to hameʃa paɾ hun-d-i a
that-fsg.Abs book.fsg.Abs all-mpl boy-mpl.Obl-by always read.Inf be-Progr-sgf be.Pres
'That book is always being read by all the boys'

As outlined in section 2, in present terms the crucial property of the perfect (in Indo-European languages) is that it denotes a result, hence a state (i.e. a state resulting from an event). States in turn are essentially properties, not unlike nouns or adjectives. Like nouns, perfects introduce the internal argument of the predication; any additional argument, and specifically the external argument of perfects, can only be introduced as an oblique – i.e. ultimately as a possessor, whence structures like (41). On the contrary, the progressive aspect corresponds to an ongoing event, introducing an eventive organization of the sentence (as opposed to a nominal/ stative one). The stative/resultative nature of the perfect bars further projections beyond the basic predicative VP projection. Vice versa, the eventive nature of the progressive forces projection of a further Asp level of structure. In other words, not only the different aspectual properties of the perfect and progressive are sufficient to motivate a split structure – but they also predict the shape of this split, given reasonable assumptions about alternative ways of introducing external arguments structure, namely via layered verbal structures or via oblique 'cases' (in reality relational predicates).

The consequences for the more general issues raised in section 2.2 are also worth mentioning. Thus the account in (24) vs. (41) does not obey Uniformity in the sense of Culicover and Jackendoff (2006), since the same predicate-argument complex can be introduced by a two-layered predicate or by a one-layered predicate plus a postpositional layer on one of the arguments. In other words, there can't be a universal categorial template whose pronunciation is the only possible dimension of variation, since even within the same language, the very same event structure can be conveyed by different syntactic shapes of predicates.

Similarly, no uniform notion of 'case' is definable on the basis of our analysis. Indeed the *–i* inflection of *rʊʈʈ-i* in (41) or the *–a* inflection of *muɳɖ-a* in (24) contain no case property. Rather *rʊʈʈ-i* results from merger of the predicative content coinciding with the nominal stem, with an *-i* inflection externalizing simply nominal class (and similarly for *muɳɖ-a*). Given the account of oblique cases in this section, Punjabi literally alternates between nominal inflections of the type more familiar from, say, Romance languages (e.g. Italian *ragazz-o* 'boy-nominal class' in (13)) and nominal inflections/postpositions that have relational (predicate/operator) content. We thus agree with Chomsky that the traditional notion of case is not a good primitive for a formal grammar.

4. Punjabi: The person split

An important point of the syntax of Punjabi not dealt with so far is the person split observed within the perfect, whereby 1st /2nd person (1/2P) external argument are found in the absolute form, rather than in the ergative case obligatory with 3rd person referents, as illustrated in (53) with transitive verbs and in (54a) with an unergative. The fact that the 1/2P external argument appears in the absolute form does not change the agreement alignment. Thus in transitive examples like (53), the perfect agrees with the internal argument. In unergatives like (54a), the perfect bears the invariable (expletive) masculine singular agreement. The same is true in transitives where the internal argument is embedded under the DOM oblique element *–nu*, as in (54b). Finally, also the necessity constructions examined in section 3.3, also have 1/2P subjects in the absolute form, as in (55).

(53) a. mɛ: kita:b / kitabb-a pə'ɾ-i/-ĩã si
I.Abs book.fsg.Abs / book-fpl.Abs read.Perf-fsg/-fpl be.Past
'I read the book/ books'

b. mɛ: / o-ne / muɳḍ-e-ne (ek) pət'thərə dekkh-ea/-e
I.Abs/he.Erg/ boy-Obl.msg-Erg (one) stone.Abs.msg/mpl see.Perf-msg/-mpl
'I/he/the boy saw a/the stone/(the) stones'

c. appa / tusi muɳḍ-e dekkh-e si
we.Abs/ you.pl.Abs boy-Abs.mpl see.Perf-mpl be.Past
'We/you saw the boys'

(54) a. mɛ: boll-ea si
I.Abs talk.Perf-msg be.Past
'I talked'

b. mɛ:/ tu: o-nu/ una-nu dekkh-ea
I.Abs/you.Abs him-Obl/they-Obl see.Perf-msg
'I/ you saw him'

(55) mɛ:/ tu:/ appa sɔ-n-a / dɔɾ-n-a a/si
I.Abs/you.Abs/we.Abs sleep-Inf-sgm / run-Inf-sgm be.Pres/ Past
'I/you/we have/had to sleep/run'

