

# Morphological and Syntactic (non-)finiteness. A Comparison between English and Balkan Languages

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## *Abstract:*

In English, finiteness has an extremely limited realization in morphology and is almost exclusively defined in syntax. In particular, there are two main morphological forms, the stem and the stem followed by the *-ed* ending, which function as finite or as non-finite (infinitive, participle) depending on the syntactic context. We propose that the main split of English is aspectual and tense and mood specifications are derived by the syntactico-semantic context. Importantly, there is no necessary connection between the form that non-finite complementation takes in English and the reduced inflectional paradigm of the language. Geg Albanian and Romanian are richly inflected languages. Yet the short infinitive of Romanian coincides with the verb stem; the Geg Albanian verb stem externalizes the infinitive (*paskajore*) and participle. Therefore in Balkan languages as well, non-finiteness is defined by syntactic context. Specific attention is paid to the role of the subject and of prepositional introducers in disambiguating the relevant verb forms.

*Keywords: Infinitive, Inflection, Participle, Preposition, Subject, Tense/mood/aspect*

## *1. Introduction*

English is characterized by the almost total absence of verbal inflection. The verbal forms for a verb like *open* are given in (1). The formations in (1a) are in the present, while those in (1b) are in the past. Leaving aside the 3<sup>rd</sup> person singular, present tense, which takes the affix *-s*, the verb has exactly the same form in all the other persons and numbers. It is basically uninflected. In (1b), the verb takes the affix *-ed* (*opened*) in all persons and in both numbers.

- (1) a. I/you open, he/she/it opens, we/you/they open  
 b. I/you/he/she/it/we/you they opened

What is more, *open*, along with the finite forms in (1a), also corresponds to the infinitive. The complement clauses in English (2a-b) are treated as infinitival, given that the embedded verbs have no morphological indication for 3<sup>rd</sup> person (cf. \**John tried/ought to opens the door*). On the contrary, they are (obligatorily) introduced by the element *to*, which is standardly treated as an infinitival marker (Chomsky 1981). The embedded subject in (2) is obligatorily null and its reference is controlled by the matrix subject.

- (2) a. John tried (\*Bill) to open the door.  
 b. John ought (\*Bill) to open the door.

The imperative (3a) and the subjunctive (3c), which is a relic form and not really productive, also correspond to the form *open*. The form *opened*, apart from being the past tense, also corresponds to the perfect/passive/adjectival participle (4).

- (3) a. Open it!  
 b. I request that he open it.
- (4) a. I have opened it.  
 b. It was opened.  
 c. an opened box

One obvious question that arises is whether the lexicon has four different entries for *open* and two different ones for *opened*, or whether there are just two entries *open* - *opened*. If the former is the case, then we should allow for a high degree of homonymy in the lexicon. If the latter, we would have to account for the different functions that each of these forms has. In morphological terms, verbal inflection in English shows a very high degree of syncretism (Pinker 1999: 30-33). In terms of the standard morphological framework for generative grammar, namely Distributed Morphology (DM, Halle and Marantz 1993), one might propose that underlying syntactic forms are fully specified; however, massive syncretism results from the underspecification of the lexicon, or the application of Impoverishment rules (or both).

As is well-known, the DM account relies on Late Insertion of lexical exponents. Under projection of the syntax from the lexicon (Chomsky 1995), the question of syncretism takes a different shape, essentially that of disambiguation by the syntax or the interpretive interface (Kayne 2010). The comparison with Balkan languages, including in particular Eastern Romance (Romanian) and Albanian, is relevant in this respect because it shows that

poverty of inflectional morphology in the system is not necessary to trigger the use of bare verb stems in particular as non-finite forms of the verb (infinitives, participles). Both Eastern Romance and Albanian are inflectionally rich. Romanian is more or less comparable to other null subject Romance languages; Albanian adds inflections for Voice (Manzini *et al.* 2016) on top of everything else. Yet the Romanian ‘short infinitive’ is a verb stem. So is the *paskajore* ‘infinitive’ of Geg Albanian, also used as the perfect participle; in Geg Albanian furthermore both the present and the simple past 3<sup>rd</sup> person singular may be instantiated by verb stems. Note that Geg Albanian does have participial inflections, which are only used in adjectival environments. Note also that Romanian has shed the *-re* inflection which was present in Latin and still survives in another Eastern Romance language, Aromanian. Therefore external causes seem irrelevant to the instantiation of non-finite forms (and partially also finite forms) by means of a verb stem.

In section 2 we discuss English, concluding that the distinction between the stem form and the *-ed* form is aspectual and that finiteness is a syntactic construal. In section 3 we discuss the representation of the subject, which represents an important factor in the syntactic definition of (non-)finiteness. In sections 4 and 5, we consider Balkan languages. Section 4, on Romanian, allows us to advance a proposal as to the prepositional element that is seen to introduce (inflected and non-inflected) infinitives in Romance and in Germanic. In section 5, we consider the verb stems of Geg Albanian in their participial, infinitival (*paskajore*) and finite construals. Again we assume that their nature as verb stems makes them compatible with a restricted set of enrichments (modal, temporal, aspectual), subject to the syntactic context.

## 2. (Non-)finiteness in English

As briefly outlined in the introductory section, the question arises what (non-)finiteness amounts to in languages like English, where inflectional morphology is almost entirely absent. The basic assumption would have to be that (non-)finiteness in English is syntactically defined.

Eide (2016) considers data from English and Norwegian and distinguishes between morphological ( $\mu$ -)finiteness and syntactic finiteness. According to her analysis, English does not have  $\mu$ -finiteness and the two verbal forms in (5) correspond to two entries in the lexicon specified simply for  $\pm$ past.<sup>1</sup> This implies that their different readings would have to be derived syntactically.

- |     |    |        |               |                        |
|-----|----|--------|---------------|------------------------|
| (5) | a. | +past: | <i>opened</i> | (preterite/participle) |
|     | b. | -past: | <i>open</i>   | (present/infinitive)   |

<sup>1</sup> We do not discuss the verbal *-ing* form, since it is non-finite in any case.

As is well-known, some English verbs distinguish between the two +past forms, since they have one form for the preterite and another one for the participle, as shown in (6).

- (6) a. go – went – gone  
 b. speak – spoke – spoken  
 c. see – saw – seen

According to Eide (2016: 159-161), these forms are quite often mixed in the speech of native speakers, as in the examples in (7).

- (7) a. woulda *came* ('would have come'), coulda *went* ('could have gone')  
 b. I *seen* it ('I saw it'), she *done* it ('she did it')

This kind of mixing, Eide argues, shows the absence of the  $\mu$ -finiteness feature in English. To the extent that the distinction between the preterite (finite) and the participle (non-finite) holds for some verbs, it has to be defined lexically and restricted to a limited class of verbs (learned forms). As the mixing of these forms shows, this distinction tends to become obsolete.

Adopting this approach, there is a single form *opened*. If we assume that the form *open* is essentially the stem, which excludes the past reference, we should define the way this form is compatible with both finite and non-finite interpretations. The same holds for the form *opened*, which being +past, is compatible with a finite reading, while as a participle it gets a non-finite reading. The issue that arises then concerns finiteness at the syntactic and interpretive level.

### 2.1 The form [-past]

Let us start with the form *open*. As a present tense, it is the same in all persons, apart from 3<sup>rd</sup> person singular which takes the ending *-s*, namely *opens*. In all the other persons, it is the syntactic subject that disambiguates it.

- (8) {I, you, we, they} *open*

Following Chomsky (1995), the syntactic category Tense has uninterpretable  $\phi$ -features, whose interpretation is determined by the corresponding interpretable features of the pronoun in subject position, as in (9). In (9), Inflection is not realized as a separate morpheme since verbal inflection is absent in English. The realization of the phi-features and their specification is derived by the merge of the pronoun (or a DP in general) with the head T; this configuration gives rise to a spec-head (Subject-T) agreement relation

(see also Ackema 2002; Roberts and Roussou 2003). In what follows we use I (Inflection) instead of T, as the relevant head, as in Chomsky (1986).

- (9) [<sub>IP</sub> I/you/we/they<sub>[iφ]</sub> [<sub>I<sub>[uφ]</sub></sub> [<sub>vP/VP</sub> open (the door) ]]]

This approach is compatible with the fact that there is no evidence for V-to-I movement in English (Pollock 1989) and a null subject is not possible in main finite clauses. Effectively, finiteness in (9) is determined by the presence of the subject. At the same time, finiteness concerns the temporal reference of the clause as well, coinciding with the utterance/speech time (for an overview see Nikolaeva 2007; Eide 2016). We assume that this particularly elementary tense specification can be provided by a (default) enrichment at the Conceptual-Intentional (C-I) interface.

Let us next consider the same form (i.e., the verbal stem) as a non-finite verb in (10). In this structure, the same form occurs along with the marker *to*, which traditionally in generative grammar is analyzed as an element of the non-finite (infinitival) Inflection. So what turns the verbal form into a non-finite one is essentially the syntactic environment it occurs in.

