Voice morphology in Albanian and Greek:

Implications for the morpholexical and LF interfaces

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1.   Introduction

The aim of this paper is to investigate the interfacing both of the lexicon/ morphology with syntax and of morphosyntax with LF on the basis of data concerning the middle-passive voice of Albanian dialects and of Modern Greek (henceforth Greek). The same general problem of non-isomorphism between form and meaning can be observed both at the level of single lexical items, in cases of syncretism, and at the level of entire structures, at the LF interface. In this perspective, we consider syncretisms involving middle-passive forms of Geg Albanian dialects in section 2, while in section 3 we consider the different morphosyntactic instantiations of the middle-passive voice in Greek.

In the generative literature, the syncretism between passive and perfect readings of the Latin and English participle has been discussed by Embick (2000) within the framework of Distributed Morphology (Halle and Marantz 1993). In Embick's (2000:187) words there is a "distinction between the *functional* and *lexical* vocabularies of a language… functional categories merely instantiate sets of abstract syntacticosemantic features", on which the derivational component operates. The actual phonological terminals corresponding to these abstract categories are inserted after Morphological Structure (Late Insertion), where readjustment rules (may) apply. One of these rules, namely Impoverishment (Noyer 1997), can delete part or all of a feature cluster. If, before Impoverishment, the feature specifications of a given node require insertion of a highly specified lexical item (given an Elsewhere-like principle (Kiparsky 1973) of lexical insertion), the application of Impoverishment results in the insertion of an underspecified, or 'default' lexical item – yielding the all-important phenomenon of syncretism.

Interestingly, a conceptual move against underspecification and default forms characterizes various recent approaches to syncretic phenomena, including Manzini and Savoia (2002, 2004b, 2005, 2007), Kayne (2006, 2007, 2008), Caha (2008). Kayne agrees with Distributed Morphology on the theoretical significance of the distinction between substantive and functional categories. The latter vary according to whether they are overtly or covertly realized; syncretism is the result of a covert ('silent') category being licensed by an overt category (i.e. the syncretic one). In Kayne's conception the syncretic category has no default status – on the contrary, its positive specifications are enough to license the silent category. However the empirical core of Distributed Morphology is

reproduced by the silent category which is responsible for abstractly realizing exactly the features that are Impoverished under the Distributed Morphology account. Manzini and Savoia (to appear a, b, Savoia and Manzini to appear) consider Kayne's proposals in great detail with respect to the empirical domain (Romance clitics) for which they are put forth; because we deal with a different empirical domain here, we will disregard them in what follows, having noted their general relevance.

Caha (2008), on the other hand, also considers the passive/ perfect participle syncretism, arguing explicitly against Embick (2000). In the Superset approach (Starke 2006) that Caha advocates, lexical entries are specified for all features of the nodes under which they insert – which means that syncretic entries (far from being underspecified) have richer specifications than others. Lexical insertion requires that lexical items match all features of the nodes they lexicalize; in case of several candidates, the more parsimonious match (i.e. the one with fewer specifications, hence the more specialized one) wins. It is again in connection with the lexical/ functional divide that the Superset model reveals its deeper similarity with the Distributed Morphology approach. More precisely, Caha assumes that functional features are rigidly ordered in syntactic hierarchies. Lexical items need not lexicalize terminals; rather they can lexicalize non-terminal nodes. But this is just another execution for what is essentially the usual idea about the interfacing of syntax with the lexicon – namely through complex syntactic structures large portions of which are not overtly matched to lexical terminals and remain therefore abstract (impoverished, 'silent' and so on).

We assume projection from the lexicon, effectively one of the minimalist postulates of Chomsky (1995), in a strong form, excluding the presence of 'silent' material. This means that in our approach there are no fixed functional structures which vary according to morphological readjustments (Distributed Morphology), overt vs. covert realization (Kayne) or terminal vs. string lexicalization (Caha). Rather, variation in the so-called functional domain is of the same type as is usually associated with the substantive lexicon: there is a universal conceptual and grammatical space to be lexicalized and crosslinguistic variation results from the different partition of that space by lexical items. The varying syncretisms of natural languages simply reflect the different possible partitions of that space.

In the second part of the article we widen our perspective on middle-passive morphology considering non-isomorphisms between form and interpretation that involve not single lexical items (as in the case of syncretism) but morphosyntactic constructs as a whole. In a nutshell, the same nucleus of interpretation, call it the middle-passive interpretation, can be associated with various morphosyntactic instantiations. In Albanian, as illustrated in section 2, the realization of middle-passive voice can take the form of a specialized inflection, a clitic (*u*) associated with the ordinary

active forms of the verb, or a specialized auxiliary (*jam*, i.e. 'I am', as opposed to *kam* 'I have' in the active) followed by a participle. Roughly the same holds for Greek, as discussed in section 3, where specialized middle-passive inflection alternates with a specialized affix –*th(ik)* followed by the active person inflections (e.g. in the aorist). The problem that arises then is how apparently different morphosyntaxes can instantiate the same meaning. The converse problem also arises, given that what we call 'middle-passive interpretation' encompasses a number of distinct meanings. These include the passive (comparable to a *be*-passive of English), the reflexive (typically expressed by a reflexive pronoun *himself* etc. in English), the anti-causative (of verbs that are otherwise transitive e.g. 'The vase broke' as opposed to 'I broke the vase') and at least in Albanian, a fourth reading, the impersonal one.

Both problems are widely recognized and discussed by the generative literature, in connection for instance with Romance and Germanic pronominal morphology (Italian *si*, Dutch *zich* etc.) which shows a clustering of (all or some of) the same interpretations reviewed for Albanian and Greek (Grimshaw 1982, Marantz 1984, Burzio 1986, Chierchia 2004, Reinhart and Siloni 2005) – while other morphologies can in turn be construed as passive (*be –en*), reflexive, and so on. These problems are standardly treated in terms of what Culicover and Jackendoff (2005: 47) aptly characterize as the Interface Uniformity principle, by which "the syntax-semantics interface is … maximally uniform, so that the same meaning always maps onto the same syntactic structure". In other words, the fact that the same meaning has different morphosyntactic realizations implies that the same syntax must be imposed on all of them. Vice versa, the fact that the same morphosyntax is ambiguous between various meanings implies that the latter can be reduced to a common core or that there are in fact different syntaxes underlying them. In any event the apparent lack of isomorphism is reduced to a deeper isomorphism.

This approach is not a logically necessary one. In the words of Culicover and Jackendoff (2006: 416) a possible alternative is that interpretation is "largely coextensive with thought….the product of an autonomous combinatorial capacity, independent of and richer than syntax",. Crucially, this alternative need not be supported by a model of grammar like the one proposed by Culicover and Jackendoff; here indeed we implement it within a representational version of minimalism, roughly in the sense of Brody (2003). If logical necessity is not involved (not even with respect to a given framework such as the minimalist one), the choice between Uniformity and non-Uniformity views is purely empirical. In this perspective, the work of Manzini and Savoia (2005, 2007) can be read as an extended argument that enforcing uniformity of the syntax with the LF interface leads to a loss of predictive power at the morpholexical interface. In other words, the syntax-morpholexical interface becomes opaque. Thus, as argued in detail by Manzini and Savoia

(2005, 2007, to appear a, to appear d) Uniformity models of Romance middle-passive *si* morphology typically resort to a disjunctive characterization of *si* and/or fail to connect *si* to the pronominal clitic series to which it belongs. The second part of this work will pursue this line of argument, illustrating it with the different Greek lexicalizations for the middle-passive morphology. If we are correct, the approach we take concerning the relation of morphosyntax to meaning allows us to capture generalizations about the morphology and the lexicon that go otherwise unexplained.

We also argue that Uniformity approaches lead to morphosyntactic structures that are transparent to interpretations only in that they annotate them to this end. The annotation is equivalent to a description of the facts and has no added explanatory value. What is more, predictions made by these approaches are typically aimed at capturing distributions of the type described in the typological literature, leaving finer grained (e.g. dialects) data by the side. We argue that this is the case for the Geg Albanian data presented in section 2, which both the Distributed Morphology and Superset models of perfect/ passive participle syncretisms do not (at least easily) account for.

In short, the aim of the present paper is twofold: to provide an account of syncretism that builds on a unified morphosyntax, and to discuss the interface between morphosyntax and LF. The common ground in both cases is that single lexical items may be open to a number of interpretations ('syncretism'), in the same way that the same morphosyntactic structure may be open to them (passive, reflexive, anticausative or even impersonal in the case of middle-passive) and vice versa the same interpretation may map to different morphosyntaxes.

2.   Syncretism in the Geg Albanian middle-passive[1]

2.1   The data

The syncretic phenomena that interest us here characterize Geg varieties of Albanian through which we will therefore exemplify the basic Albanian middle-passive paradigm (noting major departures from the Standard)[2]. In the present indicative, Albanian has a specialized inflection for the middle-passive voice, as exemplified in (1) for the variety of *Shkodër*. In (a) we illustrate verbal bases ending in vowel, while in (b) we exemplify verbal bases ending in consonant; the comparison with the active is provided in (a') and (b') respectively. The most complex instantiation of the middle-passive morphology can be seen in the vocalic bases, which are followed by the *hε* affix (glossed as

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[1] The data illustrating the syncretic pattern to be considered in this section can already be found in Manzini and Savoia (2007), where the basic analysis is also provided. The present discussion refines the analysis and also sets in greater detail the theoretical picture to which it belongs.

[2] A major split in Albanian dialectology is recognized between Geg varieties of Northern Albania and the Kosovo and Tosk varieties including the Standard. A comprehensive review of the middle-passive voice in standard Albanian as well in the Tosk Italo-Albanian dialects (Arbëresh) can be found in Manzini and Savoia (to appear c).

'M' for 'middle-passive') followed in turn by inflections for person. In the consonantal bases, the affix preceding the person inflections is simply *ɛ* (Trommer 2005). The comparison with the active allows us to establish that the person inflections are themselves specialized for the middle-passive voice – very clearly so in the singular where the active and middle-passive forms bear no relation to one another.

(1)   *Shkodër*

    a.   lɑ-   hɛ-   m/   ʃ/   t/   na/   ni/   n

            wash   M   1sg   etc.

            'I wash myself' etc.

    a'.   lɑ-   i/   n/   n/   im/   ni/   in

            wash   1sg   etc.

            'I wash (something)' etc.

    b.   veʃ-   ɛ-   m/   ʃ/   t/   na/   ni/   n

            dress   M   1sg   etc.