The classical discussion of split ergativity by Dixon (1979: 85-86) is based on the

'potentiality of agency' scale, i.e. 1st person < 2nd person < 3rd person < Proper name < Human < Animate < Inanimate: "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 NP's from the right-hand end, up to some point in the middle of the hierarchy…". However already DeLancey (1981) argues that languages with so-called ergativity splits, i.e. alternations between the ergative/absolutive case system and the nominative/accusative system, most commonly oppose 1st and 2nd person to 3rd. De Lancey's (1981) explanation is based on notions of attention flow and view point. The attention flow proceeds from agent to patient in a transitive event. On the other hand, there are at least as many viewpoints as participants in the event. If a speech act participant, SAP, is also a participant in the event, the most natural point of view is the one associated with it. Thus in split ergative systems, if the starting-point of the attention flow ó is also an SAP, i.e. a natural viewpoint locus, it is so marked by being in the nominative case. Otherwise it must be marked for ergative case, which identifies it as the natural starting-point' (DeLancey 1981: 640).

Nash (1995, 1997) is among early proponents of the encoding of person splits in terms of syntactic hierarchies. In analysing the person ergativity split in Georgian, she concludes that agents in ergative languages correspond to a predicate-internal position, though they are projected to the Spec of a higher category in non-ergative languages. For Nash the definite character of 1/2P pronouns means that they will be 'licenced higher than other pronominal arguments, at a level at which the ergative/ absolutive patterns is blocked' (Nash 1997:137).

Recall from section 1 the line of thought suggested by Laka (2006), Baker and Atlamaz (2013), Coon and Preminger (2013) on the perfectivity split – namely that perfective structures are structurally more elementary than progressive ones. Applying the structural complexity approach to Person ergativity splits, Coon and Preminger propose that in languages which display person ergativity splits, 1/2P external arguments determine a more complex structure than 3P ones. The latter therefore are compatible with the encoding of transitivity by ergative case – the former require nominative case, to reflect the essentially non-transitive structure of the sentence. This unification of perfectivity and Person splits by Coon and Preminger is supported with arguments to the effect that Person splits cannot be seen as part of a DSM (Differential Subject Marking) phenomenon that parallels the DOM phenomenon (see in particular Aissen 2003, but also Dixon 1979).

In particular, Coon and Preminger argue that 1/2P vs. 3P splits are not found (or exceedingly rare) with objects. In reality, in easily accessible European varieties, 1/2P pronouns have case and agreement pattern different from 3P ones. Just to take one familiar example from Italian (or French) 3P clitics have an accusative form, as in (56a), and a dative one, as in (56b), and the accusative

obligatorily agrees with the perfect participle. In the 1/2P accusative and dative are not distinct, and the notional accusative may not agree with the perfect participle, as in (56c).

(56) a. L(a) ha vista
her s/he.has seen.fsg
'S/he saw her'

b. Le/ ci/ mi ha parlato
to.her/us/me s/he.has spoken.msg
'I spoke to her/us/'

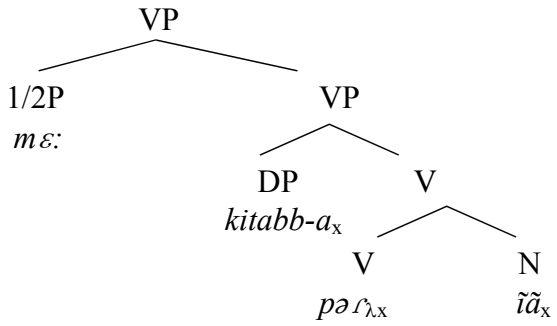
c. Ci/ mi ha visto
us/me he.has seen.msg
'He saw us/me'