- (10) (John tried) [*to open*/\**open* the door ]

It's worth pointing out that the same stem can be construed as an infinitive even when the marker *to* is absent, as in (11). The sentence in (11a) has a modal verb which functions as an auxiliary and realizes the I head. Modal verbs in English can only be used as auxiliaries and not as main verbs (see Roberts 1993). In example (11b), the so-called bare infinitive is selected by a perception verb such as *see*. Despite the absence of *to*, the verbal form is interpreted as a non-finite one and occurs in the complement position of the main verb.

- (11) a. John must/should/could *open* the door.  
b. I saw John *open* the door.

Apart from the above distribution in complement position, the verbal stem can also occur in a main clause, where it does not depend on some other element, as in example (12). That this is a non-finite form is supported by the fact that the presence of *opens* gives rise to ungrammaticality, although the subject is 3<sup>rd</sup> person singular. The above sentence is not a declarative but an exclamative, which expresses the speaker's attitude towards the content of the proposition. Thus it has a modal reading.

- (12) a. John *open*/\**opens* the door?! Never!  
b. *Him*/\**he* open the door?! Never!

Another property of this construction is that its subject is in the accusative and not in the nominative, as (12b) illustrates. This shows that there is a correlation between the morphosyntactic realization of the subject and the notion of finiteness. In any case, the subject in main modal clauses can be syntactically realized, despite the fact that it shows restrictions regarding case or person specifications.

So, what we observe is that the same stem occurs in different syntactic environments, some of which are characterized as finite, as is the case with matrix declaratives, or as non-finite, or as modal. Modal occurrences also include the ‘subjunctive’ (13a) which is not productive in English, as has been replaced by an overt modal (a periphrastic construction) (13b). The main verb in (13a) does not inflect (i.e. \**leaves*).

- (13) a. I request that he *leave*.  
 b. I request that he should leave.

In the context of modal uses, we should also include the imperative, as in (14). Once again, despite the optional presence of a 3<sup>rd</sup> person subject, the verb remains uninflected, as in (14b).

- (14) a. Open the door!  
 b. Someone open the door!

To summarize the discussion so far, the form *open* ([–past]) can be construed as a finite or non-finite, or correspond to mood distinctions (subjunctive, imperative). As a finite form, it has (independent) time reference or modality. As a non-finite form it has bound or dependent temporal reference (see Landau 2004) when it occurs in a complement clause, or it expresses modality in a main clause, as in (12). Again, one may surmise that the relevant modal readings are available at the C-I interface. Thus imperatives are read as either possibilities or necessities (von Stechow and Iatridou 2017), i.e. as either of the two basic modals. As for subjunctives, Giorgi (2009) suggests that they are best construed as the absence of ‘something’, namely of the independent T and Speaker-anchoring that characterizes main clauses (and possibly indicative embedded clauses).

## 2.2 *The form [+past]*

Let us now turn to the form *opened*, which according to Eide’s (2016) account is [+past]. For discussion’s sake, we will ignore the morphological distinction that arises within some verbs between past tense and participle. As (15) shows, the same verbal form (V+*ed*) shows in all persons in both num-

bers. As we saw in relation to the form *open* in (8), what makes this sentence finite is the presence of the subject, whereby the DP defines the (abstract) phi-features of the I head with respect to person and number.

(15) {I, you, he, she, it, we, they} opened

The same form becomes ‘non-finite’ when it is introduced by an auxiliary verb like *have* or *be*, as in (16).

- (16) a. I have *opened* the door.  
 b. The door was *opened* (by the locksmith).  
 c. The door has been *opened* (by the locksmith).

What is interesting in (16) is that although the main verb remains the same, i.e. *opened*, the readings it gives rise to change according to the auxiliary used. So the presence of *have* gives rise to the perfect (present or past) tense, while the presence of *be* changes the voice from active to passive. The example in (16c) shows a combination of both in the present perfect passive. More precisely, *have* retains voice (active in (16a), passive in (16c)), while *be* changes it (from active to passive). In descriptive grammars, the form *opened* in (16a) is referred to as ‘past participle’, while in (16b) (and (16c)) as ‘passive participle’. Stowell (2008) uses the term *p-participle* to refer to both cases.

While the form of the participle remains the same in both constructions, the valency of the predicate (its argument structure) is affected, depending on the auxiliary (see Collins 2005). In particular, the verb *opened* remains transitive when selected by *have*, but becomes intransitive when selected by *be*. In the latter case, its internal argument is promoted to the subject position (satisfying the EPP), while the external argument is either non-externalized, corresponding to an existentially bound variable, or externalized as an oblique, namely as the *by*-phrase. If we assume that the verbal form is the same in both cases (Hoekstra 1984), then the attested differences in argument structure will have to be attributed to auxiliary selection. A basic difference between the two auxiliaries is that *have* as a main verb of possession is transitive, while *be* is unaccusative (on copula *be*, see Moro 1997). Being transitive, *have* has an external and an internal argument (17a), while *be* being unaccusative has no external argument, but only an internal argument (17b).

- (17) a. I have a car.  
 b. I am a doctor.

According to Manzini and Savoia (2007, 2011), the participial form in these constructions matches its argument structure to that of the selecting

auxiliary. Their analysis is partly based on Kayne's (1993) account, which assigns a bi-clausal structure to Aux-V constructions. The embedded clause may have a reduced or a full structure. Going back to the auxiliary verbs, *have* has an external argument (the subject) and an internal one, that is, the complement defined by the non-finite verbal form. Within that complement, the verb retains its argument structure. Its external argument though is bound by the matrix subject, as in control constructions (see (18a)). On the other hand, *be* has only an internal argument, which is the complement defined by the non-finite verbal form. The internal argument of the embedded verb is demoted and its internal argument is raised to the subject position of the matrix (auxiliary) clause. Its argument structure then matches that of its selecting auxiliary. The external argument of the embedded verb is either an existentially bound variable or is realized as a *by*-phrase, as in (18b).

- (18) a. I have [(PRO) opened the door]  
 b. The door was [~~the door~~ [opened ~~the door~~] (by the locksmith)]

Denoting the embedded subject as PRO (18a) is purely conventional and serves the purpose of showing that the subject of *have* and that of *opened* are one and the same entity. The representation in (18b) is the classical configuration assigned to passives and raising (from internal argument to the subject position and from there to the matrix subject position).

At this point it's worth pointing out that if the complement of *have* changes to another non-finite form, i.e., the infinitive *to+V*, then the sentence is no longer a present perfect, but switches from a temporal to a modal reading, as in (19). This is also a control configuration, as is the case with most *to*-complements. The reading assigned to *have* is that of obligation.

- (19) I have [(PRO) to open the door]

Sentence (19) supports the view that *have* is a two-place predicate whose interpretation (possessive, auxiliary, modal) also depends on its complement.

As for the +/-past distinction, we can see that the different functions and readings of the verbal forms also depend on the syntactic context they occur in. In particular, we observe the following: the form *opened* can be characterized as [+past] when it functions as a preterite (finite) or in combination with *have* (perfect). On the other hand, the +past reading seems excluded when this form functions as a passive participle. Instead, the preterite interpretation is determined by the tense of the auxiliary *be*, as in (20).

- (20) The door is/was/has been *opened*.



This shows that what is known as the participle, that is the verbal form in its non-finite uses, cannot be always specified as [+past]. To put it differently, assuming that the form ending in *-ed* is +past, as shown by its presence in the preterite or perfect tenses, seems to exclude its non-past uses. At this point the following options arise: to assume that there are indeed two different forms (past vs passive participle) or that somehow the +past specification is suspended in the passive construction, or that this form is not specified for tense in any case.

According to Stowell (2008), the temporal reference of the participle is determined by the element it depends on and hence by the syntactic environment it occurs in. It seems that in Stowell's terms, the last of the options mentioned above is to be favored, namely that the participle is not specified for tense: it has semantic properties that give rise to a past shifting when combined with a semantic feature in the relevant syntactic context; this accounts for the perfect tense with *have*. Stowell considers additional cases, like those in (21).

- (21) a. The tenant *evicted* by Karen is taking my class.  
 b. The tenant who *was evicted* by Karen is taking my class.  
 c. If *evicted* by Karen, a tenant should take swimming lessons.

The example in (21a) contains a reduced relative clause, namely *the tenant evicted by Karen*, shown in its full form in (21b), namely *the tenant who was evicted*. The question is how the past reference arises in (21a) given that there is a passive voice reading and no past tense auxiliary to combine with the participle. In Stowell's account, this has to do with the fact that the absence of another verb (an auxiliary) precludes the association of the participial form with the utterance time and assigns to it the past reference (shifting) – presumably by implication. He argues that this is confirmed by the example in (21c) where the participle has a future reading, since it is part of the conditional (*if*) construction with a modal in the apodosis.