            'I dress (myself)'   etc.

    b'.   veʃ-   i

            ve:ʃ

            ve:ʃ

            veʃ-   im

            veʃ-   ni

            veʃ-   in

            dress   1sg   etc.

            'I dress (somebody)' etc.

In the simple past, Albanian resorts to a different morphosyntax for the formation of the middle-passive voice, namely by preposing the clitic *u* to the verb, as illustrated in (2) again for *Shkodër*. The clitic can be taken to roughly correspond to Romance *se;* it is associated with all the different forms of the paradigm, as also happens in some Romance varieties (in particular Romantsch ones) for *se* (Manzini and Savoia 2005). As for the morphology of the verb, no specialized middle-passive affix is present; furthermore, the person inflections are identical to those of the active, except for the 3rd person singular, whose active form is provided in (a')-(b'). Even there, the middle-passive voice is characterized simply by the omission of the inflection present in

the active paradigm, and not by a different inflection. We interpret affixes like *v-* in the vocalic paradigm as connected to the expression of the perfective past.

(2) *Shkodër*

    a.   u   lɒ-   v-   a

          u   lɒ-   v-   ɛ

          u   lɒ:

          u   lɒ-   mɛ

          u   lɒ:-   t

          u   lɒ-   nɛ

          M   wash   Past   1sg   etc.

          'I washed myself'   etc.

    a'.   ɛ   la-   u

          it   wash   3sg

          'He washed it'

    b.   u   veʃ-   a

          u   veʃ-   ɛ

          u   veʃ

          u   veʃ-   mɛ

          u   veʃ-   t

          u   veʃ-   nɛ

          M   dress   1sg   etc.

          'I dressed (myself)'   etc.

    b.   ɛ   veʃ- i

          it   dress 3sg

          'He dressed him'

The past (perfect) in (2) differs from the present in (1) both in temporal and aspectual properties, under the natural assumption that the present is essentially an imperfective form. Therefore the lexicalization of the middle-passive voice could in principle be sensitive to tense or aspect. In Geg varieties, specialized morphology and clitic realizations split according to tense; thus while the present has specialized middle-passive morphology, as in (1), both the past perfect in (2)

and the past imperfect (not illustrated here) have the *u* clitic. In Tosk varieties, the past imperfect follows the pattern of the present, with specialized middle-passive morphology; therefore the split is between present and past imperfect on the one hand and past perfect on the other – based on aspect.

Finally, the middle-passive conjugation in Albanian also includes forms consisting of an auxiliary followed by the participle, as illustrated in (3a) for the present perfect. In particular, the auxiliary *jam* 'I am' followed by the participle is sufficient to yield the middle-passive voice. The comparison data in (3b) show that the active is formed with the same participle but with the *kam* 'I have' auxiliary. Thus in this case it is the switch from *kam* 'I have' to *jam* 'I am' that yields the switch from active to middle-passive voice. The same is true in Tosk varieties (including the Standard), except that they have a participial ending *–r* not present in Geg; the morphology of the Tosk participle is discussed in detail by Manzini and Savoia (2007).

(3)   *Shkodër*

    a.   ɐʃt   lɒː/   veːʃ

            he.is   washed/   dressed

            'He has washed/dressed (himself)'

    b.   ɛ   kɒ   lɒː/   veːʃ

            him   he.has washed/ dressed

            'He has washed/ dressed him'

It is useful to compare the examples in (3) with those in (4a-c), which illustrate the embedding of participles in copular constructions. This type of embedding requires the full adjectival inflection on the participle, including a preposed article and a postposed agreement for number, gender, definiteness and case. In the variety of *Shkodër* exemplified here this adjectival inflection is not simply added to the participles in (3) above; rather the forms in (3) are enlarged by a participial inflection *–m* or *–un* according to verbal class (vocalic and consonantal respectively). Verbal adjectives entering copular constructions are regularly formed from transitive predicates ('to dress') as in (a)-(a'), and from unaccusative ones ('to come'), as in (b). The adjective in (4c), from the unergative verb 'to sleep', does not have the meaning of 'slept' but rather of 'asleep'. As shown in (a)-(a') copula-participle formations based on transitive verbs admit of the passive reading, disambiguated here by the presence of a *by*-phrase. In (4d) we provide just one example of an occurrence of the adjectival participle in a non-copular context; this also allows us to illustrate vocalic bases, as well as the fact that not only number and gender but also case is relevant for the adjectival inflection (Turano2001, Turano and Rokaj 2000).

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(4) *Shkodër*

a. ɐ∫t   i   ve∫-un/   ɛ   ve∫-un   (pɾɛi s   ɒms)

s/he.is m.sg dress-ed/ f.sg   dress-ed   (by   gen   mother)

'S/he is dressed up (by his/her mother)'

a'. jena   t   ve∫-un/   t   ˈve∫-un-a   (pɾɛi s   ɒms)

we.are pl   dress-ed/ pl   dress-ed-pl (by   gen   mother)

'We are dressed up (by our mother)'

b. ɐ∫t   i   arðun

he.is   Art   arrived

'He is arrived'

c. ai   ɐ∫t   i   fjetun

he   is   Art   asleep

'He is asleep'

d. i   kam   kmi∫a-t   ɛ/t   lɒ-m-ɛ

them   I.have shirt-s   f/acc wash-ed-f

'I have the shirts washed'

In this section we focus on the nature of the morphological component, and we do so by considering a classical syncretism pattern that emerges from the data presented. Specifically, we concentrate on the participial form of Geg varieties. This, as can be seen from the comparison of (3) with (1) coincides with the 2nd/ 3rd person singular (*ve:ʃ*) of the present active for consonantal bases; for vowel bases it coincides with the 3rd person singular of the middle-passive perfective past (*lɒ:*) (in the *u* formation) as can be seen by the comparison of (3) with (2).

In fact, the same form of the verb enters into one of the phenomena that more sharply differentiate Geg from Tosk varieties – i. e. the so-called *paskajore* 'infinitive'. As is well known, Albanian lacks a morphological infinitive. Thus where English or Romance employ an infinitive, Standard Albanian and other Tosk varieties have recourse to a finite verb introduced by a so-called subjunctive particle *të* (Manzini and Savoia 2007 and references quoted there) – very much like Greek has recourse to *na* followed by the finite verb, and so on. However in the same contexts, Geg varieties such as *Shkodër* can employ the preposition *mɛ* 'with' followed by the form of the verb which also occurs as a participle, giving rise to the so-called *paskajore,* as illustrated in (5) (Cordignano 1931, Joseph 1983, Demiraj 1985, 1997, Pellegrini 1995, Manzini and Savoia 2007).

(5)   *Shkodër*

    a.   du   mɛ   ɛ   lɒ

          I.want to   him/her   wash

          'I want to wash him/her'

    b.   t   kam   ˈθð̃ːn mɛ   ɛ   veːʃ

          to.you I.have said   to   him/her dress

          'I told you to dress him/her'

In other Geg varieties, such as *Mirditë*, with bases ending in consonant such as (6i) the invariable participle/ infinitive as in (a) coincides with the entire singular of the present indicative, as in (b), and with the 3rd person singular of the middle-passive perfective past as in (c). With other verbal classes, such as the one exemplified in (6ii), the 2nd person singular imperative in turn coincides with the forms already mentioned.

(6)   *Mirditë*

    i.   a.   du   m(ɛ) u   kɾɛf

               I.want to   M   comb

               'I want to comb myself'

          a'.   ɐʃt   kɾɛf

               s/he.is combed

               'S/he has combed himself/herself'

          a".   ɛ   kam   ˈkɾɛf

               him/her   I.have combed

               'I have combed him/her'

          b.   ɛ   kɾɛf

               him/her   I/you.comb/ s/he combs'

               'I/you comb him/her' 'S/he combs him/her'

          c.   u   kɾɛf

               M   s/he.combed

               'S/he combed him/herself'

    ii.   a.   t   kam   θan   mɔs   mɛ   ɛ   lɔð

               to.you I.have said   not   to   him/her   tire

               'I told you not to tire him/her'

          a'.   ɛ   kam   lɔð

him/her   I.have tired

'I tired him/her'

a".   ɐʃt   lɔð

s/he.is   tired

'S/he has tired'

b.   ɛ   lɔð

him/her I/you tire/s/he tires

'I/you tire him/her' 'S/he tires him/her'

c.   u   lɔð

M   tired

'S/he tired'

d.   mɔs   ɛ   lɔð

not   him/her   tire

'Don't tire him/her!'

In order to relate the syncretism of *Mirditë* in (6) to those of *Shkodër*, it is important to note that in *Shkodër* the forms of the participle/infinitive coinciding with the 2nd and 3rd person singular forms of the present are characterized by specialized length and quality of the stressed vowel. By contrast, the 3rd person singular of the middle-passive perfective past in (2b) is differentiated by the presence of a stressed nucleus both shorter and more open/centralized; the latter in turn is syncretic with the 2nd person singular of the imperative in (7):

(7)   *Shkodër*

a.   vɛʃ-   ɛ/   i

dress- him/her/them

'Dress him/her/them!'

b.   vɛʃ-   u

dress- M

'Dress youself!'

It is useful at this point to provide a schematic summary of the syncretisms reviewed in the two varieties of *Shkodër* and *Mirditë*. From the table in (8) it is clear that the relevant forms correspond in all cases to modal (infinitive, imperative) or aspectual (participle, perfective past, present) interpretations. Furthermore they turn out to be compatible with a restricted range of

subject, or technically EPP (Extended Projection Principle) argument, denotations, essentially the singular, and more often the 3rd singular and/or the 2nd singular.