One may of course invoke morphological level phenomena such as 'syncretisms' for data like (56). Alternatively, in syntactic terms, the 'syncretism' of accusative and dative on a form which may not agree with the perfect participle suggests that 1/2P clitics undergo obligatory DOM, which in Romance is generally lexicalized as a (non agreeing) dative (as in Punjabi, see section 3.1). Similar considerations apply to the several full pronouns systems in both Romance and Albanian varieties (Loporcaro 2008, Manzini and Savoia 2011a, 2011b, 2014) that display different case alignments along the 1/2P vs. 3P divide. If such data are confined to the morphology, they no longer represent a counterexample to Coon and Preminger. However, the empirical issue these authors discuss vanishes, since the alignment of pronouns can no longer reveal any syntactic pattern. Examples of 1/2P vs. 3P splits do not necessarily involve the pronominal system either. Consider in particular the prepositional accusative phenomenon of Romance, whereby DOM objects are introduced by a dative/locative preoposition, generally *a*. Though the large majority of Romance varieties have the Spanish-type split based on animacy and definiteness (van Heusinger and Kaiser 2011), Italian varieties with a 1/2P vs. 3P split are documented by Manzini and Savoia (2005). In short, it seems to us that Participant/non-Participant distinctions are equally relevant for DOM and for Person ergativity splits (i.e. DSM). This also weakens Coon and Premingers's conclusion that in the absence of any possible not DSM/DOM unification, Person ergativity splits must be unified instead with perfectivity splits.[12]

[12] Coon and Preminger also draw a parallel between their account of Person ergativity splits and accounts of auxiliary selection according to Person in Central and Southern Italian dialects by Kayne (1993), Cocchi (1999), D'Alessandro and Roberts (2010). For these authors, *have* auxiliary in the 3P depends on an abstract preposition ('to') incorporating into *be*; ParticipantP forms a barrier to this incorporation and *be* auxiliary surfaces in the 1/2P. However, Legendre

From the present point of view, all aspects of the structure of examples (53)-(54) must be as already detailed in section 3 – except that the external argument is associated with the Loc(⊆) elementary predicate in terms of which we model ergative case. Putting together the structure of the VP predicate in (41) with the absence of Loc(⊆) ergative case on the external argument, we obtain a structure of the type in (57) for example (53a), where we adopt the conclusion that Participant argument have a distinct categorial signature.

(57)



We know that in (57), *mɛ:* cannot be interpreted as an internal argument – not only because of the presence of an independent VP internal argument, but also because DOM obligatorily applies to 1/2P internal arguments attaching them as possessor/obliques. Therefore the question why the absolute 1st /2nd P form is not interpreted as an internal argument simply does not arise. The question is how it can be interpreted as an external argument. The simplest answer is that the presence of a Loc(⊆) elementary predicate introducing the location-of the-event, as in the ordinary perfects in (41), is sufficient to create a transitive predicate, but it is not necessary. Rather, one could argue that the application of an argument to the VP predicate (via a simple lambda-operator) is interpreted as transitivizing the event. This is what Punjabi (57) implies. The question then becomes why simple lambda-attachment of the external argument, not licenced by ergative case, is restricted to 1st/2nd person.

Under the conceptualization that we are suggesting, the structure in (57) reflects simply a lack of restrictions on 1/2P. Manzini and Savoia (2007: 188) discussing auxiliary selection according to Person in Romance, state that "the participants in the discourse, i.e. the speaker and the hearer (and the sets including them) are anchored directly at the universe of discourse, independently of their role within the event. On the other hand non-participants in the discourse depend directly for their characterization on the position assigned to them within the structure of the

(2010), Manzini and Savoia (2005, 2011a) show that there are varieties where the person split pattern is maintained (1/2P vs. 3P) – but the auxiliaries are inversely matched (1/2P with *have* and 3P with *be*). Such data suggest that the person split and auxiliary selection really are two independent variables, which can freely recombine. A strong theory enforcing the 'standard' auxiliary split (i.e. 1/2P with *be* and 3P with *have*) appears to be empirically inadequate.

event". When applied to the Person ergativity split in Punjabi, this means that non-Participant arguments, must be introduced by a dedicated predicate, either lexical V or Asp, or Loc(⊆). This constraint does not hold of 1/2P, which are introduced in the absolute form not only as the external argument of progressives (where they agree with Asp), but also as the external arguments of perfects. In other words, lexical 3P referents, crucially interpreted in virtue of their role in the event, require a specialized morphosyntactic characterization of this role. The interpretation of Participants arguments, crucially based on their anchoring to the universe of discourse, can dispense with specialized means of attachment to the structure of the event, specifically Loc(⊆).

The proposal that we are putting forward (essentially like De Lancey's 1981) yields the syntactic Person split, i.e. the intrinsic ability to serve as 'location-of-event' of 1/2P, directly on the basis of their cognitive content. In this sense it is distinctly shallower than approaches such as Coon and Preminger's. Yet a treatment of Person splits in terms of structural complexity appears to be empirically too strong, undergenerating in more than one respect (DOM, auxiliary selection).