Before we reach our own conclusions, let us briefly consider the so-called adjectival participle, as in (22a-b); in (22a'-b') we set out their Greek translations. The adjectival participle in English corresponds to two different forms in Greek: the (active) verbal adjectives ending in *-tos* and the (passive) verbal participles ending in *-menos* (for Greek see Anagnostopoulou and Samioti 2013).

- (22) a. a *closed* door  
 a'. *mia klisti porta*  
 b. a *chased* dog  
 b'. *enas kinijimenos skylos*

The basic property of these participles is that they modify a noun, and belong to the nominal projection; thus they are not related to the I head which defines the clause as part of the verbal projection.

The main question that adjectival participles raise is how they differ from verbal participles, especially when they function as predicates (for an early distinction between adjectival and verbal participles, see Wasow 1977), as in (23). Traditionally, the passive (verbal) participle describes an event, while the adjectival participle (nominal) describes a state or a result (see also Levin and Rappaport 1986).

(23) The door *is/was* closed.

We will not discuss the (syntactic and semantic) differences between the two cases. What is of interest here is that from the morphological point of view, there is one form with either function. Therefore the different functions are disambiguated syntactically and/or at the C-I interface.

### *2.3 Some preliminary conclusions: tense or aspect?*

Summarizing the discussion so far, there are two morphological forms in English which can be categorized as [+/-past]. The [-past] form corresponds to finite and non-finite (infinitives) uses, as well as non-indicative mood interpretations (subjunctive, imperative). On the other hand, the [+past] form corresponds to the preterite (finite) but also to the participle. In the latter case, the temporal characterization does not seem to be accurate with respect to the semantic properties of the form.

If we follow the reasoning that English is highly syncretic and that there are indeed just two forms, the next step we should take is to view their distribution from a new perspective. In this respect we suggest that the distinctive property is not [+/-past], that is tense, but [+/-perfective], that is aspect. Such an approach can cover the distribution of the two forms and solve the problem that arises with the *-ed* form (Stowell 2008). As a perfective form, it is compatible with a past tense reference in finite declaratives. On the other hand, it is compatible with the denotation of a state or result when it takes the distribution of a 'participle', as in these instances the temporal reference is provided by the auxiliary verb. In this way, participial contexts instantiate the basic (aspectual) denotation of the *-ed* form and the problem shifts from the participle to the past (preterite) and the expression of finiteness. When we consider the bare stem form, what we have characterized as [-past] so far could similarly be argued to be [-perfective]. The latter can correspond to present tense, to the infinitive (when it is dependent and usually introduced by *to*, or when it is bare under a modal auxiliary), and can be supplied to carry

modality. In the context of the present discussion, we can also clarify the issue of strong verb paradigms in (normative) Standard English, with their distinction between finite past and participle forms. In present terms, those varieties of English simply preserve a distinction between [+past], embedded in finite contexts and [+perfective], embedded as a participial expression where Tense is contributed by the matrix auxiliary.

A further elaboration of our general approach will be provided in section 5, when we will turn to (Geg) Albanian. The highly inflected nature of this language means that both agreement and tense/mood/aspect are explicitly encoded by verbal inflections. Despite very different external circumstances, the verb stem in Albanian corresponds to the (non-adjectival) participle and the infinitive, as well as (depending on verbal inflection class) to the 3<sup>rd</sup> person singular of the perfective past (in the middle-passive voice) or to the 2<sup>nd</sup>/3<sup>rd</sup> person singular of the present.<sup>2</sup> This also goes to show that attempts at explaining the English pattern on external grounds (a repair to the loss of inflectional endings) would be severely misguided.

For the time being, we leave open the discussion of the role of the element *to* in infinitival structures. As mentioned earlier, *to* is taken to realize non-finite I. A different approach is outlined by Roberts and Roussou (2003), though, which take it to be a C element originating from a preposition. Under this line of reasoning, the implication is that there is no marker of non-finiteness associated with I in English. We will get back to this issue once we consider similar constructions in Romance (section 4) and Albanian (section 5). Before we proceed, however, we complete our discussion of English, addressing the role of the subject in determining finiteness.

### 3. *The role of the subject*

In this section, we consider what makes a verbal form finite, in the absence of the relevant morphological distinction (absence of  $\mu$ -finiteness). In particular, the question is what sort of role syntax plays in the definition of (non-)finiteness. As we saw in the preceding section, a verbal form can be construed as finite or non-finite depending on the syntactic environment it occurs in. More precisely, in main (matrix) clauses it has a finite property, further depending on the clause type, while in subordinate (complement or adverbial) clauses this construal depends on other properties, such as the presence of the marker *to*, for example.

The features that the form acquires potentially affect the realization (and interpretation in relevant cases) of the syntactic subject and vice versa

<sup>2</sup> At least in the dialect of Shkodër, taken by Manzini and Savoia (2007, 2018a) as their empirical basis. For other dialects see Manzini and Savoia (2007).

the features of the subject define those of the verbal form. Let us consider the examples in (24). In the sentence in (24a), the form *open* is understood as finite and the subject is obligatorily realized. If *they* is omitted, a different meaning is derived, namely that of an imperative (*Open the door!*), with the implicit subject understood as second person (singular or plural). On the other hand, in the sentence in (24b), the form *open* is understood as non-finite, as it is the complement of the marker *to*. This syntactic context excludes the overt realization of the subject, which is necessarily a PRO (*\*They tried John/him to open the door*).

- (24) a. They *open* the door.  
 b. They tried to *open* the door.

Following the idea that syntax and morphology build on the same set of categorial features (see Halle and Marantz 1993, Manzini and Savoia 2007), the possible scenarios are as follows:

- (i) morphological and syntactic expression → morphemes correspond to syntactic heads  
 (ii) lack (partial or total) of morphological expression → syntax takes over completely

Case (i) holds for the Romance languages, Albanian, and Greek, at least in most instances: the Inflection head in syntax has a morphological exponent, namely the verbal inflection. Case (ii) holds for English: absence of a morphological exponent.

Let us start from the first type of language, e.g. Greek (25a). Verbal inflection in Greek provides information on tense and agreement (phi-features). In particular, agreement provides information on the subject with respect to person and number in all tenses (+/-past). This allows for the subject to be omitted, since its features are provided and identified via the inflectional affix attached to the verbal stem. If we accept that inflection has a syntactic correspondent I, then the inflectional affix is also syntactically expressed as in (25).<sup>3</sup> Thus the subject is always expressed in the syntax, and in this way the Extended Projection Principle in the sense of Chomsky (1982) is automatically satisfied.

- (25) a. {egho, esi, aftos, emis, esis, afti} anigh-o/(j)-is/(j)-i/-ume/(j)-ete/-un  
 I, you, he, we, you(plural), they open-I/-you/-he/-we/-you(plural)/-they  
 b. [<sub>IP</sub> DP<sub>[φ]</sub> [<sub>I</sub><sub>[φ]</sub> [<sub>VP</sub> V (DP) ]]]

<sup>3</sup> In (9) we use T instead of I, simply following approaches based on Chomsky (1995). Using Inflection (I) allows us to give a better correlation with morphology, but nothing else hinges on that.

Whether the null subject is syntactically expressed as an empty category, namely *pro* (Rizzi 1982, 1986) or is elided under agreement with the inflectional affix (Roberts 2010), or is not at all expressed in syntax but only as the affix in I (Manzini and Savoia 2007) is a theoretical issue which will not concern us here. These three options are illustrated in (26). What interests us at present is that in languages like Greek, the consistent presence of inflectional morphology defines finiteness with respect to tense and agreement (subject). So finiteness is defined both morphologically and syntactically.

- (26) a.  $[_{IP} \textit{pro}_{[\phi]} \quad [_{I_{[\phi]} \quad [_{vP/VP} \textit{V} (\textit{DP}) ]]]]$   
 b.  $[_{IP} \textit{egho/esi/aftos}_{[\phi]} \quad [_{I_{[\phi]} \quad [_{vP/VP} \textit{V} (\textit{DP}) ]]]]$   
 c.  $[_{IP} \quad [_{I_1 [\textit{V-affix}_{[\phi]}] \quad [_{vP/VP} \textit{V} (\textit{DP}) ]]]]$

Let us now consider English, where inflection is not realized via some affix. In main clauses, the temporal reference is directly associated with the verbal form. If it is the stem (*open*), the temporal reference will be [-past]. In the presence of the ending *-ed* (*opened*), the verb acquires a [+past] temporal reference, at least on the basis of Eide's (2016) analysis; adopting our conclusions in the last section, the difference is actually aspectual and past is a default temporal value associated with the perfective. Independently of tense/aspect, the realization of the subject is obligatory. As we saw in section 2, the overt subject essentially defines the phi-features of Inflection. Finiteness, in terms of tense and agreement, is defined on the basis of the syntactic context, essentially the obligatory presence of the subject.