(8)   *Shkodër*

    i)   Bases in vowel   participle/infinitive

                                                3rd sg middle-passive perfective past

    ii)   Bases in consonant :   participle/ infinitive

                  Long stressed nucleus   2/3sg present

    iii)   Bases in consonant: 3sg middle-passive perfective past

                  Short stressed nucleus   2sg imperative

    Mirditë

    iv)   Bases in consonant   participle/infinitive

                                                  3sg middle-passive perfective past

                                                  1/2/3sg present

                                                    (2sg imperative)

It is worth noting that despite the fact that Romance languages generally have a morphological infinitive and a participial form, syncretisms comparable to (8) occasionally crop up. Thus according to Manzini and Savoia (2005, vol. 3: 488) and references quoted there, in Tuscan varieties like Florence, infinitival contexts can embed a form of the verb clearly differentiated from the morphological infinitive and coinciding with the 2nd person singular of the imperative (as well as with the 3rd person singular present indicative for first conjugation verbs, and with the 2nd person present indicative for third conjugation verbs). This systematicity of the phenomenon makes it look less likely that some historical or other external explanation applying specifically to Albanian is responsible for the syncretic pattern we are interested in.
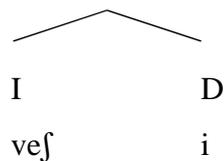
2.2   *Structural analysis*

The proposal concerning the relation of morphology and syntax that we intend to put forth has an important point of similarity with the standard Distributed Morphology model of Halle and Marantz (1993), namely the presence of syntactic-like hierarchical structures at the morphological level – though as we saw in section 1, in other respects the two models differ.
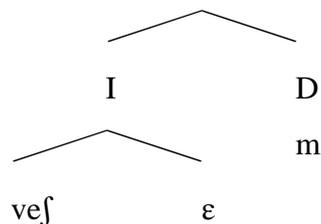
In this mould and before we proceed with our account, we first outline some preliminary background analyses of the so-called agreement inflections of the verb and of the noun/ adjective. Following Manzini and Savoia (2004a, 2005, 2007), the agreement inflection has the same status within the verb as the pronominal subject has within the sentence. Hence it is inserted in a verb-internal D position, capable of satisfying the EPP at least in null subject languages. This is illustrated for the 1st person singular of the present indicative of *Shkodër* (consonantal bases) for the active (9a) and the middle-passive (9b)[3].

(9)   *Shkodër*

    a.

```
        ╱‾‾‾‾╲
      I          D
      veʃ        i
```

    b.

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            ╱‾‾‾‾╲
          I          D
     ╱‾‾‾‾╲           m
   veʃ      ε
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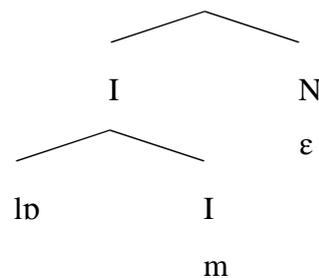
The internal structure of a noun or adjective, including the agreeing participle in (4), is also formed by a lexical base I followed by an agreement inflection. In this case, following again Manzini and Savoia (2004a, 2005, 2007) we associate the agreement inflection with the category N, as in (10), which typically corresponds to the internal argument (object). On the one hand, the different categorization of the agreement inflections in (9) and (10) reflects their different denotations, since only the D inflection can be associated with 1st and 2nd person (Definite/ Deictic) denotation, while only the N inflection has gender (Nominal class) properties. On the other hand, if we assume (with Marantz 1997) that noun and verb are not basic categories but rather the label that predicative bases take on once they combine with other morphological/ syntactic material,

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[3] Note that (9b) gives no indication of the categorization of the middle-passive morphology *(h)ε*. Manzini and Savoia (to appear c) treat it as an auxiliary-like constituent at the morphological level – essentially a morphological level version of *to be*, and correspondingly assign it to the I head position, very much like tense/aspect/mood morphology. However, the comparison of these structures with their Greek counterparts, especially (25b), suggests that such I morphology is at the very least not necessary. Rather *(h)ε* may relate to the argumental structure of the verb, playing a crucial role for instance in selecting the specialized middle-reflexive inflection (effectively an absolutive one in terms of the analysis of section 3) as opposed to the active (nominative) one (cf.Manzini and Savoia to appear a).
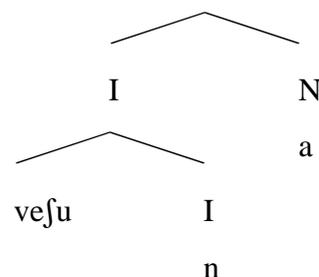
we can claim that the D inflection in (9) individuates the I lexical base as a verbal constituent, while the N inflection on an I lexical base individuates it as nominal, as in (10). The D and N inflections under consideration in turn associate to different argument slots of the predicative base, roughly the EPP in the case of D (the nominative) and the internal argument in the case of N (similar to the absolute case of ergative systems, in the sense that it is the morphological realization of the internal argument).

(10)   *Shkodër*

a.

```
            ╱‾‾‾╲
          I        N
        ╱‾‾╲        ɛ
      lɒ      I
              m
```

b.

```
            ╱‾‾‾╲
          I        N
        ╱‾‾╲        a
     veʃu     I
              n
```

For bases ending in vowel, as in (10a), the adjectival participles of *Shkodër* further present an –*m* morphology which can be analyzed as the bearer of the aspectual, perfective properties of the participle. Thus the –*m* inflection is an I head, as in (10a), which takes the verbal base as its complement. The verbal base, inclusive of the thematic vowel, appears independently of further inflectional material as the invariable participle in (3), i.e. *lɒ*. Verbal bases ending in consonant in turn form the participle with a suffix –*(u)n*, as in (10b). We assume an analysis parallel to that of bases in vowel, so that the –*n* inflection is an I aspectual, perfective head, which takes as its complement the verbal consonantal base, combined with a thematic vowel –*u*, selected in this case by the perfective aspect itself, as in (10b). The article that precedes both the noun and the adjective can be treated, as in standard analyses of the noun phrase, as a D element at the phrase level, giving rise to structures like (11). The agreement between the article in D and the inflection of the noun in N takes us back to the basic structure of noun phrases once again where the N internal argument of
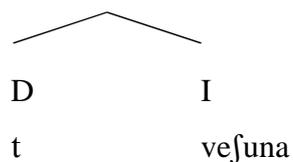
13

the nominal base agrees with its D subject(-like) argument in terms of the theory of determiners in Higginbotham (1985).

(11)   *Shkodër*

      a.

           D   I

           ɛ   lɒmɛ

   b.

           D   I

           t   veʃuna
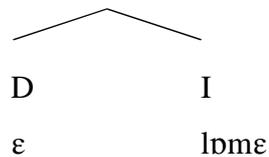
Let us then proceed to the analysis of the invariable participles/ infinitives that directly interest us here. As we just mentioned, for vocalic bases these coincide with the lower portion of the morphological tree in (10a), *lɒ* in the example at hand. Providing an account of the internal structure of these forms amounts to characterizing the thematic vowel. For Romance languages, Manzini and Savoia (2005, 2007) propose that the so-called thematic vowel is again an N inflection (at a low morphological level), as indicated for the invariable participles of *Shkodër* in (12). This N argument does not vary according to the referential properties of the internal argument of the participle, as is instead the case with the higher N inflections *-a/-ɛ* in (10). The *-a/-ɛ* elements are therefore agreement morphemes in the traditional sense of the term, lexicalizing the nominal class and/or the plurality of an argument of the participle. On the other hand, in the terms of Manzini and Savoia (2005, 2007), the so-called thematic vowel in (12) lexicalizes reference to the internal argument of the participle as a variable. This hypothesis on the nature of so-called thematic vowels amounts to saying that bare verb bases are closed by the most elementary nominal inflection that can possibly be conceived (a variable). Thus in (10) what is embedded under the aspectual/ perfective inflection in the participles is the verb base inclusive of a thematic vowel; this further implies that (perfective) aspect cannot select a pure predicate, but requires a predicate minimally closed by some argument specification.

(12)   *Shkodër*

I   N

l   ɒ
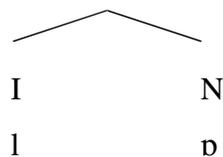
In turn the invariable participle of verbal bases ending in consonant, is characterized by a long stressed nucleus, as in *ve:ʃ* in (3), contrasting with the pure verbal base *veʃ* (as in (10b) which has a short stressed nucleus (cf. Beci 1979, 1984 on long vowels in Geg). An analysis of invariable participles such as *ve:ʃ* is suggested precisely by the comparison with participles of the type of *lɒ* in (12), where the specialized thematic vowel is an N constituent internal to the verb. We can extend this analysis to participles of the type of *ve:ʃ* by assuming that the latter is a specialized lexical item, inclusive of an N closure of the internal argument. The pure verbal base (without vowel lengthening), on the other hand, is deprived of such property.

2.3   *Syncretism as interpretation*

Summing up so far, in Geg varieties the verbal forms for which we have used the descriptive label of invariable participles correspond to simple verbal bases, including an invariable N inflection, in the form of a thematic vowel, as in (10a) and (12), or of a specialized long nucleus in the verbal base, as in (10b). With this much background we can now address the question that interests us here—i.e. that of the descriptively syncretic nature of these forms. As discussed at the outset, in a framework such as that of Distributed Morphology these, like other syncretic forms, could be treated as default lexicalizations for fully specified feature matrices in the syntax. If so, the syncretism problem reduces to which morphological manipulations (in the specialized Morphological Structure component) are necessary to ensure the insertion of the underspecified (syncretic) lexical item (Impoverishment or other). The syntax itself, i.e. its abstract feature bundles, is transparent to interpretation. If we follow the program hinted at in section 1, cutting away the mediation of a specialized Morphological Structure component and projecting syntactic structure directly from positively specified lexical items, the problem of syncretism becomes quite different, namely why a given morpholexical form (endowed with certain, positively specified properties) can yield several different interpretations (to the exclusion of others). In a nutshell, if morphology is unified with syntax, syncretism becomes a special case of ambiguity at the interpretive interface.[4]

In this perspective, we begin by considering how the *Shkodër* verbal bases (with a thematic vowel or a lengthened nucleus) can have an aspectual interpretation in the participial contexts in (3),

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[4] Syncretism is often used as an important piece of evidence for the autonomy of morphology, on the assumption that it represents a case where syntax and morphology 'mismatch' (see Baerman, Brown and Corbett (2005) for a recent overview and their analysis).

a modal interpretation in the infinitive contexts in (5), and a temporal interpretation, corresponding to the present, as in (1b') or to the past, as in (2a). The connection between modality and verbal tense and aspect is independently known from the descriptive and theoretical literature. In particular, Iatridou (2000) considers the fact that the imperfective past of Greek can also express counterfactuality; the same holds in (varieties of) Italian. Iatridou (2000) is able to elegantly explain the occurrence of the past morphology in both past (temporal) and counterfactual (modal) contexts in terms of a scope difference between past and irrealis: when the relevant morphology ranges over a temporal variable it implies that the event time excludes the utterance time, i.e. the time of the speaker – in other words it is a past. When it ranges over possible worlds it implies that the event world excludes the speaker's world, i.e. the actual world – in other words it is a counterfactual. Iatridou further assumes that when temporal morphology does not connect to the utterance time, it can only be imperfective; therefore she treats the imperfective aspect associated with the past as a sort of default.