5. Kurdish: the ódecay of ergativityô

Many Iranian languages (though not Persian) are characterized by perfectivity splits of the type illustrated in Punjabi with similar agreement alignments and with a similar contrast between a nominative subject of progressive tenses and an oblique subject of perfective tenses. We already saw in relation to the Indo-Aryan language Haryani in (27) that a perfectivity split can be observed in the absence of a specialized ergative case – since in Haryani the subject of perfective sentences is introduced by an all-purpose oblique (dative). Kurmanji Kurdish is characterized by an even more elementary case organization, since it has just two possible forms for DPs, best characterized as a nominative/absolute form and as an oblique/objective one. A residual case system is found in Sorani Kurdish, where DPs lack case inflections and the perfectivity split has a reflex only in the lexicalization of clitic pronouns. In what follows we will briefly consider whether the continuity, or discontinuity, between these forms of perfectivity split and the classical ergativity split of Punjabi, can be captured within the present framework of assumptions.

5.1 Kurmanji Kurdish

Our Kurmanji Kurdish data come from the Bahdînî dialect (cf. fn. 1; for a general description see

Thackston 2006a). Bahdînî Kurmanji has a case system which distinguishes a nominative case from a non-nominative one, both in nouns and in pronouns. In nouns, nominative case corresponds to uninflected lexical base, therefore to what we have called the absolute form of the noun in Punjabi. In the progressive tenses, the nominative lexicalizes the external argument of transitive verbs, as in (58), and the sole argument of intransitives, as in (59). The internal argument of transitives is in the non-nominative (traditionally oblique) form. The verb agrees with the nominative argument in person and number. Besides in the progressive tenses, Bahdini Kurmanji has a system of 'tense ezafes' (Haig 2011), i.e. linkers, which also agree with the nominative subject. Following Franco et als. (to appear) here we will assume that they instantiate a system of doubling clitics.

(58) a. ʒənək jɑ: kamis-i də-ʃʊ-t
woman.Abs Lkr.f shirt-Obl Progr-wash-3sg
'The woman is washing the shirt'

b. ɛz kurk-(æk-)i/ketʃk-(æk-)e: jɑ:/je: də-bin-ɪm
I.Nom boy-(indef)-Obl/girl-(indef)-Obl Lkr.f/m Progr-see-1sg
'I(f./m) am seeing the/a boy/girl'

c. ɛz jɑ: tæ də-bin-ɪm
I.Nom Lkr.f you.Obl Progr-see-1sg'
'I(f.) am seeing you'

d. tu je: mən də-bin-i
you.Nom Lkr.m me.Obl Progr-see-2sg
'You(m) are seeing me'

(59) ʒənək jɑ: də-nəv-it
woman.Nom Lkr.f Progr-sleep-3sg
'The woman is sleeping'

The traditional characterization of the case inflections *–i* for masculine singular, *-e* for feminine singular and *–a* for plural as obliques is best understood in relation to examples like (60) where they alone lexicalize the thematic dative. Similarly the possessor in the DP in (61), cf. (7a) above, is in the oblique (genitive); an ezafe, i.e. linker clitic, is also present, agreeing with the head noun. Furthermore the oblique appears on the internal argument of Prepositions, as in (62).

(60) a. aʊ je: partuk-e də-da-ta ʒəŋk-e
he.Nom Lkr.m book-Obl Progr-give-3sg woman-Obl

‘He is giving the book to the woman’

b. ɛz jɑ: qalam-i de-da-ma kurk-ɑ:/ketʃk-ɑ:
I.Nom Lkr.f pen-Obl Progr-give-1sg boys-Obl/girls-Obl
‘I are giving the pen to the boys/girls’

(61) dest-e ketʃk-e
hand-Lkr.m girl-Obl.f
‘the hand of the girl’

(62) bærɑmbær/ ʒer/ lə pəʃt/ lə bən/ sɛr mɛn/ tæ/ kʊrk-i/ ketʃk-e:/ mez-e
in front of/ under/ behind/ before/ on me.Obl/you.Obl/boy-Obl/girl-Obl/table-Obl

In perfect contexts, nominative lexicalizes the internal argument of transitives as in (63), while their external argument is lexicalized by oblique. The verb agrees with the nominative, hence with the internal argument.