- (27)  $[_{IP} \textit{I/you/he}_{[\phi]} \quad [_{I_{[\phi]} \quad [_{vP/VP} \textit{V} (\textit{DP}) ]]]]$

The case of the imperative is rather different, since temporal reference is substituted by modality. In this context, the subject can be absent. It's worth mentioning that the implicit subject in this construction is the hearer/addressee, which can be either 2<sup>nd</sup> or 3<sup>rd</sup> person, as in (12) (see Zanuttini 2008). The pair of sentences in (28) shows one more interesting contrast. Negation *not* requires the presence of the auxiliary *do* in (28a). However, as we can see, in the declarative sentence in (28a) the subject precedes the auxiliary *don't*, while in the imperative in (28b), the subject can be absent, or be present in which case it follows the negated auxiliary. This could be interpreted as a construction where the negated auxiliary is in a position above I, namely C, triggering subject-auxiliary inversion, as is the case in questions (*Do you open the door, when it's windy?*). In this context, imperatives involve one additional head in the left periphery, which may be overtly realized as in (28b) (see for example Zanuttini 2008).

- (28) a. You don't open the door, when it's windy.  
 b. Don't (you) open the door, when it's windy!

Let us next consider how the realization of the subject is affected when the verb occurs in embedded contexts (subordinate clauses). We already saw that when the *-ed* form occurs along with an auxiliary verb (perfect tenses or passive voice) the subject is controlled by or raised to the subject of the main clause. These structures are attested with the 'infinitival' complements as well, as in the examples in (29). (29a) is a control configuration with a null subject realized as PRO in syntax and bound by the matrix DP subject. So the DP *John* functions as the subject of both the matrix and the complement clause (via PRO) and is associated with two arguments, or more precisely is the argument shared by two predicates. (29b) is a raising construction: the main verb *seems* has no external argument, so the DP *John* is the argument of the embedded verb only but functions as the subject of both clauses. Finally, in (29c), the subject is overtly realized but with accusative case. This is due to selection by the verb *expect*, which allows for the subject of the complement clause to also function as the object of the matrix predicate (Exceptional Case Marking).

- (29) a. John tried [PRO to open the door]  
 b. John seems [~~John~~ to hate wine]  
 c. Mary expects [*John/him* to open the door]

In the context of the present discussion what interests us is that if the verbal form *open* is selected by the marker *to*, the syntactic structure is interpreted as infinitive and the subject is then licensed by the matrix I, as in (29a) and (29b), or by the matrix verb (v) as in (29c).

Summarizing so far, the defective morphology in the verbal system of English poses the question of how the notion of finiteness is to be defined. Given the limited morphological distinction, finiteness is almost exclusively defined in syntax. In particular, as we saw in section 2, English has two main morphological distinctions that correspond to the stem and the stem with the *-ed* ending, e.g., *open - opened*. According to Eide (2016) these two forms are characterized as [-past] and [+past] respectively. In the present paper we saw that this distinction probably has to be reviewed as one corresponding to aspect, that is a distinction between [-perfective] for the bare form (stem) and [+perfective] for the stem+*ed* respectively. Independently of which is the optimal approach, the issue that remains is that the characterization of these two forms as finite or non-finite is provided syntactically. We further saw the contribution of the subject in this definition, particularly in those cases where the sentence is characterized as finite. Alternatively, the realization of the subject is affected when the sentence is non-finite.

In what follows we turn to Eastern Romance and Albanian and consider non-finite forms that occur in complementation. Although these grammars mark finiteness inflectionally ( $\mu$ -finiteness), they nevertheless show striking similarities with English when it comes to non-finite forms. The similarities involve two aspects: the verbal form which is a bare stem and the availability of a preposition that introduces these forms in complementation.

#### 4. Non-finite complementation in Eastern Romance: Prepositional ‘complementizers’

We begin our discussion of Balkan languages by briefly reviewing Romanian and Aromanian. Aromanian partakes in the Balkan phenomenon of control and raising into finite ‘subjunctive’ sentences, that is sentences that involve a fully inflected verbal form introduced by a ‘subjunctive’ particle. Yet, it has an inflected infinitive with the common Romance *-re* ending. By contrast, Romanian has a so-called “short infinitive”, coinciding with the verb stem as in English, though its occurrences are more restricted than those of the English infinitive.

The so-called short infinitive of Romanian is an invariable verb form corresponding to the verb root followed by the thematic vowel (i.e. the verb stem) – without the morphological *-re* ending of the Romance infinitive. As succinctly stated by Dobrovie-Sorin (1994: 82) “the short infinitive takes on two different forms: it can be preceded by the Prts *a*, or can lack it, be ‘bare’”. Examples of bare infinitives include those in (30). We follow Dobrovie-Sorin (1994: 82) in assuming that the Romanian examples in (30) involve auxiliary verbs that take CP complements – even though for Hill (2013: 566) bare infinitive structures are monoclausal, along the lines of Cinque (2006).

- (30) a. Copiii            nu-            l                    vor            respecta.  
           children-DEF   not-            him                will            respect  
           ‘The children will not respect him’
- b. Copiii            nu                l-                 ar                respecta.  
           children-DEF   not                him-             would            respect  
           ‘The children would not respect him’

Short infinitives preceded by *a* are exemplified in (31). Dobrovie-Sorin (1994: 91) treats the preposition *a* in a way akin to the subjunctive Prt *să*. In other words *a* is generated under C and its I-like properties derive from incorporation between C and I.

- (31) Am                    început            a citi                “Cei trei mușchetari”  
       I.have                    started            to read “The Three musketeers”  
       ‘I began to read *The three musketeers*’

Early Romanian had a larger repertory of infinitival structures, since it also admitted of so-called long infinitives, i.e. infinitives which maintain the *-re* inflection. Long infinitives were preceded by *a*; furthermore the *de* preposition could precede *a*, as in (32). The examples below are from Hill (2013: 562):

- (32) Iar turcii ... au lăsat pre moscali de-a-i mai gonire  
 and Turks-DEF have quit DOM Russians-DEF of-to-them more chase  
 ‘And the Turks ... quit chasing the Russians’

Hill follows the cartographic framework of Rizzi (1997: 563) and therefore identifies the prepositional complementizers *a* and *de* with Fin. In Early Romanian where the two co-occur it is assumed that the Fin position splits into two, with the higher Fin taken by *de* and the lower Fin taken by *a*. It should be mentioned that infinitivals had an altogether wider distribution in Early Romanian, progressively eroded by the subjunctive.

In Standard Romanian, *-re* (long) infinitives in fact survive, but only as nominalizations, for instance in (33) (from Pană Dindelegan 2013).

- (33) consecințele plecării imediate a lui Ion  
 consequences-DEF leaving-OBL.DEF immediate of him Ion  
 ‘the consequences of Jon’s immediate leaving’

Interestingly, Aromanian has kept the long infinitive in its sentential construal. In externalist terms, then, Aromanian appears to be more conservative than Romanian; this is particularly notable, in that Aromanian is spoken in contact with languages (Albanian, Greek) that have fully undergone the shift to infinitival-less languages. The examples of infinitives in (34), from Manzini and Savoia (2018a), display control by an antecedent, or so-called arbitrary control (i.e. generic closure of the control variable), except for causative embeddings, for instance (34e). Control environments include complements of aspectual, modal and attitude verbs, as in (34a-c), as well as infinitival relatives, as in (34d). In all instances, the long infinitive is preceded by the Preposition *ti/di*, with a meaning close to English ‘for’.

- (34) a. mbari ti məkari  
 I.stopped for eat-INF  
 ‘I stopped eating’  
 b. ɲ ɛrəsefti di/ ti vədɛri  
 to.me it.likes for see-INF  
 ‘I like seeing him’  
 c. ma tsə dzək di fətsəri  
 PROGR to.you I.say for do-INF  
 ‘I am telling you to do it’



- d. esti                    unə                    kəmiʃa                    di                    ɣari  
 is                        a                        shirt                    for                    wash-INF  
 ‘It is a shirt to be washed’
- e. i-o                        fɛtʃ                        kəmiʃa                    otsui di                    ɣari  
 to.him-it                    I.made                    shirt-DEF                    to.him for                    wash-INF  
 ‘I made him wash the shirt’

Aromanian, Libofshë

Two types of questions are raised by this complex of data. One has to do with the fact that non-finite sentential embedding does not just involve the dedicated infinitive form, as in Aromanian – but can be carried out by bare stems, as in Romanian. This is the question already discussed in relation to English in section 2; we will further investigate it in relation to a richly inflected language, when we consider the Geg Albanian so-called infinitive (*paskajore*) in section 5.<sup>4</sup>

The second question has to do with the nature of the P introducers of non-finite sentences. As discussed in relation to standard Romanian, the prepositional introducers of Eastern Romance (and of Romance quite generally) are generally assimilated to complementizers; specifically, in a cartographic perspective, they are low complementizers, i.e. Fin. If on simplicity grounds we reject the conclusion that elements like Aromanian *ti/di* bear the double categorization P and C (or Fin), then we are faced with the question why non-finite complements in the Romance languages are embedded by prepositions.