In considering the imperfect/ perfect aspectual distinction specifically in relation to the past tense, Bonomi (1997) on the other hand, proposes that the imperfective morphology introduces a universal or generic quantification over events, while the perfective introduces an existential quantification. Manzini and Savoia (2005) more generically characterize the imperfective/ perfective opposition through an indefinite/ definite split which seems roughly compatible with Bonomi's (1997) analysis, to the extent that existentials allow for a specific ('definite') interpretation. Bonomi does not extend his treatment of imperfectives to counterfactual contexts, but we can take it that a scope difference of the type proposed by Iatridou (2000) can play a role in this respect as well. Thus the same universal quantification that yields imperfective aspect when it ranges over events can plausibly yield hypotheticals/ counterfactuals when it ranges over possible worlds – thus explaining the morphological identity of imperfective and counterfactual.

Needless to say, in the cases just reviewed the coincidence of modal and temporal/ aspectual values characterizes specific morphologies, for instance the so-called imperfective past of Greek or Italian, with which we can associate properties of universal or existential closure and the like. In the *Shkodër* variety under consideration, aspectual, temporal and modal properties coincide on the pure verbal base. For us, the N thematic vowel/ lengthened nucleus, exactly like any other morphological or syntactic level constituent conveys interpretable properties; more specifically, it provides a low-level N closure of the internal argument of the predicate; but of course it does not have any intrinsic aspectual, temporal or modal character. If so, the bare base is not really lexicalizing the various aspectual, temporal and modal interpretations. Rather it proves compatible with (any of) them, due to the very elementariness of its morphology.

Suppose that in keeping with the preceding discussion, the modal (irrealis) interpretation that we impute to the 'infinitive' depends on a universal closure at the situation level. If the same closure applies at the event level, we expect that the verb bases of *Shkodër* will be compatible with an imperfective interpretation. In fact, in combination with the particle *tu* these forms receive an aspectual, progressive interpretation. In terms of Bonomi (1997) this will depend again on a universal quantification, in this case over event stages/ subevents. The relevant examples are given in (13).

(13)   *Shkodër*

        jam   tu   ɛ   lɒ/   ve:ʃ

        I.am   Prt   him/her   wash/ dress

        'I am washing/ dressing him/her'

This in turn raises the question of how to account for the perfect participle interpretation. Recall that according to the structural analysis in section 2.2, the *Shkodër* verbal bases consist of the predicative plus N morphology satisfying the internal argument. What this produces is a nominal version of the predicate; in turn, the ordinary reading of nominal predicates (i.e. nouns and adjective) is a stative, property reading. What we propose then is that this reading forms the basis for the participial interpretation. To the extent that the participial reading is aspectual and perfective, we can assume that the event argument of the predicate is existentially closed, as in the analysis of Bonomi (1997). However, this existential closure can be connected, in the way just discussed, to the N morphology associated with the predicate, as opposed to being available as an interpretive default.

Before we proceed further, it is worth introducing a side note on how the analysis of the *Shkodër* verb bases provided so far compares with that of the coincidence between imperfective past and counterfactual provided by Iatridou (2000). It is evident that the latter is not described as a syncretism, but is treated instead as an interpretive 'ambiguity', in that it does not involve single forms but entire paradigms (e.g. that of past tense). On the contrary, the same coincidence on single forms, like the ones we are dealing with here, would routinely be described as an instance of a morphological-level syncretism. All we are saying is that distinctions of this type, though current and traditional, possibly have no sound theoretical basis, and if they do, they require the introduction of extra definitions in the grammar, i.e. a complication of it. In this perspective, the present discussion aims at showing that at least in the case of *Shkodër* verbal bases, morphological syncretism can indeed be reduced to interpretive ambiguity; in other words, that at least in this case

there are no unsurmountable empirical objections to the morphosyntax unification program.

At this point it remains for us to account for the finite interpretations of the verbal bases of *Shkodër*, where the temporal/ modal/ aspectual interpretation combines with a particular denotation for the EPP argument (3rd person etc.). Let us then consider the *Shkodër* verbal bases ending in vowel – which, as illustrated in (2a), also represent the 3rd person singular of the middle-passive perfective past (*lɒ:*). The middle-passive property is in fact not lexicalized by the verbal base itself but rather by the clitic *u* morphology that combines with it. Similarly, *u* combined with the verb base yields the middle-passive of the infinitive, as in *Mirditë*'s (6ia), while the same verbal base co-occurring with an accusative clitic (e.g. *ε*) has the active reading, as in *Shkodër*'s (5). In this connection, it is also worth recalling that the verb base combined with the auxiliary *jam* 'I am', as in (3a) yields a middle-passive reading; but the combination of *kam* 'I have' with the same participle yields the active, as in (3b). In other words the middle-passive vs. active interpretation depends on the alternation between auxiliaries. For more details of how the middle-passive interpretation is established, the reader is referred to section 3; what is relevant here is that it is not read off the verbal base itself.

Let us then concentrate on the temporal properties of the verb base in (2a), namely its interpretation as a past perfective. Needless to say, the aspectual perfective properties are independently associated with the participial reading of the verb bases of *Shkodër*. We can therefore assume that the way this reading was derived for the participial contexts extends to the case at hand. We also propose that temporal reference to the past is simply inferred from the perfective aspectual reading. Indeed in languages like Albanian (or the Romance varieties) specialized perfective morphology is present only in the past; hence the latter can be inferred from the former (though this is not the case in Greek, as we will see in section 3).

To be more precise, closer inspection of the inflections in (2) shows that there is no specialized perfective morpheme *per se*; rather the same D endings that convey reference to the various EPP arguments convey perfective (past) reference as well. This is the norm for Indo-European languages: crucial properties pertaining to tense, mood, and aspect are not lexicalized directly, but through a series of D inflections specialized for them. Manzini and Savoia (2005, 2007) discuss this point at length in connection with Romance languages, where they show that the same generalization holds for syntactic-level pronominal arguments, e.g. clitics, which have different series according in particular to modality (questions, etc.).

At this point (8i) of *Shkodër*, i.e. the syncretism between participle/ infinitive and the middle-passive perfective past has been analyzed, except for the fact that the reference of the EPP argument in the last reading is restricted to the 3rd person singular. We assume that this restriction

reflects the fundamental person split between $1^{st}/2^{nd}$ person, i.e. speaker and hearer, whose denotations imply reference only to the universe of discourse, and 3rd person, whose denotation, as suggested by Manzini and Savoia (2005, 2007), is characterized by its necessary anchoring to an eventive role. In such terms, we can assume that denotation anchored at the discourse requires the lexicalization of a D inflection, which is therefore predicted to appear in 1st and 2nd person. Similarly, we assume that lexicalization of a D inflection is required for denotations involving plurality (i.e. weak quantification), so that its appearance in the 3rd plural is also predicted. This effectively restricts the compatibility of the bare base forms to a 3rd person singular denotation, as desired.

In this way, the intuition that 3rd person singular represents the 'default' specification of the EPP argument finds a counterpart within the present theory. Note however, that there is no morphological encoding of 'default' in the system via lexical underspecification, Impoverishment or other. Thus in the system at hand, where the event-anchored singular referent is inferred rather than lexicalized, this is taken to be a possible way of cutting out the conceptual space of reference to the D argument. By contrast, morphological-level Impoverishment, lexical underspecification and the like are unconnected to the interpretive properties of the features they affect. This means that hierarchies of features must be introduced at the morphological level, expressing relations that are independently given at the interpretive interface and introducing therefore a duplication of information at the morphological and the LF interface. While descriptive adequacy may be achieved in this way, the grammar that results from it is not only richer, but also seems to mask the real level of explanation.

A wrinkle on this discussion is introduced by the fact that the finite 3rd person singular reading is restricted to the middle-passive in (2a), while the active lexicalizes the D element in the 3rd singular as well, namely as the affix –*u* (*la-u*) in (2a'). In fact, in reviewing the middle-passive property associated with the past pefective 3rd singular reading, we concluded that this property is wholly contributed by the clitic *u.* In other words, there are two active forms for the 3rd person singular of the past perfective, which do or do not combine respectively with the *u* clitic. This distribution can be captured for instance by a restriction against the specialized ending in (2a') co-occurring with the *u* clitic, with the result that the *u* clitic is forced to co-occur with the verb base.

Summing up so far, recourse to the positive characterization of morpholexical terminals is sufficient to derive the middle-passive past perfective reading of (2a), the participial reading in (3) and the infinitive reading in (5) of *Shkodër*'s verbal bases in vowel, as in (8i); neither underspecification or Impoverishment are needed nor markedness hierarchies of features. Needless to say, if we are on the right track, we should be able to derive the other syncretisms in (8) by

applying the same principles of interpretation.

Let us then turn to the consonantal bases of *Shkodër*, involving long stressed vowels of the type of *ve:ʃ*. Recall that we have interpreted the lengthening of the stressed nucleus as an N closure of the internal argument of the predicate. In these forms, as indicated in (8ii), the participle and infinitive coincide with the 2nd and 3rd person of the present indicative, illustrated in (1b'). A notable property of the consonantal bases of *Shkodër* is therefore that the aspectual reading of the participle and the modal reading of the infinitive coincide not with the past perfect, as discussed above for vocalic bases, but with the present indicative. Since the present indicative in Albanian can have both a generic reading and a progressive one, we assume that it is interpreted through a universal closure of the verbal base at the eventive level, yielding both the imperfective (progressive) aspectual reading and the generic reading. We take it furthermore that this imperfective reading implies reference to the present in the absence of any temporal specification (in the form of a specialized D inflection or other).

Given the discussion of the person split in relation to vocalic bases, the fact that reference to the 2nd and 3rd singular is implied by consonantal bases in the present may appear to pose a problem. As a matter of fact, the common behaviour of 2nd and 3rd singular, as opposed to other persons of the paradigm, is observed by Manzini and Savoia (2005, 2007) not only in connection with the verbal paradigms of Romance varieties but also in connection with splits in auxiliary selection in Central and Southern Italian varieties. What they propose is that while 3rd singular is the core case of event-anchored denotation, 2nd singular (i.e. hearer) is the core case of discourse-anchored denotation. Therefore, 3rd person singular and 2nd person singular reference are the core case of an event- and discourse- anchored reference respectively. In other words, 2nd and 3rd person singular syncretisms cover core denotations irrespectively of the domain (event or discourse) they are anchored at.