(63) a. ʒəŋk-e zɔruk nəχoft/ nəχoft-ən
Woman-Obl child/children.Nom cover.Perf-3sg/-3pl
‘The woman covered the child/ the children’

b. ʒəŋk-e ɛz nəχoft-əm
woman-Obl I.Nom cover.Perf-1sg
‘The woman covered me’

c. mən korek dit-ən
I.Obl boys.Nom see.Perf-3sg
‘I saw the boys’

The sole argument of intransitive perfects appears in the nominative, as in (64). There is no difference between unaccusative and unergative contexts. This represents a considerable departure from a classical ergative system like Punjabi. In perfects like (63)-(64) the case and agreement alignment is in fact not sensitive to the internal vs. external argument divide – but to the distinction between external arguments of transitives and all other arguments.

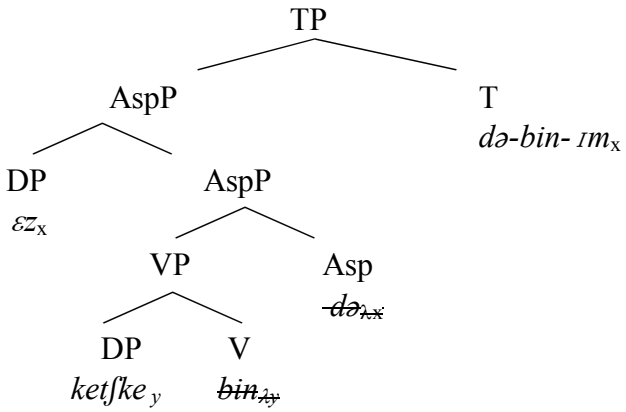
(64) a. aʊ kaft
he.Nom fall.Perf.3sg
‘He fell’

b. tu nəvəst-i / aʊ nəvəst

you.Nom sleep.perf-2sg / he.Nom sleep.Perf.3sg
'You have slept/he has slept'

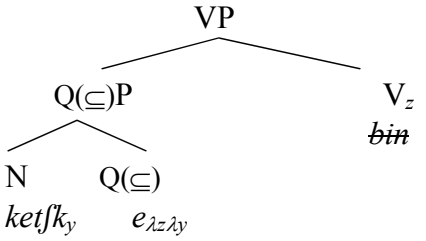
Let us begin with the transitive progressives in (58). We assume that the internal structure of the predicate is the same as in Punjabi; in particular the Kurmanji examples present a progressive morphology *də-* which we may consider to be a lexicalization of Asp∀. At the same time the verb does not have a nominal class and number inflection (unlike the participial forms of Punjabi), but rather a number and person inflection, like finite verbs in Romance or Germanic languages. This suggests that Kurmanji Kurdish is rather more similar to English or Italian in that the verb lexicalizes a T position. If we put together a predicate-internal structure of Kurmanji with the positioning of the finite verb inflection in T we obtain the structure in (65) (for example (58b)). If the finite inflection is associated with T, as in English, by minimality agreement will pair it off with the outer argument of the predicate, i.e. the external argument (or the internal argument with unaccusatives). If it turns out to be desirable, the structure in (65) is also compatible with the assumption that the higher argument is raised to Spec, TP for agreement with T.

(65)



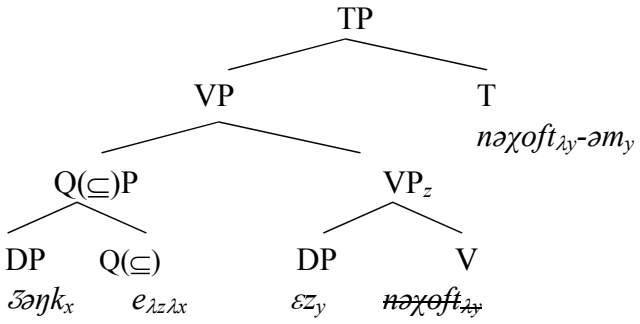
Recall from section 1 that Baker and Atlamaz (2013) assume that the case on the internal argument in (65) is a default case. However under present assumptions, the grammar includes positive properties only; in other words, there couldn't be a lexical entry specified simply as the absence of any property (default). Rather an alternative analysis of the internal argument in (65) is available to us in terms of previous proposals on Punjabi. Thus we can assume that in Kurdish oblique marking is extended to all internal arguments – in other words that they are all attached through the Q(⊆) case/elementary operator, as sketched in (66) for the relevant subtree of (65).