Before we address this question, it is important to go back to English ‘infinitival’ *to*. The standard view is that *to* is an I element, marking non-finiteness, in the absence of an infinitival marker on the verb. However,

<sup>4</sup> A set of facts from the Florentine dialect of Italian seems to indicate that ‘short infinitives’, i.e. verb stems, are a morphological realization of the properties of infinitival embedding open to all of the Romance languages – and are as such independent of the particular external circumstances of Eastern Romance. The facts are relatively well-known in the descriptive dialectological tradition under the label of ‘embedded imperatives’, because they involve the embedding in infinitival contexts of forms homophonous with the 2<sup>nd</sup> person singular imperative, as in (i).

- (i) bizoɾɲa                    zmetti-la  
 is.necessary                    cease-it  
 ‘It is necessary to stop’

In reality, as argued by Graffi (1996), the 2<sup>nd</sup> person imperative is the true exponent of the verb stem in Italian (and Florentine). The example in (i), from Manzini and Savoia (2005: §7.2.5), to which we refer for further discussion, shows that 2<sup>nd</sup> person interpretation is in no way associated with the embedded null subject (here a so-called arbitrary PRO). The corresponding inflected infinitive in Italian/Florentine is *smettere* and the truncated form is *smette* (like the 3<sup>rd</sup> person singular present indicative), therefore truncation of the inflected infinitive is not at stake.

the status of *to* as an infinitival marker under I has been challenged by Roberts and Roussou (2003: 97-110) who argue that *to* in these structures has grammaticalized from a preposition to an element that occupies the lower C position, akin to that of ‘subjunctive’ particles in the Balkan languages. Their evidence is based on the similarities between *to* and the ‘subjunctive’ particles. For example, they both introduce control complements, they give rise to a modal reading in matrix clauses, and they follow the subject when that is overtly realized (cf. *I believe him to be smart*). This view is quite consistent with the approach put forward by Hill (2013). In the context of the Romanian data presented above, English makes a perfect match if it is treated as an element of the P/C categorial status that introduces a complement clause.

Let us now go back to the question that we raised, namely why non-finite complements in Romance (but also in English) are embedded by prepositions. In order to answer this question, we must briefly refer to proposals in the literature to the effect that *that* sentences in English, *che* sentences in Italian etc. are (free) relatives, where *that* in English or *che* in Italian is the relative pronoun (the demonstrative pronoun or wh-pronoun respectively), see Arsenijevic (2009), Kayne (2010), Manzini and Savoia (2011). In other words sentential embedding (in Germanic, Romance) involves a nominalization of sorts. Manzini and Savoia (2018a, b) argue that what they call the *Agree Resistance Theorem* is ultimately responsible for this state of affairs. In standard minimalist theory, embedding of a DP in one of the core argument positions of the sentence involves an Agree operation. If so, it stands to reason that sentential embedding is impossible, given the impossibility of associating  $\phi$ -features with sentences. The treatment of sentential complements as (free) relatives is a way of nominalizing sentential content, so as to allow for its merger as complement or a subject of a verb.

Next, we note that the standard minimalist case licencing via Agree (with *v*, I) only applies to direct cases. Embedding under an oblique case or preposition does not involve an Agree mechanism, but rather the deployment of an elementary predicate, namely the preposition or equivalently the oblique case inflection. In turn, the P elements that we have seen to introduce infinitival and participial clauses in Eastern Romance are all exponents of the two fundamental oblique relations, namely *a* ‘to’ and *di/de* ‘of’. It is reasonable to conclude that in the Romance languages one way to get around the impossibility of licencing sentential constituents via Agree is to turn infinitival sentences into oblique arguments, by introducing them with prepositions, as schematized in (35) for sentence (34a) above.

(35) ... mbari                    [<sub>pp</sub> di                    [<sub>ip</sub> lədzɛri libru]]                    cf. (34a)

This proposal raises a certain number of issues which Manzini and Savoia (2018a, b) discuss. Here we note only that the relativization and obliquization strategies that are used to circumvent Agree Resistance fly in the face of Stowell's (1981) Case resistance, since they amount to saying that sentences are either nominalized and assigned direct case or assigned oblique case. The clash is particularly direct with respect to what we claim to be prepositional embedding in Romance, since one of the crucial pieces of evidence provided by Stowell is the impossibility for finite sentential complements to be embedded under prepositions – which in his terms depends precisely on Case Resistance. However, the Romance languages show that embedding of finite sentence under oblique case/Prepositions, even those selected by the verb, is not excluded in principle, as in Italian (36).

- (36) a. Ho                   provveduto   alle loro necessità  
 I.have               provided    to their needs  
 'I provided to their needs'
- b. Ho                   provveduto   a che    tutti ne   fossero informati  
 I.have               provided    to that  all  of.it were  informed  
 'I saw to it, that all were informed of it'

Eastern Romance also shows that there is no necessary mutual exclusion between P introducers and finite complements. Indeed in Early Romanian the *de* preposition could also precede finite complements, as in (37), besides heading “possessives, complements of origin, ‘by’ phrases, complements of location” (Hill 2013: 559).

- (37) a. au                   poruncitŭ   de au           făcut           un sicriu  
 has                   ordered    of have       made           a coffin  
 'He has ordered them to make a coffin'
- b. să întâmplasă   de           nu           știè           nemic  
 MP happened   of           not         he.knew     nothing  
 'It happened that he did not know anything'

In short, it seems to us that there are no obvious grounds for dismissing the idea that prepositions introducing non-finite sentences in Romance are anything other than the genitive, dative, etc. case markers that also appear in front of DPs. In the present account, the bases for such a construct are posed by the Agree Resistance principle, which can be circumvented either by nominalizing complement sentences – or else by rendering them obliques.

In deciding whether to proceed in the direction just sketched, we also consider what the available alternatives are. The leading alternative is that elements such *deldi*, *a* lexicalize C positions, perhaps Fin in an articulated left periphery of the type proposed by Rizzi (1997). This amounts to saying that

these elements systematically belong to two categories, namely C and P. The question then is why this is so. Asking why certain lexical elements can be merged as both P and C amounts to seeking what properties P and C may have in common, a discussion also raised by Kayne (2000) in observing the affinity between these two categories. In other words, one must eventually explain why P properties translate into Fin status. Introducing the notion of grammaticalization, as in Roberts and Roussou (2003), doesn't necessarily help, unless typological-functionalist approaches are correct in saying that internal explanations cease to hold whenever historical processes intervene. The line we take here is that, though of course variation and change are unpredictable, the internal reasons of grammatical competence always intervene in shaping them.

### 5. *The Geg Albanian participle and infinitive*

In contexts where the Romance or Germanic languages insert an infinitive and other Balkan languages have the subjunctive, Geg Albanian also has the option of lexicalizing the syntactic construct traditionally described as *paskajore* (Joseph 1983, Demiraj 1985). The class of elements that can introduce the *paskajore* includes *mε* 'with' in (38a), *pa* 'without' in (38b) and the progressive *tu(i)* in (38c). These introducers can be identified with prepositions; indeed *mε* and *pa* also introduce DPs. As for the Prt *tu(i)*, yielding a gerund interpretation, it must be connected with the preposition *tu*, *tek* 'at' (Demiraj 1985).<sup>5</sup>

- |         |  |            |                          |       |         |
|---------|--|------------|--------------------------|-------|---------|
| (38) a. | ka   | f'ʎu       | mε                       | hãŋər |         |
|         | he.has   | finished   | with                     | eat   |         |
|         | 'I finished eating'                                |            |                          |       |         |
| b.      | dola   | pa         | u                        | la:   |         |
|         | I.went.out   | without    | MP                       | wash  |         |
|         | 'I went out without washing myself'                |            |                          |       |         |
| c.      | jam  | tu ε       | la/tʃu/mlu/ve:ʃ          |       |         |
|         | I.am   | at him/her | wash/wake.up/cover/dress |       |         |
|         | 'I am washing/waking up/covering/dressing him/her' |            |                          |       |         |
| d.      | t  | kam        | pa                       | tui   | ka'lu   |
|         | you  | I.have     | seen                     | at    | pass.by |
|         | 'I saw you passing by'                             |            |                          |       |         |

Geg Albanian, Shkodër

<sup>5</sup> The data are from Manzini and Savoia (2007, 2018a), where a discussion of the general shape of the verbal and complementation system both of Geg and of Tosk Albanian, can also be found.

At the same time, the invariable verbal form which combines with the prepositions *me/paltu* also appears in combination with the auxiliaries *kam* ‘I have’ and *jam* ‘I am’, in contexts which in English require a participle. Specifically, it forms the present perfect active together with *kam*, as in (39a), while with *jam* it forms the present perfect middle-passive, as in (39b). In essence, embedding under either auxiliary yields a (present) perfect; *be* triggers a passive reading, *have* an active reading.