For the case at hand, therefore, the idea is simply that the lack of D inflections is compatible with core instances of event- and discourse- anchored reference. On the other hand, reference to the speaker or to the plural does require a D specification. It is worth noting that in the active present of verbal bases ending in vowels, as in (1a'), while all persons are formed with D inflections, the 2nd and 3rd person singular coincide on an –*n* (*la-n*) ending. In other words, 'syncretism' between these two forms is found independently of the lack of lexicalization discussed here.

This completes our review of the range of interpretations (i.e. 'syncretisms') associated in the *Shkodër* variety both with vocalic bases (8i) and with consonantal bases (8ii). In (8iv) we summarize a different syncretism in the *Mirditë* variety, involving the consonantal verb base without lengthening of the stressed vowel. Since in the preceding discussion we argued that the

lengthening of the stressed vowel is equivalent to a thematic vowel, we conclude that the short vowel forms lack even this nominal closure of the predicate. In the verbal class in (6i) these bases combine all (and only) the readings that we have separately analysed for bases in vowel and in consonant of *Shkodër*, since they can be interpreted as the participle/ infinitive, as the 3rd person singular of the middle-passive perfective past and as the singular forms of the present.

A minor difference between *Shkodër* and *Mirditë* is that the reference of the verbal bases in the present of *Mirditë* extends to all persons of the singular– and not just to the 2nd and 3rd person singular as in the present of the consonantal bases of *Shkodër*. The pattern of *Mirditë* on the other hand, represents a particularly simple referential split which opposes the quantificational properties implied by plurality to their absence in the singular; evidently, it is only the latter reference that can be inferentially interpreted on the basis of the bare forms of *Mirditë*.

According to the discussion of *Shkodër*, the irrealis (infinitive) and imperfective (progressive) interpretations of verbal bases correspond to universal/ generic closures at the situation and event level respectively; the same can of course hold for the verb bases of *Mirditë*. In the discussion of *Shkodër*, on the other hand, we derived the perfective interpretation corresponding to participial and past perfect contexts from the nominal nature of the verb bases. In the case of *Mirditë* under consideration, we propose that the even more elementary nature of the verbal form involved is compatible with all basic types of quantificational closure, yielding the perfective reading through existential closure at the event level. The past reading can be obtained as a consequence of the perfective, and so on, once again as detailed for *Shkodër*. Recall also that the middle-passive voice morphology is independently supplied in the perfective past by the *u* clitic.

In short, the interpretations of the bases reviewed so far for *Mirditë* amount to the sum total of the syncretisms separately considered for *Shkodër* verb bases, either vocalic or consonantal. This is expected, to the extent that we have imputed the single syncretisms to universally available interpretive mechanisms at the LF interface. If so, in the same way that they can crop up singly (as in the case of vocalic vs. verbal bases of *Shkodër*), we expect that they can appear all together; in this sense *Mirditë* represents an important confirmation of our predictions.

What is also interesting about *Mirditë* is that, besides the interpretations already reviewed for the *Shkodër* verbal bases, a further interpretation is possible, that of the 2nd person singular of the imperative. For the referential split that singles out the 2nd person singular we can rely once again on the preceding discussion; quite simply, the core discourse-anchored referent is singled out. What is more, the imperative represents a modal (irrealis) reading, which corresponds in present terms to universal (generic) closure at the situation level. It is worth noting that in many Italian varieties the 2nd person singular negative imperative is lexicalized by the infinitive, yielding an

independent attestation of the imperative - infinitive syncretism (or suppletivism). Furthermore, Manzini and Savoia (2005) report suppletivism of the 2nd person singular negative imperative by the gerund, thus also connecting modal and aspectual (progressive) readings once again.

It remains for us to comment briefly on the fact that the 2nd person singular of the imperative is syncretic with the 3rd singular middle-passive perfective past for the *Shkodër* consonantal bases in (8iii). The relevant forms have a short stressed nucleus and are therefore identical to those examined for *Mirditë*. As before, we expect that in the absence of lexicalization of a D inflection, reference will be available to the 3rd person singular or to the 2nd person singular to the exclusion of other denotations. In turn, the irrealis modality of the imperative corresponds to a (universal) quantification over situations/ possible worlds. The perfective reading corresponds to an existential quantification over the event. These closures need not be introduced by specialized lexicalizations but are independently available to the grammar. Remember also that past reference is construed here as being implied by the perfective, while middle-passive voice is independently lexicalized by the *u* clitic.

Let us draw some conclusions. In a morphology-based account of syncretism like the one provided by Distributed Morphology, syncretic phenomena represent lexical coincidences corresponding to different feature matrices in the syntax. These coincidences are supported by morphological readjustments, such as Impoverishment, and by lexical underspecification. To the extent that these mechanisms are blind to the LF import of the features being impoverished or not lexicalized, it is predicted that syncretisms will be interpretively random. Given that this seems not to be the case, markedness hierarchies between features have to be invoked to explain (sub-) regularities. But again, if markedness hierarchies are morphological, we do not expect them to import interpretive relations from LF.

The aim of this section has been to show that there is no need for syncretism to be accounted for through Impoverishment, insertion of underspecified lexical items and the like applying to highly-specified abstract syntactic feature matrices. Rather syncretism amounts to the fact that a given lexical form turns out to be compatible with a range of interpretations. To put it differently, it amounts to ambiguity at the LF interface. The relevant interpretations directly depend on interpretive and inferential mechanisms at the LF interface, including quantificational closures over events and situations, as well as the possibility for the context to supply core event-anchored or discourse anchored (hearer) referents. Needless to say, these mechanisms are all independently motivated. For example, existential and universal (generic) closure at the LF interface must be assumed, if the interpretation of indefinites/ free variables (existential closure) or of so-called arbitrary PRO (generic closure) is to go through at all, quite independently of its application in the

aspectual/ modal domain.

In a nutshell, the present theory differs from Distributed Morphology in that the latter has a specialized morphological component which is altogether dispensed with in the present approach – a move desirable on simplicity and restrictiveness grounds. Correspondingly syncretisms, which are treated as low-level morphology-internal patterns in Distributed Morphology, represent full-blown ambiguities at the LF interface in the present account. On this basis, different empirical predictions should in principle follow from the two theories. We shall address this question more directly in the next section.

2.4   Other analyses

The syncretism between perfect participle and perfective past tense observed for the *Shkodër* vocalic bases in (8i) is also one of the salient characteristics of English morphology, where the past tense and the perfect participle can coincide on the *–ed* morphology. In English, the adjectival/stative reading of participles can also be associated with the same morphology, unlike in Geg Albanian where the relevant reading is associated with fully inflected participles, as in (4). An English verb for which the participial/ stative reading, the eventive participial reading and the past reading all coincide on *–ed* is exemplified in (14). With other verbs, the stative/ adjectival reading can be singled out by different morphology, e.g. by the *–en* morphology in (15a). What is more, the participle can be picked up by the *–en* morphology as opposed to the past tense, as in (16a-b) vs. (16c).

(14)   a.   The door is closed.

        b.   I have closed the door.

        c.   I closed the door.

(15)   a.   John is (clean) shaven.

        b.   I have shaved John.

        c.   I shaved John.

(16)   a.   My feet are swollen.

        b.   Many young people have swollen the ranks of the unemployed.

        c.   My feet swelled.

The analysis of the English participial morphology proposed by Embick (2004a, b) within the Distributed Morphology approach can provide a useful term of comparison with the present analysis. The fact that in (14a-b) and (16a-b) *–ed* and *–en* have pretty much the same distribution

can be captured by providing similar entries for them, as Asp heads, selecting however for different verbs. Yet this is not sufficient, because of (15a-b), where the verb can obviously combine with both –en and –ed as participial morphology. What Embick (2004a, b) proposes is that –en and –ed select for attachment to the root or to the *v* level respectively. It is not obvious how this approach can be extended once the simple past in (c) is brought into the picture; presumably another syntactic level will have to be added in order to specify the attachment restrictions of –ed.

An alternative analysis to Embick's (2004a, b) is proposed by Caha (2008). In his Superset approach, an entry can be inserted under a given node, if it contains all of the specifications of that node (the Superset Principle) – as opposed to containing only specifications of that node (the Subset principle) as in Distributed Morphology. In case there is more than one entry available for insertion, the least rich one is inserted in Superset theory (as opposed to the richest one in Distributed Morphology). In the Superset approach, English –ed can straightforwardly preempt –en in the past in (14)-(16), if -ed has the past specification and –en does not have it. In cases like (16) furthermore, we may assume that –en blocks -ed because although -en spells out exactly the same participial properties as –ed, it is also specified for the root SWELL; thus it is richer. Though Caha (2008) does not consider (15), the same line of reasoning could apply, with the difference that –en would be specified for the root SHAVE and for the STATE property; at the same time it could not insert in eventive participial contexts, if it lacks positive specification for them.

Despite their differences, these two treatments concur in important respects, on which they differ from our proposal. Specifically, Embick (2004a, b) and Caha (2008) share the idea that properties such as state, aspect, event (passive/ perfect), (past) tense etc. are built into a syntactic hierarchy of constituents. This idea is then implemented in different ways, corresponding to the difference between Subset and Superset insertion. Thus for Embick, the relevant structures are of the type in (17), with Asp selecting for Root (yielding the adjectival/ stative reading) or for *v*P (yielding the passive/ perfect reading). Given (17), –ed or –en are inserted under Asp according to selectional restrictions.

(17) a. [Asp √

b. [Asp [*v*P

For Caha, on the other hand, the relevant structures consist of highly articulated hierarchies of functional projections, maximally as in (18). Given (18), –ed or –en spell out not a single terminal but an entire substring of terminals, yielding various readings according to the string they spell out; specifically, the eventive participle reading corresponds to the spelling out of the string up

to Voice/ Perfect, the stative reading to a spell-out up to State and the Past reading to the spell out of the entire string.