(66)



The analysis in (66) has the advantage that if we apply the same construal of the oblique to subjects of perfects, the perfectivity split of Kurmanji is revealed to have the same basic shape as that of canonical ergative languages like Punjabi. We keep assuming that the organization of the predicate is simpler in the perfect than in the progressive, since in the perfective the event is presented as a resulting state, i.e. in present terms as a simple VP predicate. In the absence of an Asp layer, as in Punjabi the external argument is introduced by the oblique case/elementary predicate Q(⊆), denoting a relation between the argument itself and the V(P) event, as in (67) (cf. example (63b)). The agreement inflection in T targets the closest non-oblique DP, namely the internal argument. [13]

(67)



As we already commented, a crucial difference between Punjabi and Kurmanji lies in the

[13] Note that nothing that we have said so far predicts that the internal argument cannot itself be associated with oblique case, with the verb showing up in the invariable 3rd person singular form. Indeed even within the Kurmanji dialectal fold, there are varieties where this pattern is attested, for instance the variety of Dyarbarkir in (i) (Dorleijn 1996).We would of course apply to (i) the same basic analysis as in Punjabi double obliques in section 3.

(i) We min dit
2pl.Obl I.Obl see.Perf
'you saw me'

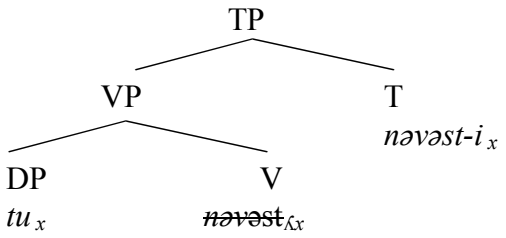
Another property of Dyarbarkir Kurmanji worth remarking upon is that in double oblique contexts, agreement with the oblique external argument becomes possible, as in (ii).

(ii) We min ditin
2pl.obl I.Obl see.pst.2pl
'you saw me'

There is crosslinguistic evidence that (ii) reflects an independent parameter. Thus agreement with the oblique external argument is attested in Indo-Aryan languages, for instance in Nepali (Schikowski 2013), with double obliques (i.e. DOM internal arguments) or without (i.e. internal arguments in the absolute form). Not surprisingly, Sigurdhsson (2004) argues that oblique ('quirky') subjects allow for (partial) agreement in Icelandic. Another independent parameter involves the possibility of agreement with oblique objects; this is attested in Indo-Aryan languages with DOM internal arguments, for instance in Marwari where the perfect "always agrees with O whether it is marked [DOM] or not" (Verbeke 2013:234). These parameters are outside the scope of the present work.

fact that the external argument of unergative perfects is not introduced as an oblique in Kurmanji. Recall that in Punjabi the verb inflection is associated with V and picks up only the internal argument – or takes on an invariable form if the internal argument is incorporated (in the sense of Hale and Keyser 1993) as with unergatives. Any external argument must then be merged as an oblique, since direct merger with the lexical predicate is impossible. However in Kurmanji, the verb inflection is associated with T; nothing therefore prevents us from adopting structures like (68) for unergatives (cf. example (64b)). The inflection in T becomes then identified (agrees) with the sole non-oblique argument.

(68)



The present analysis is compatible with Baker and Atlamaz's (2013) conclusions in that it takes the two-case system of Kurmanji to be in reality an alternation between agreement-licenced forms (bare lexical bases) and forms licenced by a case inflection proper. The more complex structure of the progressive determines agreement with the external argument of transitives and the internal argument of unaccusatives, as well as the oblique treatment of the internal arguments of transitives; the more elementary structure of the perfect determines agreement with the internal argument of transitives and the sole argument of intransitives, as well as the oblique treatment of external arguments of transitives. However contrary to Baker and Atlamaz, the present account does not involve the assumption that the perfectives are a form of passives;[14] it does not characterize non-nominative case as a default, but associates it with the positive Q(⊆) characterization (the basic oblique); and finally it does not depend on computationally complex processes such as Cyclic Agree to explain the agreement pattern in (67)-(68). Among other things, the latter seems to hold little hope of an explanation of the relation of the Iranian pattern and the Indo-Aryan (here Punjabi) one.

In present terms, like European languages, Kurmanji Kurdish associates agreement with T and hence its agreement patterns are not directly sensitive to thematic structure, either in the perfect or in the progressive. Yet Kurmanji is still like Punjabi with respect to the asymmetric structuring (VP vs. AspP) of perfective and progressive predicates, leading to the ergative-like case alignment

[14] Baker and Atlamaz provide an example of a Kurmanji passive (actually what they call a quasi-passive) involving the perfect form of the verb, but the latter is crucially endowed with a nominalizing suffix. Suffixation of the perfect is also necessary for the formation of passives for instance in the Western Iranian language Masali (Paul 2011: 117).

of the former.