- (39) a.  $\epsilon$                       kan              mlu  
           him/her              they.have    covered  
           ‘They have covered him/her’
- b. jan                      mlu              (prei s ams)  
           they.are              covered        by the mother  
           ‘They have covered up/been covered (by mother)’
- Geg Albanian, Shkodër

The examples in (38) bring up an important theme discussed in section 2 in relation to English, namely the ability of the verb stem to be construed as infinitival depending in essence on the context of embedding. The examples in (39) bring up another important theme of the discussion of English, namely the fact that the participle can in turn correspond to a non-specialized verb form, here again the verb stem. Despite the fact that Albanian has an extremely rich repertory of finite verb inflections, the non-finite forms are even more morphologically impoverished than those of English. We are then faced with a different version of the issue we discussed at length in section 2, namely whether we want to say that a single form of the verb is involved and if so, what the morphosyntactic and interpretive properties are that allow it work the way it does.

### 5.1 *The paskajore ‘infinitive’*

The discussion of English in section 2 ended with the proposal that the differentiation between verb stems and *-ed* forms is aspectual, essentially contrasting [+perfective] and [-perfective] forms. Even an elementary characterization along these lines seems too rich for the verb stems of Geg Albanian. Specifically, the examples in (38)-(39) show that both perfective and progressive readings are available for the verb stem depending on the syntactic context. The conclusion that the relevant forms are verb stems morphologically is motivated in detail by Manzini and Savoia (2007, 2018a).

We begin by considering the structures traditionally known as *paskajore* ‘infinitive’ which most closely parallel English and Romanian, considered before. The *paskajore* occurs in subject control contexts with modals as in (40a), and with aspectuals as in (40b), in object control contexts as in

(40c), as well as in arbitrary control contexts, as in (40d), and in embedded *wh*-questions as in (40e). It also lexicalizes complements of causative verbs, as in (40f), where no control is involved but rather an accusative embedded subject. Note that the modal negation *mas* precedes *mε*, though *mε* precedes object clitics.

- (40) a. doin            mε            ε            bā  
 they.want    with        it            do  
 'They want to do it'
- b. kam            fi'ʎu        mε            hāŋɟər  
 I.have        begun        with        eat  
 'I have begun to eat'
- c. t                kam        θãn        mε        ε        mlu  
 to.you        I.have     said        with        it        cover  
 'I told you to cover it'
- c'. i                kan        θãn        (tʃi) (mas)    mε    ε bā  
 to.him they.have     said        that not        with it do  
 'They told him not to do it'
- d. ɸʃt    mε        mir        mas        mε        ε        ʃkru  
 it.is    more     good        not        with        it        write  
 'It is better not to write it'
- e. nuk            di            (sε)        tʃa        mε        bā  
 not        I.know     that        what        with do  
 'I don't know what to do'
- f. ε                kam        bā        m        u        tʃu  
 him        I.have     made     with        MP    wake.up  
 'I made him wake up'

Geg Albanian, Shkodër

The *paskajore*, like English infinitives, also occurs in adverbial control sentences such as purpose sentences in (41a-c) and temporal adjuncts in (41d).

- (41) a. kam            a:rð        mε        t        a        ðãn  
 I.have        come        with     to.you    it        give  
 'I came to give it to you'
- b. kam            a:rð        (tʃi)     mε        ε        pa  
 I.have        come        that     with        him/her see  
 'I came to see him/her'
- c. kam            i:k pər    mas    mε        ε/t        pa  
 I.have        left for not    with     him-her/you see  
 'I left not to see him/her/you'
- d. kam            da:l        para     sε        mε        ʃku  
 I.have        got.out    before    that        with go  
 'I got out before going'

Geg Albanian, Shkodër

The embedded sentences in (40)-(41) show that *mε* can be introduced by the finite complementizers, namely *tʃi*, as in (40c), (41b) or *sε*, as in (40e), (41d). A second noteworthy set of facts is that in (41) *mε* can be preceded by other prepositions such as *pār* in (41c) or *para* (*sε*) in (41d).

Unlike the English infinitive, the *paskajore* supports nominative lexical subjects. Specifically a lexical subject can insert between the complementizer and the *paskajore*, as illustrated in (43a-b); the other possible position for the subject is postverbal, as in (43c-d). The example in (43e) seems to configure a different possibility yet, namely that of a *pro* construal of the *paskajore*'s subject. Reference is understood to be to the object of the main clause ('you'), but the hypothetical 'if' clause is attached too high for the matrix object to c-command it and therefore its null subject, controlling it in the technical sense of the term (predication or logophoric binding for Landau 2015). A similar issue arises with the occurrence of the *paskajore* in matrix sentences, with modal meaning (optative, etc.), as in (42).

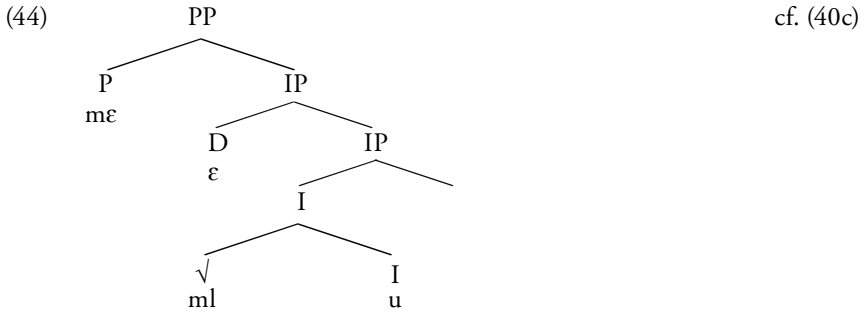
- (42) *mε* a:rð  
with come  
'If he came!'
- (43) a. du                    tʃi                    ti                    mε                    ε                    bā̃  
I.want                    that                    you                    to                    it                    do  
'I want you to do it'
- b. du                    tʃi                    vła-i                    jat    mε ε                    bā̃  
I.want                    that                    brother-the                    yours to it do  
'I want your brother to do it'
- c. doin                    (tʃi)                    mε                    a:rð                    a'ta  
they.want                    that                    to                    come                    they  
'They want to come'
- d. kam                    da:l                    para sε                    mε                    a:rð ti  
I.have                    gone.out before that                    to                    come you  
'I went out before you came'
- e. bā̃    mas                    mε                    a:rð                    s    t                    pʃes  
if                    not                    with                    come                    not    you    I.await  
'If you don't come, I am not waiting for you'

Geg Albanian, Shkodër

Let us focus first on the element that generally introduces the *paskajore*, namely *mε*. This also introduces noun phrases, taking the meaning of the preposition 'with'. An argument in favour of the conclusion that this coincidence is not mere homophony comes from the fact that the negative counterpart of *mε*, i.e. *pa* 'without', can also introduce the invariable participle/infinitive, cf. (38). Recall that the Romance languages attest the use of *di/de* 'of' and *a* 'to' as sentential introducers, namely the prepositional counterparts of the two basic oblique cases, genitive and dative (on case

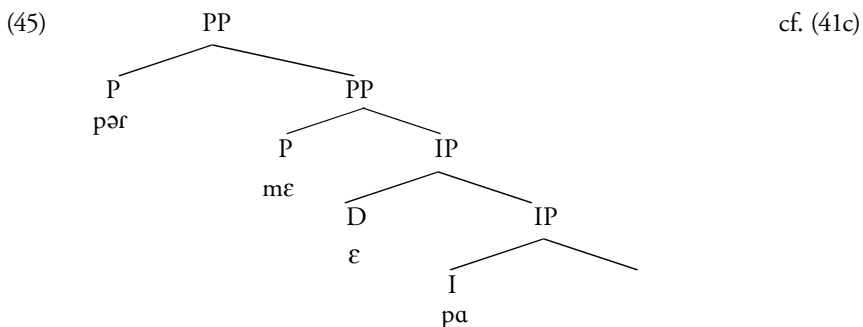
markedness hierarchies see Blake 2001, Caha 2009). Unsurprisingly, *mε* ‘with’ is the prepositional exponent of another fundamental oblique, namely instrumental. In fact, Levinson (2009), Franco and Manzini (2017) observe that the preposition ‘with’ in a sentence like *the girl with the hat* essentially introduces the reverse relation with respect to the preposition ‘of’ as in *the hat of the girl* (cf. also *I sprayed paint on the wall/ I sprayed the wall with paint*).

Given the analysis of oblique sentential embedding introduced in section 4 for Eastern Romance, we obtain a structure like (44) for example (40c). In the examples in (40)–(43), the evidence points to the complement of the Preposition *mε* being an IP, since the modal negation *mas* and wh-phrases are external to it.