(18)   [Past   [Perfect   [Voice [Cause [State [Root

The present proposal contrasts with both of the approaches just reviewed. In particular, we agree with Culicover and Jackendoff (2005, 2006) that current theorizing is based on a rational, but essentially unmotivated 'Interface Uniformity' assumption – namely that 'the syntax-semantics interface is maximally simple, in that meaning maps transparently into syntactic structure; and it is maximally uniform, so that the same meaning always maps onto the same syntactic structure'. This bias of much current theorizing corresponds to a picture where syntax 'includes' interpretation, in the sense that all relevant semantic information finds itself translated into syntactic structure. Thus (17) and (18) are ways of notating interpretations at the interface (and implicational relations between them) in the standardized way of constituent structures. However, this notation does not appear to have any independent empirical motivation. In other words the different structures (or features) are postulated solely on the basis of the interpretations that we ultimately want to derive. In the present model only actual terminals project syntactic (constituent) structure (as in section 2.2). Furthermore, we once again agree with Culicover and Jackendoff (2006: 416) that interpretation is "the product of an autonomous combinatorial capacity, independent of and richer than syntax", which syntax simply restricts in crucial ways. Specifically, interpretation is restricted by the way in which actual terminals, i.e. the morphological- or syntactic level lexical entries, cut up the conceptual space (section 2.3) as well as by their structural relations.

This is not to say that the views of Distributed Morphology and those of Caha (2008) are equally distant from the present theory – as can be seen, if we try to apply either approach to the data of Geg Albanian reviewed so far. Pursuing the line of Embick (2004a, b) it is difficult to see how to account for Geg Albanian verbal bases except by having recourse to zero morphology. As Caha (2008) points out, this is the treatment that would have to be provided for English irregular verbs, where perfect and/or past are only realized as root allomorphs (e.g. *begun, began*, vs. *begin*). By contrast, the approach that Caha (2008) advocates makes zero morphology irrelevant to both English root allomorphies and the Geg Albanian verb base insertion; in both cases, the verb root will simply spell out the entire functional (sub) string.

The irrelevance of zero morphology represents a point of contact between Caha (2008) and the theory we propose, as opposed to more traditional approaches like Distributed Morphology. We refer the reader to Caha (2008) for more specific arguments against the use of zero morphology in

the cases at hand. In general, following Manzini and Savoia (2005, 2007), we reject zero exponents on principled grounds, as incompatible with a restrictive theory of projection from actual lexical terminals. This similarity between Superset theories and our work is not isolated; rather it extends to the fact that Superset theories do not depend on default for lexical insertion and correspondingly do not necessitate Impoverishment of terminal nodes.

Yet the differences are more important, as emerges in a particular clear way from Caha's (2008) discussion of cartographic models in which 'the syntactic structure of verbs, nouns, prepositions and adjectives is composed of a relatively large number of functional projections. At the same time, it seems that many of these functional projections lack independent overt exponents … The fact that the Superset principle allows for a spell out of non-terminals resolves … the tension between syntactic and morphological structure in a natural way'. In other words, Caha's approach is yet another execution for what is essentially the usual idea about the interfacing of syntax with the lexicon and the interpretation – namely through abstract structures not projected from the lexicon but serving as a base for its 'insertion', much like the zero exponents of Distributed Morphology or the 'silent' categories of Kayne (2006ff.).

By contrast, we propose a more direct implementation of minimalist ideas, and one which is better suited to an account of variation. Even if we assume that Caha (2008) is correct in his criticism of Embick's (2004a, b) treatment of English, it is worth pointing out that he also faces empirical difficulties when it comes to the Geg Albanian data. Thus Caha considers it an advantage for his proposal that English ablaut roots can alone satisfy an entire functional sequence. The problem is that this cannot be extended to Geg Albanian verb bases, for the simple reason that the adjectival/ stative reading of the participle requires lexicalization by specialized participial morphology, namely *-m, -n* as discussed in section 2.2. It is evident that if the latter is characterized for the category STATE, then it always ought to override ROOT in competitions for insertion in higher positions of the hierarchy in (18).

This only leaves us with another possibility, namely that verbal base (root or thematic vowel) morphology contains a superset of specifications with respect to the *-m, -n* morphology. Since at least in the case of vocalic bases the *-m, -n* morphology actually attaches to the verbal base, this appears to be impossible as well. But this is not the only problem. Let us look at the variation in (8) in the way the hierarchy in (18) suggests. In the schema in (19), there is no obvious superset (or subset) pattern cutting across the classes. Note that we have omitted the Cause level, which is irrelevant from the point of view of the variation observed, and conflated Voice and Perfect, since Caha (2008) himself suggests that these may be distinguished only by the auxiliary that embeds them. We have furthermore indicated a Tense position conflating Past and non-Past and, given that

we are also dealing with modal forms, we have supposed that the entire hierarchy might be crowned by a modal slot.

(19)	Root	State	Voice/Perfect	Past/ Present	(Ir)realis
Shkodër -V		base-*m*	base		base
Shkodër-C			base(longN)	base(longN)	base(longN)
Shkodër-C		base-*n*		base	base
Mirditë		base-*n*	base	base	base

We are not saying that the data could not be made to fit into Caha's (2008) framework by readjustments of various kinds, very much as would happen in Distributed Morphology. What we are saying is that the observed variation hardly supports the idea that morphological syncretisms work by overarching structural patterns. There is of course an internal structure to syncretisms which we have tried to bring into relief in our own discussion. But this structure does not respond to the logic of (hypothetical) functional hierarchies. Rather it responds directly to the logic of conceptual space, and its (conceptually) possible partitions.

To summarize: in this section we have considered syncretism as an instance of a potential non-isomorphism between syntax and morphology. On the basis of data from Albanian dialects, we have argued however, that morphological and syntactic structures can be unified since they are built on the same set of categories and relations, further dispensing with notions such as (Late) Lexical Insertion, underspecification, impoverishment, string lexicalization and more. Syncretism is instead taken to correspond to a non-isomorphism between (morpho-)syntax and interpretation, i.e. to a standard case of ambiguity whereby a single form can correspond to an array of interpretations.

3. Middle-passive voice morphology in Greek

3.1   The data

In this section we turn to the discussion of middle-passive voice in Greek also in comparison with the Albanian data already presented in section 2.1, with the aim of showing that the same non-isomorphism found with single lexical items (syncretism) can also be found with morphosyntactic structures. In particular, we show that different morphosyntactic realizations for the middle-passive voice can correspond to a single interpretation, and vice versa, different interpretations can correspond to the same morphosyntactic realization. We next treat these patterns as instances of ambiguity resolved at the interface.

27

In the present tense (imperfective) Greek makes use of a specialized agreement inflection for the middle-passive voice, as the comparison between (21a) and (21a') shows. The relevant paradigms are exemplified for the first conjugation by the verb *pleno* ('wash'). The same distinction in terms of agreement inflections is found between the two voices in the imperfective past, as shown in (22b-b'). The segmentation below is based on the analysis of Ralli (2005):[5]

(21)　　*Present (imperfective)*

　　　a.　　plen　-ome/　-ese/　-ete/　-omaste/　　-osaste/[6]　　-onde

　　　　　　wash　M.1sg etc.

　　　　　　'I wash (myself)'　　etc.

　　　a'.　　plen　-o/　　-is/　　-i/　　-ume/　　　-ete/　　　　-un

　　　　　　wash　1sg　etc.

　　　　　　'I wash (something)'　etc.

　　Past (imperfective)

　　　b.　　plen-　omun/　-osun/ -otan/ -omastan/　　-ostastan/　-ondan

　　　　　　wash　M.1sg etc.

　　　　　　'I was washing (myself)'　　etc.

　　　b'.　　eplen- a/　　-es/　　-e/　(plen)-ame/　(plen)-ate/　(eplen)-an

　　　　　　wash　1sg　etc.

　　　　　　'I was washing (something)' etc.

A number of clarifications are necessary regarding the forms in (21). First, an alternative segmentation is possible, according to which, the *–o* and *–e* vowels immediately after the base in (21a) are separate affixes (thematic vowels), and not part of the person inflections, which accordingly reduce to *–me*, *–se* etc., or *–mun*, *–sun*, etc. for the past formations. If they are treated as thematic vowels, then they may turn out to be related to the *(h)ɛ* affix of Albanian, as discussed in footnote 3. A different segmentation can also apply to the active voice, where *–i* in the 2nd (and 3rd) singular, *–u* in 1st and 3rd plural, as well as *–e* in the 2nd plural are separated from the person inflections (see Philippaki-Warburton 1973, Ralli 1988, for different formulations). Since this is not strictly speaking relevant to the discussion that follows, we will retain the segmentation in (21). The second property concerns the formation of the past tense in (21b') where the verb base seems to have two possible shapes, namely *eplen-* and *plen-*. This is due to the fact that the past tense is

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[5] For an overview of the different approaches regarding the verb morphology in Greek, see Ralli (2003), also Janda & Joseph (2002). For an analysis within the framework of Distributed Morphology see Galani (2005).

[6] The alternative shorter form *pleneste* is also available.

formed by a stress shift to the antepenultimate. The 'augment' *e-* adds one extra syllable on the monosyllabic verb base, allowing for the stress to be born by the antepenultimate syllable. In the 1st and 2nd plural, on the other hand, inflection is bisyllabic and therefore no augmentation takes place (see Klairis & Babiniotis 2004, Ralli 2005, Spyropoulos & Revithiadou 2008). The same pattern holds in the perfective past tense in (22b') below.

Turning next to the present and past perfective (the 'aorist'), we observe that the specialized middle-passive agreement inflection is no longer available. Instead, the active agreement inflection appears along with the affix *th-* for the present tense or *thik-* for the past tense, as shown in (22a-b). The affix *th-* has been treated as the 'passive affix' in a series of morphological and syntactic works (see Matthews 1967, Philippaki-Warburton 1973, Tsimpli 1989, Rivero 1990, Ralli 1988, 2005, among others). Regarding the *th-/thik-* alternation, Ralli (1988, 2005) argues that *thik-* is the past tense allomorph of *th-*. On the other hand, Philippaki-Warburton (1973) argues that *th-* is the passive (+perfective) affix, while *–ik* marks past tense (sensitive to passive voice). Spyropoulos & Revithiadou (2008) also argue that *–ik* marks past tense, which may appear in the active voice as well with a small class of verbs, cf. *ben-o* 'enter' vs. *b-ik-a* 'entered' (without augmentation and stress shift due to the presence of *–ik*). On the basis of the evidence provided in the literature, we also assume that *th-* and *–ik* are separate affixes, with the former realizing middle-passive voice and the latter past tense.

(22)   *Present (perfective)*

    a.   pli   -th   -o/   -is/   -i/   -ume/ -ite/   -un

        wash   M   1sg   etc.