5.2 Sorani Kurdish

In Sorani Kurdish (Thackston 2006b, cf. fn. 1 on our sources) both lexical DPs and full pronouns lack any case inflection; yet a perfectivity split is still visible in this language, in the agreement inflections associated with the verb and in the clitic system. As noted by Thackston, the latter has a distinctive morphological shape (*-m/-t/-i/-man/-yan/-tan*) coinciding with that of possessive clitics in DPs, as in (69). [15]

(69) ktjeb-akæ-i/-m/-n (M)
book-Def-3sg/-1sg/-3pl
'his/her/ my/ their-book'

In the progressive examples in (70), the verb inflection agrees with the external argument of transitives, as in (70ac) and with the sole argument of intransitives, as in (70d) – i.e. with what in Kurmanji would be the nominative/absolute argument. The clitic picks up the internal argument of transitives, i.e. what would be an oblique in Kurmanji; the oblique status of the clitic is of course what its possessive (i.e. 'genitive') use in (69) also suggests. Within the sentence clitics seem to appear immediately to the left of the verb, where they are preceded by the Progr head. They can also attach to prepositions, providing a lexicalization of their object, as in (70c).

(70) a. kor-ak-æ a-i/-m/-t bin-et (M)
boy-def-Lkr Progr-3sg/-1sg/-2sg see-3sg
'The boy sees him/me/you'

b. ema e-i/ a-t ʃor-in (S)
we Progr-3sg/ Progr-2sg wash-1pl
'We are washing it/you'

c. mən e-i a-m pe:-t (ɔu krasa) (S)
I Progr-3sg give-1sg to-2sg the shirt
'I am giving it to you (the shirt)'

[15] The labels (M) and (S) specify the data from our Mariwan informant and those from our Sanandaj informant respectively.

d. korakɛ a-χɛw-et (M)
the boy Progr-sleep-3sg
'the boy is sleeping'

In the perfect, the same series of clitics that lexicalize the internal argument of transitives in (70), lexicalizes their external argument, as in (71a-c). If clitics are oblique, then the fact that they pick the external argument in perfects reveals the existence in Sorani of a case perfectivity split parallel to that of Kurmanji, even in the absence of case inflections on nouns. As expected, if an inflection is present on the verb, it agrees with the internal argument of transitives, as for instance in (71c), or with the sole argument of intransitives, as in (71e). The positioning of the clitic is largely compatible with that observed in progressives in (70) – since it tendentially appears before the verb; since however there is no Progr head, it encliticizes on the closest argument (cf. also Dabir-Moghaddam 2012). There also appears to be a constraint against sentence-initial clitics or clitics attaching to a topic, forcing the clitic to follow the verb in, say, (71c).

(71) a. du ʒən-əm bini (M)
two woman-1sg see.Perf
'I saw two women'

b. to qalam-aka-t grt(-ue) (M)
you pen-Def-2sg take.Perf-3sg
'You took the pen'

c. mən da-m pe:-t a'ma (S)
I give.Perf-1sg to-2sg this
'I gave you this'

d. hat-i (M)
come.perf-2sg
'You came'

e. korakɛ χaut (M)
boy sleep.Perf
'the boy slept'

A further pattern emerges in transitives, for our Sanandaj speaker, namely transitive perfects associated with two clitics, as in (72), one picking up the internal argument and the other the external argument. The realization of two clitics, hence two obliques, one for the internal argument

and one for the external one, creates a double oblique structure; though these are not found in the Bahdini variety considered here, we have seen that they are amply attested in Iranian varieties (fn. 13). In clusters of two object clitics, the internal argument clitic always precedes the external argument clitics (i.e. it is lower than it). Note also the position of the clitic between the negation and the verb in (72b).

(72) a. ema di- t- man (S)
we see.Perf 2sg 1pl
'We saw you'

b. ema na- t- man- di (S)
we NEG 2sg 1pl see.Perf
'We did not see you'

It is beyond the scope of the present paper to provide a structural account of the clitics of Sorani and specifically of their positioning. Their basic alternations seem compatible with the conclusion that they are clitics in the Romance sense of the term, i.e. dedicated heads in the inflectional domain of the sentence (Sportiche 1996, Manzini and Savoia 2007 a.o.).[16] Their mesoclitic positioning (between the progressive prefix and the verb stem) is not an obstacle to their syntactic treatment, given analyses of Romance mesoclisis such as Kayne (2010), Manzini and Savoia (2011c).