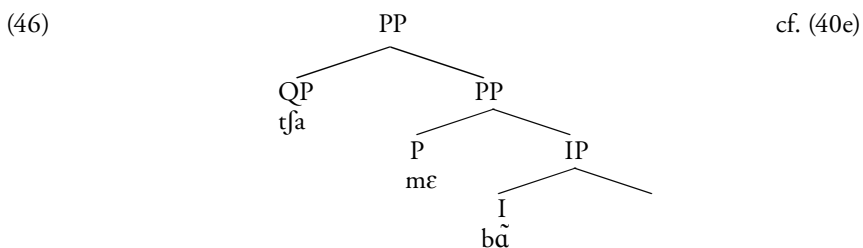


The preposition *mε* can be preceded by a *tʃi* or *sε* complementizer. Furthermore, it is also possible to combine the *paskajore* with a further prepositional introducer. We know from much recent literature that what are conventionally known as PPs have complex internal structures (Svenonius 2006) where the lowest layer is represented by the prepositions that we have been discussing throughout, roughly corresponding to the fundamental oblique cases – while higher levels denote more complex relators, specifically spatial relators or AxPart (Axial Parts). The embedding of *mε* under purposive *pər* in this sense instantiates an independently known type of structure, as in (45). If the complex PP was spatial, we could confidently use the label AxP for *pər*, which has the spatial meaning of ‘through’ in Albanian, as in Latin/Italian *per*, besides the causative/benefactive meaning ‘for’. Given the lack of spatial meaning we simply use the PP label, pending further research.





A further descriptive issue is raised by *wh*-elements and the negation, which are merged higher than *mɛ* though lower than complementizers. The fact that the *wh*-phrase is found above *mɛ*, as is the negation, would seem to imply that these elements are adjoined to PP, as in (46).



Let us then turn to matters pertaining to the internal structure of the *pa-skajore*. On the basis of the discussion of English, we assume that the presence of PRO controlled subjects (or traces in raising) is the normal state of affairs with non-finite predicates. As illustrated in (43), however, a lexical subject in the nominative case may appear above *mɛ* and below an eventual complementizer, or in the lower predicative domain of the embedded sentence, surfacing postverbally. This raises questions about the licensing of nominative case, given Chomsky's (2001) approach to direct cases in terms of  $\varphi$ -features agreement with *v* (accusative) and with I (nominative). Unless we resort to the idea that nominative is the default case (Belletti 1990), the licensing of nominative case in (43) seems to be oblivious to the absence of  $\varphi$ -features on the verb.

In fact, we tentatively propose that the presence of  $\varphi$ -features may be relevant in some languages that do not admit nominative subjects in non-finite sentences like English (see the discussion in section 3). In other

languages, agreement in a more abstract property, say D, returns a more realistic picture of the availability of nominative case. For instance in the Romance languages, lexical subjects are overtly visible in many varieties in non-obligatory control infinitivals (Mensching 2000; Manzini and Savoia 2005). Notice that the idea that null case is necessary for the definition of PRO (Chomsky 1995) is consistently rejected by more recent literature (Landau 2004, 2015 a.o.).

Manzini and Savoia (2007) take examples like (43e) to show that the *paskajore* also allows null subject *pro* construals, followed by Manzini and Savoia (2018a) without much discussion. In reality the evidence is compatible with much less drastic assumptions. We know that even English allows so-called arbitrary readings of PRO, i.e. generic (near universal) readings in non-obligatory control environments like (47a). In the same environments it also allows individual readings, apparently depending on contextual restrictions, as in (47b). In the absence of evidence to the contrary, we assume that something similar is involved in the individual reading of (43e) or (42).

- (47) a. Attacking the boss is a risky career move  
 b. Insulting the boss during the meeting was the wrong career move for Mary

In the next section, we consider the bare verb stem occurring in participial contexts, both progressive and perfect. We argue that the perfective (resultative, stative, nominal-like) reading is basic and the progressive reading is syntactically determined. Similarly, the minimally specified basic nature of the verb stem is compatible with enrichment by modal operators, yielding the kind of irrealis interpretations associated with infinitives in English as well.

### 5.2 Participial (and finite) construals

Let us consider the examples in (39b), where the verb stem is embedded under the *be* auxiliary yielding a perfect passive reading. In discussing English in section 2 we simply referred to the demotion of the external argument (realized as an existentially bound variable or an oblique *by*-phrase). Delving somewhat deeper into the analysis, we assume that perfect participle structures are reduced, in so far as they do not involve the Voice layer which supports the attachment of a DP external argument (in the sense of Harley 2013, Legate 2014). The external argument nevertheless may surface, but as an oblique, as in (48a). Short passive is also possible. In this instance, the external argument slot remains unsaturated; this is read as an open variable at the C-I interface and is interpreted by existential closure, as in (48b). The subject of the *be* matrix verb is provided by raising of the object, which is the only goal available for the T probe (see also Manzini *et al.* 2016).

- (48) a. jan                    [[<sub>vp</sub> mlu DP] [<sub>pp</sub> pr̥i s ams]]                    cf. (39b)  
 b. jan                    [∃x, x [<sub>vp</sub> mlu DP]]

The passive structures in (48) need now to be compared to active perfects. The ideal outcome would be that perfect active sentences have the same structure as in (48), lacking a Voice layer capable of hosting an external argument. What varies is just the presence of the auxiliary *have* rather than *be*. The idea is that the fact that *have* has an external argument, forces the control reading for the variable corresponding to the external argument of the embedded participle/verb stem (or to the sole argument of intransitives). This yields a control configuration, along the lines of (49).

- (49) DP kan                    [x=PRO [<sub>vp</sub> mlu ε]]                    cf. (39a)

At the same time, the verb form found in (48)-(49) is compatible also with the progressive reading, in combination with the Preposition *tu* ‘at’. Pronominal clitics occur between the *tu* introducer and the verb it embeds, suggesting that the participial structure embedded by *tu* is a sentence, as sketched in (50) for example (38c). Further corroboration as to the sentential status of the *tu* complement comes from the fact that it can also embed the modal negation *mas*, as in (51), associated with the modal C area of the sentence.

- (50) [<sub>ip</sub> jam            ...            [<sub>pp</sub> tu    [<sub>ip</sub> ε mlu                    cf. (38c)  
 (51) ... tu            mas            ε            b̃ã  
       ... at            not            it            do  
       ‘... not doing it’

Geg Albanian, Shkodër

How is the progressive interpretation of (50) compatible with the perfective interpretation of (48)-(49)? In the words of Manzini and Savoia (2007) “the bare stem is not so much lexicalizing these meanings, but rather proves compatible with them due to the very elementarity of its morphology”. At the same time we want to avoid characterizing the verb stem of Geg Albanian in purely negative terms, as a default. Rather we propose that the verb stems of Geg Albanian have a stative, property-like interpretation, producing a “nominal version of the ... predicate” (Manzini and Savoia 2007). Various types of embedding are available for such a form. The simplest one, requiring no extra assumption, is the embedding just seen in (48)-(49); the participle reading is a resultative reading, which accrues to the verb stem in virtue of its stative/nominal-like nature. The same stative/nominal-like nature is compatible with (irrealis) modality, hence with infinitival readings, as in section 5.1.

In turn, the progressive interpretation involves the building of sentential structure pivoting around the prepositional introducer *tu* 'at'. In the typological literature, progressives are known to often involve locative constructions. As Higginbotham (2009: 54) points out, the historical origin of the English progressive is a locative construction: "...the relic of the preposition is still heard, of course, in those English speakers who say *John is a'crossing (of) the street*". Manzini *et al.* (2017) consider the matter in connection with Apulian and Sicilian varieties where the progressive is constructed by the verb *stare* 'stay' followed by the *a* 'at/to' dative/locative preposition and by a finite form of the verb. They assume that the dative/locative preposition instantiates a relation whose content is part/whole or inclusion (notated  $\subseteq$ ). In other words, in a sentence like *I gave the book to Peter*, *to* introduces a relation between its object '*Peter*' and the theme of the verb *the book* such that *Peter* includes *the book*, i.e. possesses it. Locative is a specialization of the part-whole relation, which involves instances where the internal argument of ( $\subseteq$ ) is a location (i.e. 'x included by y, y location') or is otherwise locatively restricted.

Manzini *et al.* (2017) further observe that a locative syntax is fairly naturally mapped to Landman's (1992) Part-of Proposal for the progressive, namely that "Mary is crossing the street is true iff some actual event realizes sufficiently much of the type of events of Mary's crossing the street". For instance, the sentence in (52a) is true "iff some event is realized in *w* in the past and that event stands in the PROG relation to the type of events of Mary building a house", as indicated in (52b), where PROG is the relation between events and types (sets) of events mentioned in the Part-Whole Proposal.

- (52) a. Mary was building a house  
 b.  $\exists e' [t(e') < \text{now} \ \& \ \text{PROG}(e', \lambda e.\exists y [\text{house}(y) \ \& \ \text{Build}(e) \ \& \ \text{Agent}(e)=\text{Mary} \ \& \ \text{Theme}(e)=y ])]$   
 (Landman 1992)

An important point of the logical syntax of the progressive in (52) concerns the nature of PROG. In Landman's terms, "E, the set of events, is ordered by ... a relation of 'part-of'". For instance "if an event is a complete accomplishment event (Mary's building of a house), the result (the house being built) is part of that event". Importantly for present purposes, this is true in exactly the same sense in which "Hanny's hand at a certain interval is part of Hanny at that (or a larger) interval."