        'I wash (myself)'   etc.

    a'.   plin   -o/   -is/   -i/   -ume/ -ete/   -un

        wash   1sg   etc.

        'I wash (something)' etc.

Past (perfective)

    b.   pli   -th   -ik   -a/   -es/   -e/   -ame/ -ate/   -an

        wash   M   past   1sg   etc.

        'I washed (myself)' etc.

    b'.   eplin-   -a/   -es/   -e/   (plin)-ame/   (plin)-ate/   (eplin)-an

        wash   1sg   etc.

        'I washed (something)'   etc.

The present perfective forms in both the middle-passive and the active voice in (22a-a') are characterized as 'dependent' ones (Holton, Mackridge and Philippaki-Warburton 1997) since they cannot occur independently in (finite) clauses, but have to be preceded by one of the modal particle ('subjunctive' *na*, 'future' *tha* or 'hortative' *as*), a hypothetical or temporal conjunction (*an* 'if', *otan* 'when', etc.) or by a free relative pronoun (e.g. *opjos* 'whoever'). Note that Greek, unlike Albanian, allows for perfective aspect in the present tense as well.

The perfective verb base in (22) is *pli-*, for the mediopassive and *plin-* for the active; the corresponding imperfective ones in (21) are *plen-* for both voices. In this particular case, perfective aspect is realized on the verb base as a raised vowel. Other formations are possible for other verbs. For example, a verb like *din-*o ('dress') shows no vowel change but the affix *–s* appears in the active voice, i.e. *di-s-o*; in the middle-passive the formation is *di-th-o* (and *dithika* for the past tense). A verb like *dhin-o* ('give') exhibits both vowel change and *–s* morphology, e.g. *dhin-o > dho-s-o*, while the middle-passive once again lacks *–s*, i.e. *dho-th-o*, *dho-th-ik-a*. The complementary distribution of *th-* and *–s* has been used as evidence that *th-* is not only specified for the middle-passive but also for perfective aspect. However, this assumption is not well-supported by those verbs which form the perfective aspect through vowel change in both voices, as already mentioned. In this respect then, it makes more sense to identify *th-* as the middle-passive affix only.

The above data shows that the morphological realization of middle-passive voice in Greek splits according to aspect: imperfective (present, past) requires specialized agreement inflection, while perfective (present, past) makes use of the *th-* affix and active agreement inflection. The Albanian Tosk varieties also show a split conditioned by perfective aspect, while in Geg varieties this split is conditioned by past tense (cf. the discussion surrounding (2)). Irrespectively of the basis for the split, the Albanian pattern is that the *u* clitic combines with the agreement inflection of the active voice, and it cannot appear with the specialized middle-passive agreement inflection. The same holds for Greek *th*, which can only appear with the active and not with the specialized middle-passive inflection; thus formations like **pli-th-ome* or **pli-th-omun* are ruled out. On the basis of the similarities with Albanian, it seems natural to analyze *th-* as the morphological (word-internal) equivalent of the clitic *u*. This correlation further supports the conclusion that *th-* does not bear any perfective specification in the same way that *u* in Albanian cannot be treated as a perfective marker (in Tosk) or as past tense marker (in Geg). The presence of *th-* along with active voice can on the other hand imply perfective aspect in Greek.

Going back to the lack of **plithome/ *plithomun* formations, Ralli (2005: 130) assumes that this is due to a morphological constraint that disallows the (pleonastic) duplication of the same feature in the same structure; since both *th-* and specialized agreement inflection realize middle-

passive voice, their co-occurrence is excluded. Although the intuition seems to be on the right track, namely that these two elements, in different ways, do the same job, the morphological constraint invoked only describes the unattested pattern. Furthermore, in an analysis that associates a given item with more than one feature, it is not so obvious why their co-occurrence cannot be justified on the grounds of these other features. In other words, if according to Ralli (1988, 2005) *th-* is +middle-passive, +perfective and inflection is +tense, +agreement then it is rather unclear why the aspectual and tense specifications cannot override the voice one. Finally, duplication of features is not altogether excluded in grammar; indeed so-called 'pleonastic' realizations crop up in various places. At the syntactic level at least, two (or more) pieces of inflection may realize the same feature in the same structure; this is the typical case of subject clitic languages where inflection on the verb is doubled by another piece of inflection, namely the subject clitic. Thus the incompatibility of *th-* with specialized agreement inflection (which also realizes middle-passive voice) has to be accounted in some other way.

The middle-passive voice of Greek also includes forms of the auxiliary *exo* 'have' followed by a 'participial' form, as in (23a). The same auxiliary is used in the active voice, while it is the 'participle' that differs, as in (23b). By contrast in Albanian, voice distinctions are encoded by auxiliary choice (*be* for the middle-passive, *have* for the active) and not by the participle (cf. (3)).

(23) a. exo, exis, exi, etc.   pli-th-i

          have.1sg, 2sg, 3sg, etc   washed

          'I have been washed' ('you have/he has been/ etc. washed')

      b. exo, exis, exi, etc.   plin-i

          have.1sg, 2sg, 3sg, etc   washed

          'I have washed (something)' ('you have /he has etc. washed')


In (23) the form of the lexical verb coincides with the 3rd person singular of the perfective present in the middle-passive and active voice respectively. Person inflections are carried by the auxiliary *exo*. The verbal forms *plithi* and *plini* are then cases of syncretism like the ones discussed for Albanian in the previous section. Recall that in the pattern given in (8i), the participle (and infinitive) coincides with the 3rd person singular of the middle-passive perfective past. A similar pattern is found in (23) – though in (23a) middle-passive is realized by *th-*, while in Albanian it is realized by *u*. The same type of explanation provided for the Geg Albanian data carries over here as well. The so-called agreement inflection corresponds to a variable, which in the participial context (embedded under a fully inflected verb) is compatible with the whole range of denotations of the matrix

(auxiliary) inflection.[7] The same variable by itself can imply the core event-anchored reference (i.e.3rd person singular).

3.2   Structural analysis

Recall from section 2.2 that the agreement inflection of finite verbs is analyzed as the morphological equivalent of a pronominal subject; thus it occupies a D (EPP) position verb-internally. Extending this structure to Greek, we get the configuration in (24a) for active inflections and (24b) for specialized middle-passive inflections in the imperfective tenses (illustrated with 1st person singular).
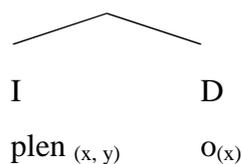
(24)   a.   Active

              I   D

           plen   o

    b.   Middle-passive

              I   D
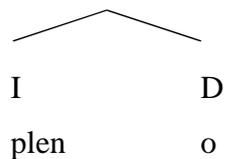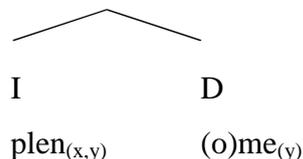
           plen   (o)me
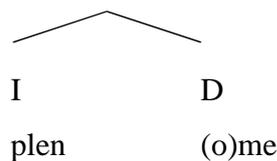
The configurations in (24) do not distinguish between active and middle-passive morpho-syntactically, although intuitively at least, the two sets of inflection seem to have different interpretations. In particular, active inflections associate with a D argument, be that internal, as with unaccusatives (*pefto* 'fall'), or external, as with transitives (*pleno* 'wash') and unergatives (*jelao* 'laugh'), or even a quasi-argument, as with weather verbs (*vrexi* 'rain'). On the other hand, the middle-passive specialized inflection is selective. It can only associate with the internal argument, thus promoting it to the D position, while the external argument (if present) remains free. In the light of the above, the structures in (24) are reformulated as follows:

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[7] There is a further form of participle available, namely the 'adjectival' participle which is formed by attaching the affix –*men* to the verb base, cf. *pli-men-os* ('washed'). This participle fully inflects according to the nominal (adjectival) declension for gender, number and case. Following the analysis of the Albanian participles, the agreement inflections in these formations correspond to N elements (similar to absolute). Voice distinction is carried by auxiliary choice: *exo* 'have' for the active and *ime* 'be' for the (adjectival) passive (for a discussion see Anagnostopoulou 2003). Due to lack of space, we do not consider these formations here. Their Albanian counterparts are given in (4).
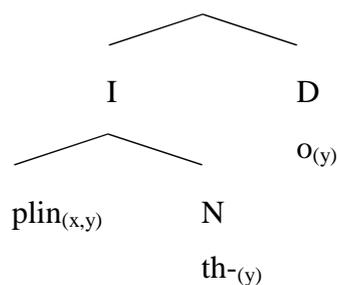
(25)   a.   Active

$$\overbrace{\qquad\qquad\qquad}$$

        I   D

     plen $_{(x,\,y)}$ o$_{(x)}$

   b.   Middle-passive

$$\overbrace{\qquad\qquad\qquad}$$

        I   D

     plen$_{(x,y)}$ (o)me$_{(y)}$

The *x* and *y* in (25) correspond to the argument/ thematic slots of the verb.[8] Inflection *(o)-me* becomes associated with *y*, leaving *x* free, while the active *–o* becomes associated with *x*, while *y* is saturated by an object DP at the syntactic level. The effect of specialized middle-passive inflection then is that it creates an intransitivized morphosyntactic structure (Roussou 2008).
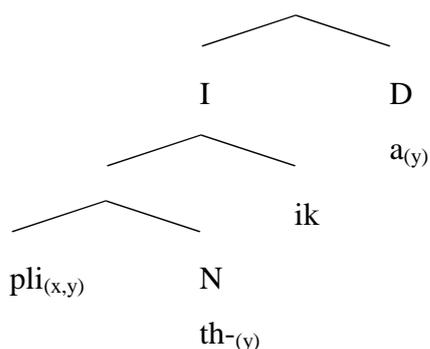
Consider next the *th-* middle-passive formations which associate with active inflection. The latter is insensitive to theta-roles (the internal-external argument distinction). The question then is what sort of role the middle-passive affix *th-* plays. Comparison with the Albanian data of section 2, allowed us to identify *th-* as the morphological equivalent of the object clitic *u.* Following Manzini & Savoia (2005, 2007), we furthermore take object clitics to be N categories. Thus while in the imperfective tenses, the internal argument is directly lexicalized as D by the specialized morphology, in the perfective tenses, the realization of the two argument slots is distinct. The structure for the perfective middle-passive then is as in (26), illustrated with present perfective in 26a) and with past perfective in (26b):

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[8] An interesting fact is that lexical unaccusatives are predominantly associated with the active inflection. The same is true in Albanian, so that especially in the perfect tenses they are associated with the auxiliary *kam* 'I have' (Manzini and Savoia 2007, to appear c, d). This leads Manzini and Savoia (to appear d) to conclude that what is crucial for the definition of the middle-passive interpretation is not so much the linking of the internal argument to the EPP position as the presence of an unsaturated argument (typically the external argument). Obvious limitations of space require us to put this matter aside (after duly noting it). At the same time middle-passive inflection may not altogether be ruled out with lexical unaccusatives (e.g. *marenome* 'wilt'). However, this option leads us into another matter that has to be noted and left aside, that of so-called deponents, i.e. verbs with middle-passive inflection but active syntax (either overtly, given the presence of accusative objects etc. or at least in that no active alternant is known). In terms of Embick's (2000) analysis, the middle-passive forms proper are characterized by a voice feature, say [pass] associated with the *v* functional projection of the verb, while the deponent forms are characterized by a [pass] feature associated with the verb root. The objection that we have to this type of approach is, as before, that it at best annotates the relevant differences without explaining anything about them. Therefore, despite the fact that Embick (2000) dismisses similar solutions, we tentatively maintain that deponents are *bona fide* instances of middle-passive voice at LF – despite the lack of non-middle instantiations of such argument structures (cf. Manzini and Savoia to appear d on the Italian *si* counterparts of deponent verbs).