Even though we must leave a more detailed analysis of Sorani for future research, the reason its data bear mention here is that they show the perfectivity split can arise in a language where case is restricted to inflectional heads (clitics). Though the progressive-perfect contrasts are restricted to clitics, they are indeed the same as in Kurmanji and they admit of the same general explanation. Progressive sentences have an Asp layer of structure triggering the distribution of case (here only on clitics) and of agreement analyzed for Kurmanji in (65). On the other hand the simple structure of the predicate VP in the perfect triggers patterns of agreement and case (here only on clitics) seen in Kurmanji (67). As already mentioned, the Sorani examples in (72) correspond to a double oblique pattern, for which the relevant discussion here is that of Punjabi in section 3. Why a language may have double oblique and invariable agreement (here Sorani) – while another language does not (here Bahdini Kurmanji) is therefore an independent parameter (cf. fn. 13).

[16] Karimi (2013), working within an Appl framework, argues that the oblique clitic of the perfect corresponds to a high Appl head.

6. Conclusions

The so-called ergativity split between perfect and progressive tenses is observed both in languages with a specialized ergative case (e.g. Punjabi) and in languages with a more elementary case system (Kurdish). In present terms the perfectivity split is due to the fact that perfects are states/results and hence project an elementary VP predicate (like APs, NPs, PPs); therefore external arguments are not introduced directly on the predicative spine, but by means of an oblique case, i.e. an elementary predicate Q($\subseteq$) or Loc($\subseteq$) saying that the event is 'included by', 'located at' the argument (restricted to transitives in Kurdish). In a VP predicate furthermore the inflection picks up the internal argument, determining phi-feature identity with any DP lexicalization of the latter ('agreement'). By contrast progressives have a complex organization of the predicate/event, where the progressive head can introduce an argument (the external argument). The verb inflection, appearing externally to the verb complex, picks up the external argument or the sole argument of intransitives, which appear in the direct case. It is eventually the internal argument that is introduced by an oblique elementary predicate/case.

The idea that ergative alignment corresponds to a lesser degree of internal complexity of the sentence with respect to nominative alignment is not new in the formal literature. Here we have reviewed in particular recent work by Baker and Atlamaz (2013) and Coon and Preminger (2013) (based on Laka 2006). The comparison is instructive when it comes to the realization of the core idea. Both Baker-Atlamaz and Coon-Preminger adhere to what we may call the 'new Chomskyan synthesis' heavily dependent on the 'syntacticization of semantics' (Cinque and Rizzi 2010) and on the Uniformity Hypothesis (Culicover and Jackendoff 2006) – in a nutshell, on the existence of a precompiled Universal Grammar where complex sets of categories and their hierarchies are fixed cross-linguistically; externalization is just a matter of pronunciation (Kayne 2010). In the present work we adopt a much more spare view of what is precompiled; the conceptual space of UG can be cut up by different categories in different languages, projecting different syntactic structures (compatible with semantic composition, i.e. Full Interpretation). Externalization is effected by the lexicon and different lexicons define different grammars (Chomsky 1995).

The debate is not ideological – since it is constructed on a common core of assumptions as to the mental reality of grammar and the existence of language universals inscribed in our mind-brain. We believe that the poorer model we are proposing is better suited to explaining variation than the richer, stronger alternative. For instance, we have no need to invoke the passive nature of perfect participles, as Baker and Atlamaz do, getting involved in stipulations about empty auxiliaries reinstituting the active interpretation of perfects. What we have is simply a stative/

resultative aspect, represented by a VP projection. As the result of an event it can convey past tense (perfect) or a state imputed to its internal argument (passive, cf. so-called adjectival passive); this depends on the further build-up of the sentence.

Our conclusions on the person split are analogous to those on the perfectivity split. Strong predictions on the distribution of person splits such as those introduced by Coon and Preminger's theory do not seem adequate to capture fine variation, since in the actual data record, Participant vs. non Participant splits characterize both subjects and objects. In other words, the weaker theory entertained here, that makes the person split into a cognitive primitive interacting freely with syntactic structuring, seems at the moment better motivated.

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