In the Geg Albanian progressive structure in (50), the responsibility for introducing a relation between the event introduced by the main verb and the event type introduced by the embedded sentence falls to the *tu* Preposition, for which we independently postulate  $\subseteq$  part-whole content. Assuming that the  $\subseteq$  part/whole relation may hold of event pairs, saying that one event

is part of, or a stage of, a set of events/an event type, we obtain the semantics required by Landman's PROG.

Next, an operation of  $\lambda$ -abstraction at the C-I interface, which turns the embedded clause/predicate/event into an event type (set), is necessary in order to map the syntax in (50) to a semantics like (52b). This is the kind of enrichment that can reasonably be expected to take place at the interface. At the same time the verb stems of Geg Albanian do not really take on a progressive interpretation. Rather, the progressive interpretation is contributed in (50) by the embedding context, specifically by the part/whole locative preposition *tu* – while  $\lambda$ -abstraction leads the verb stem to receive a type interpretation. Thus the verb stem has again essentially the stative, nominal-like semantics of other participial uses, denoting in this instance an event type.

Finally, as in English, in Geg Albanian verb stems turn up in finite environments. Verb stems ending in vowel occur as the 3<sup>rd</sup> person singular of the middle-passive perfective past, as in (53a), where the *u* clitic like the *si/se* clitic of Romance, externalizes the middle-passive voice. Consonantal verb stems involving long stressed vowels of the type of *ve:f* occur as the 2P/3P person of the present indicative, as in (53b) (see Manzini *et al.* 2016).

- (53) a. u                      mlu  
           MP                    cover  
           ‘He covered himself’  
       b. ε                      ve:f  
           him/her dress.2SG/3SG  
           ‘You dress him/her’/‘S/he dresses him/her’

Geg Albanian, Shkodër

As already assumed for English, present (time of event=time of utterance) may be available as a default contextual enrichment in (53b). Furthermore, Past may be available as a contextual enrichment depending on the perfective, i.e. stative/resultative nature of the verb stem. We assume that 3<sup>rd</sup> person singular interpretation is available in the absence of  $\phi$ -features specifications again as a default enrichment. The fact that Hearer in (53b) is treated like 3<sup>rd</sup> person evokes a split in the person hierarchy 1P vs 2P/3P.

The comparison between English and Albanian illustrates the point that syncretisms in the verbal paradigm cannot be brushed aside as a response to a loss of inflectional paradigms, since Geg Albanian has very rich inflections (for persons, tense, mood, aspect and voice). More to the point, Geg varieties possess a specialized participle, but this only occurs in adjectival contexts of the type in (54). Morphologically, stems ending in vowel combine with an *-m* suffix, for *mlu:-m* ‘covered’ in (54a), *la-m* ‘washed’ in (54b). Stems ending in consonant take *-un*, for instance *ve:f-un* ‘dressed’. These combine with the normal morphology of adjectives, i.e. a preposed Linker (Lkr) and a suffixal agreement.

- (54) a. jam                    i                    mlu:-m/    ε mlu-m-ε    (pɾɛi s ams)  
 I.am                    LKR                    cover-ed/    LKR cover-ed-F    by LKR mother  
 'I am covered (by mother)'
- b. i    kam            kmif-at    ε/t                    lam-ε  
 them I.have    shirt-PL.DEF LKR                    washed- F  
 'I have the shirts washed'

Geg Albanian, Shkodër

The occurrence of verb stems shown in Geg Albanian in perfect/passive contexts is therefore definitely not due to the lack of inflectional resources.

In short, in Geg Albanian the minimally specified nature of verb stems (nominal-like states/results) is compatible with its perfect/passive interpretation, with the enrichment by modal operators, yielding the kind of interpretations associated with the infinitive (control/raising) in other languages. It can also denote an event-type, which is the real nature of its presence in the progressive construction, according to the discussion in this section. There is no need to postulate underlyingly different forms homophonous with one another or syncretically realized as the result of Late Insertion in the DM sense of the term. Rather the verb stem is treated as being multiple ambiguous, depending on the syntactic context.

### 5.3 Back to the *P* element in English

In discussing English in the first part of this article, we initially adopted the standard approach to *to* as an exponent of the *I* category in English. This assumption was called into question in connection with our discussion of Romanian. In particular, Roberts and Roussou (2003) argue that 'infinitival' *to* instantiates categorial reanalysis, from *P* to *C*.

In the history of English, *to* as a preposition was used to introduce a nominalized (dative) verbal form, ending in *-ne* (Callaway 1913, and Lightfoot 1979 in the early generative framework, among others) as a purpose clause in Old English (see Los 1999 for a slightly different view on the nominal status of the infinitive). Part of the change to later stages of the language involves an expansion of this distribution from adjunct (purpose) clauses to complement clauses. The details of this historical development do not concern us here. Suffice it to say that, according to Roberts and Roussou (2003), changes in the infinitival paradigm, along with changes in the realization of subjunctives, gave rise to non-finite complements introduced by *to*. As they argue, *to* was reanalyzed to a (lower) *C* head associated with modality. They also point out that this reanalysis is consistent with the close link that seems to exist between prepositions and complementizers, also attested in Romance languages.

In discussing Eastern Romance, we suggested that a grammaticalization perspective based on the categorial change from P to C is essentially descriptive. Vice versa, better insights may be gained by maintaining that elements such as *a* 'to' keep their prepositional/oblique case status. Based on our conclusions on Romance we assigned a prepositional categorization to the element *me* 'with' introducing the *paskajore* (infinitive) in Geg Albanian. In Geg Albanian as well, nothing much is gained from adopting a grammaticalization view. On the contrary, by keeping the P categorization, we tentatively suggested that the same explanation as to the presence of an oblique case marker can be put forth as in Romance.

The view that *to* is a preposition introducing a non-finite clause may then be entertained for English as well. The comparison is particularly close with the *paskajore* of Geg Albanian, even more than with Romance. Thus for instance, the prepositional introducer follows the negation in both Geg Albanian and in English. Furthermore, as is the case with other prepositional complements, English *to* can be embedded under another preposition, namely *for* as in (55a) (a development that is attested in Middle English). The structure of this sentence can easily conform to the schemata provided above in section 5.1 for Geg Albanian. Finally, *to* as a locative or dative preposition embeds a nominal, as in (55b-c).

- (55) a. I prefer *for* John/him *to* leave.  
 b. John went *to* the movies.  
 c. John gave the book *to* Mary.

Assuming that *to* is the same in all cases in (55), as argued for the corresponding elements in Albanian and Eastern Romance above, is consistent with the approach suggested so far about the role of prepositions as clause-introducers in non-finite contexts in particular.

In short, the similarities between English, on the one hand, and Albanian/Eastern Romance, on the other, include both the availability of bare stems as non-finite forms and the use of a preposition (not necessarily reanalyzed to I/C) for the embedding of these forms.

## 6. Conclusions

In this article, we have examined in detail the behavior of verb forms which coincide with verb stems – or in any event do not display any person endings. English has residual inflectional morphology and it may be thought that the presence of such forms simply reflects the external pressures that have shaped the language. Yet verb stems realizing the 3<sup>rd</sup> person singular of the present/preterite as well as participial/infinitival structures are attested in richly inflected languages such as Albanian. The characterization we arrived

at for English is that these forms are aspectual. For Geg Albanian (and possibly for Romanian) we propose that verb stems are simply a stative/resultative, property-denoting (i.e. nominal) form of the verb. Thus we exclude mere homophony as an explanation – and we also exclude that underlyingly different forms of the verb are syncretically realized via morphological readjustments in a DM-like fashion (see the brief remarks in section 1). Rather, we consider that aspectual, modal and temporal interpretations are made possible by complex forms of embedding, building on the elementary semantics of the verb form, along the lines of Table 1.

<i>Language</i>	<i>Lexical content</i>	<i>Syntactic context</i>
English	verb stem = [imperfective]	present (except 3 <sup>rd</sup> person singular), imperative, infinitive
	<i>ed</i> = [perfective] (regular verbs)	simple past, perfect participle, passive participle
Romanian	verb stem = [stative/nominal]	infinitive
Geg Albanian	verb stem = [stative/nominal]	2nd/3rd person singular present, infinitive, progressive
	verb stem = [stative/nominal] > [perfective]	3rd person singular preterite (middle passive), perfect/passive participle

Table 1. Summary of languages, lexical forms and syntactic values

A parallel line of investigation concerned the contextual setting that helps us disambiguate the relevant verb forms. In this connection, we suggested that adopting the idea that some process of grammaticalization turns prepositions into complementizers (Romance) or inflections (English) does not help much in understanding their role. Vice versa, we suggested maintaining their P categorization and oblique case marker status, at least in Romance and Albanian, with extensions to English as well.

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