(26)   a.   Present perfective

$$I \qquad D$$
$$\qquad\qquad o_{(y)}$$
$$plin_{(x,y)} \qquad N$$
$$\qquad\qquad th\text{-}_{(y)}$$

   b.   Past perfective

$$I \qquad D$$
$$\qquad\qquad a_{(y)}$$
$$\qquad\qquad ik$$
$$pli_{(x,y)} \qquad N$$
$$\qquad\qquad th\text{-}_{(y)}$$

Unlike the structure in (25b) with specialized middle-passive inflection, the structures in (26) have a position both for the D argument and for the N (internal) argument. If (25b) presents an intransitivized morphosyntax, (26b) presents a transitive one along the lines of the Albanian *u* and Romance *se/si* formations. The structures in (26) can also account for why *th-* and specialized middle-passive inflection cannot co-occur: the presence of *th-* gives rise to a transitive morphosyntax which is therefore incompatible with the intransitivization property of specialized middle-passive inflection. Thus while *th-* and specialized middle-passive inflection are alternative modes for the realization of middle-passive voice, their incompatibility is due not to a morphological constraint blocking duplication of features but on the contrary to the conflict in their requirements.

At this point one may wonder how the middle-passive interpretation comes about at all in a transitive structure like (26). Note that in (25), *th-* not only picks up the internal argument *y*, but the latter further becomes associated with the D inflection (*-o/ -a*), while the external argument *x* remains free. In this respect, the outcome of (26) is the same as that of (25): in both structures the internal argument is promoted to the D position, either through specialized middle-passive inflection or through an object position. It is in this sense then that both specialized middle-passive inflection and *th-* fulfil the same role. The question then is what sort of properties *th-* has that

necessitate its association with D. Recall that the clitic *u* in Albanian and Romance *se/si* are taken to share the same properties. Now, according to Manzini & Savoia (2005, 2007), *u* and *se/si* correspond to a variable. This is the property of *se/si* and *u* then that is responsible for the various interpretations that arise. Assuming that *th-* is the morphological counterpart of these clitics, its association with D becomes straightforward: its variable status forces it to get bound by the first available antecedent, which in this case is D.[9] Thus the reference assigned to the middle-passive affix will be that assigned to the D inflection; at the same time, the chain formed between N and D will ensure that it is the theta-role (argument slot) picked up by *th-* that will be inherited by D.

3.3   The interpretations

As already mentioned in section 1, the middle-passive voice in Albanian and Greek can give rise to at least three different interpretations, namely passive, reflexive, and anticausative. Albanian, just like Italian *si* constructions, allows for a fourth one, that is the impersonal reading. Consider the following Greek examples:

(27)   a.   Ta pedhjia   pleno*nde*.

the children wash-M.3PL

"They children are being washed/ The children wash themselves."

b.   I   zaxari keje*te*.

the sugar burn-M.3SG

"The sugar burns."

The sentence in (27a) is preferably interpreted as either passive or reflexive, as indicated by the English translations, while the most typical reading for (27b) is the anticausative. However, a closer examination shows that the anticausative reading may also be available in (27a), i.e. 'the children are getting washed due to/with the (falling) rain'. Similarly, the passive reading may also be available in (27b), i.e. 'the sugar is being burnt by the cook, in order to produce caramel' (see Tsimpli 2005, 2006; for a different view, see Alexiadou & Anagnostopoulou 2004). The reflexive reading is not possible in (27b), but this is due to the fact that the subject is an inanimate DP and reflexivity requires an entity that is capable of a mental state. Finally, the passive reading implies that there is an agent present. In fact, the presence of a *by*-phrase in (27a), e.g. *apo tin mitera tus*

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[9] Papangeli (2004) offers a very thorough discussion of the differences and similarities between middle-passive morphology in Greek and Romance *si/se*. However, she does not distinguish between specialized inflection and −θ formations, which in her analysis, as in most analyses, are treated alike.

('by their mother'), or in (27b), e.g. *apo ton majira* ('by the cook'), disambiguates the readings in favor of the passive one.

What is important is that each of these readings is available with each of possible morphosyntactic realizations of middle-passive, namely with specialized inflection and with *th-* (including the *exo* + 'participle' formations as well). The same holds for Albanian, where specialized middle-passive inflection, the *u-* clitic, and *jam* + participle are each compatible with any of the interpretations which come under the cover term 'middle-passive'. As mentioned above, Albanian allows for a fourth reading, namely the impersonal one, very much like *si* in the Italian example below:

(28)   si punse   <u>Gianni</u>

          M prick.3SG John

          "John was pricked/John pricked himself/Someone pricked John"

Depending on whether the DP *Gianni* is construed as the subject or the object of the verb, we get a variety of readings. If *Gianni* is the object, then the impersonal reading ("Someone pricked John") becomes available. If *Gianni* is the subject, then *si* gives rise to three possible interpretations: passive ("John was pricked by the doctor"), reflexive ("John pricked himself") or anticausative ("John got pricked with the needle"). As argued by Manzini & Savoia (2007) these readings follow from the characterization of *si* as a variable. If *Gianni* is the EPP argument and *si* forms a chain with it, the first three readings arise (namely the bound readings of passive, reflexive, anticausative); if not (in which case *Gianni* is the object), *si* receives an impersonal reading. The first three readings are disambiguated on the basis of mainly pragmatic factors. What Greek and Albanian show is that the same range of interpretations can also arise with specialized middle-passive inflection.

Focusing a little bit more on the morphosyntax-LF interface we observe the following: a single morphosyntactic structure can yield a range of interpretations, and at the same time each of these interpretations can correspond to a single morphosyntactic structure. This picture clearly shows that there is no isomorphism between morphosyntax and interpretation, thus providing immediate evidence against Interface Uniformity. Where 'syncretims' and the middle-passive voice morphosyntaxes converge is that in both cases we have a single form (lexical item, or structure) which is essentially ambiguous – and this ambiguity is resolved at the LF interface.

Going back to the middle-passive, in most current analysis the opposite view is being adopted: it is interpretation that dictates structure. Alexiadou and Anagnostopoulou (2004) argue

that the different readings are syntactically encoded through the projection of different *v* heads. For example, a passive has a VoiceP above VP with no specifier, a transitive has a VoiceP projection but with a specifier (hosting the external argument), while an anticausative with middle-passive morphology has a Result vP embedding the passive VoiceP structure. The projection of different structures is necessitated by the availability of different readings. However, in all cases the morphology remains the same. Thus the interface of syntax with morphology becomes opaque, with a certain cost on the lexicon.[10]

In the present model, no such opacity arises. Projection from the lexicon predicts a given morphosyntactic structure. In (25b) for example, specialized middle-passive inflection picks-up the internal argument and also expresses the D (EPP) slot. At LF the external argument which remains free morphologically, can associate with the D inflectional argument in turn, giving rise to the reflexive reading; or it can associate with the *by*-phrase, (or in the absence of the *by*-phrase, become generically bound), yielding the passive reading; or finally it can be suppressed, giving rise to the anticausative reading (that is the reading were no external agent or cause is implicated). Something similar holds for the *th-* (or *u*) realizations as in (26b). The difference here is that the morphosyntactic structure provides a distinct realization for the internal argument (*th-*) and for the D slot. However, given the variable status of *th-*, the latter gets bound by D. In this case also, the structure remains ambiguous depending on the interpretation of the external argument.

4. Conclusions

In the present paper we focused on the morphosyntax of middle-passive voice in Albanian and Greek with the aim of investigating the lexicon/morphology-syntax and the morphosyntax-LF interfaces. We considered the case of syncretism in a variety of forms in Albanian and argued that syncretism is nothing else but an instance of non-isomorphism between form and meaning: a single lexical item giving rise to a range of interpretations (ambiguity). Thus syncretism does not reflect a 'mismatch' between syntax and morphology, as argued by most approaches, but non-isomorphism between morphosyntactic structure and interpretation. The same lack of isomorphism was shown to hold at the level of entire structures at the LF interface. In this respect our approach argues in favor of a unified morphosyntax – as it also argues against Interface Uniformity. In particular, we showed that in the case of the middle-passive the same morphosyntax can correspond to a range of readings (at least passive, reflexive, and anticausative), while each of these readings can in turn be associated

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[10] In fact, Tsimpli (2005) argues that the reflexive interpretation involves a different derivation from the non-reflexive (passive, anticausative) one. The crucial difference is that in the non-reflexive readings there is no Spec,VoiceP, while in the reflexive there is. In the latter case the DP present in this position is forced to become associated with both theta-roles. Kalluli (2006) provides a unified approach for passives, reflexives and anticausatives in Albanian but further assumes that the v positions involved can bear different feature specifications.

with several different morphosyntaxes (specialized inflection, *u* clitic in Albanian and *th-* affix in Greek, or auxiliary choice). Despite the fact that specialized middle-passive inflection yields an intransitivized morphosyntax, and *u* (in Albanian) and *th-* (in Greek) yield a transitive one, both structures are compatible with any of the three readings (passive, reflexive, and anticausative).

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