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# The semantics and syntax of complementation markers as an areal phenomenon in the Balkans, with special attention to Albanian 

## 1 Introduction

It is well known that various languages of southeastern Europe show a number of grammatical features that have led to them being characterized as a "Sprachbund", ${ }^{1}$ i.e., a group of geographically related languages which due to centuries of intense and sustained contact show convergence along structural - as well as, in the typical case, lexical -dimensions. The Balkan Sprachbund group includes, but is not restricted to, languages from five branches of the Indo-European family: Albanian, Greek, the Indic language Romani, the Balkan Slavic languages Bulgarian and Macedonian, and the Balkan Romance (Italic) languages Aromanian, Daco-Romanian, and Megleno-Romanian; the non-IndoEuropean language Turkish also figures prominently in the Sprachbund, though with less of an effect on structure than on lexis. ${ }^{2}$

Balkan convergent structural features range over all components of grammar, from phonology through pragmatics, but especially noteworthy in the Balkans are features at the level of morphosyntax. There is one morphosyntactic parallel shared by all the languages that is particularly striking, and, in the European context, highly unusual as well. In every one of these languages most if not all complementation - by which is meant clausal structures that fill argument roles in a sentence ${ }^{3}$ - involves finite clauses introduced by a subordinating element of some sort and, significantly, containing verbal forms marked for person and number in all of the languages, for aspect in some of the languages, and for tense as well in some. This feature is realized to a considerable extent in each language,

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with Aromanian, Greek, Macedonian, and Romani showing it to the greatest degree, lacking nonfinite complementation altogether. ${ }^{4}$ Bulgarian comes close to showing no nonfinite subordination, with just some optional and generally rare use of such nonfinite forms in the standard language, while nonfinite complements play a more significant role in Daco-Romanian and in both major varieties of Albanian, i.e. both the northern Geg and the southern Tosk dialect zones. ${ }^{5}$

Two different types of subordinating element accompany the finite complement in each of the languages: one associated with complements expressing propositions that can have a truth value, here called "indicative" complements, ${ }^{6}$ and one associated with nonveridical modality, here called simply "modal". As discussed in Section 2, the indicative complements are introduced by elements complementation markers - that can be analyzed as canonical complementizers, while the modal complements are accompanied by elements, also a type of complementation marker in that they are associated with complement clauses, that for some of the languages at least are probably best analyzed not as canonical complementizers per se but as mood markers. These elements can be labeled, at least informally, as "dental modal subordinators", abbreviated throughout as 'DMS'. ${ }^{7}$ Arguments concerning the status of the DMS markers within the overall class of complementation markers, especially in respect to canonical complementizers, are also presented in Section 2.

Leaving aside Albanian, which is treated in some detail in later sections, some examples of the finite complementation from various languages are given in (1), illustrating both modal and indicative possibilities, presented by examples (i) and (ii) respectively; examples from languages that show nonfinite complementation are given in (2). ${ }^{8}$

[^1](1) a. i. Iska-m [naši=te da spečel-jat]. (Bulgarian) want-1SG ours=ART DMS win.PFV-3PL.PRS 'I want our (team) to win.' (literally: "I want that ours win")
ii. Vjarva-m [če naši=te šte spečel-jat].
believe-1SG.PRS COMP ours=ART FUT win.PFV-3PL.PRS
'We believe that our (team) will win.'
b. i. emis $\theta e l u-m e \quad[n a ~ s i z i t i s u-m e ~ t i n ~ a p o f a s i ~ s a s] ~(G r e e k) ~$ we.nom want-1PL DMS discuss-1pl the.ACC decision.ACC your 'We want to discuss your decision.' (literally: "want that we-discuss")
ii. emis pistevu-me [oti $\theta a$ nikis-i $i \quad$ omaða mas]
we.nOM believe-1pl COMP FUT win-3SG the.Nom team.nom our 'We believe that our team will win.'
c. i. nie planira-me [da ostavi-me] (Macedonian)
we.nom plan-1pl dMs leave-1pl
'We are planning to leave' (literally: "planning that we leave")
ii. misla-m [deka Petar e pameten]
think-1sG COMP Petar is smart
'I think that Petar is smart.'

$\begin{array}{llll}\text { d. i. } & \text { Stă } & {[\text { s̆ă }} & \text { plou- } \breve{a}]\end{array} \quad$ (Daco-Romanian)
(2) a. toj ne smea [se obadi] (Bulgarian)
he.nOM NEG dares.3SG REFL answer.INF 'He does not dare answer'.
b. Pare $\quad\left[\begin{array}{ll}\boldsymbol{a} & \text { ploua }] \quad \text { (Daco-Romanian) }\end{array}\right.$ seems.3SG INFM rain.INF
'It seems to be raining'.
The inclination toward exclusively finite complementation structures actually represents the synchronic result of two different but related diachronic developments: a reduced use of forms populating a previously existing category of infini-
examples are mostly taken directly or adapted from standard sources, especially Newmark, Hubbard \& Prifti (1982) but also Camaj (1984), though some were found on-line via a targeted google search. The Bulgarian examples have been checked with a native speaker; I thank Dr. Anastasia Smirnova of the University of Michigan for her help here; example (2a) is from a standard grammar of essentially $20^{\text {th }}$ century literary usage and sounds unnatural or dialectal to most speakers today. Macedonian examples are adapted from standard sources. The Daco-Romanian and Aromanian examples come from standard reference works, especially (Pană Dindelegan (2013) for Daco-Romanian and Vrabie (2000) for Aromanian. Note that the Romanian infinitive is introduced, in most contexts in which it is used, by an element $a$, which for want of a better classification and in the absence of careful analysis is simply labeled "INFM" here, for "infinitive marker" (also used here with Albanian elements).
tive and an expanded use of finite verbs in subordination. The diachrony, while interesting in its own right, is not relevant here, as the focus here is on the synchronic nature of complementation in the Balkans but more particularly on the syntax and especially the semantics of the complementizer and complementizerlike elements that occur in complement structures. Although the language focus is on the Balkans in general, particular emphasis is placed on Albanian, as it is perhaps the least well described of the languages of Europe that serve as a national (official) language of a nation-state, ${ }^{9}$ as far as modern analytic accounts are concerned. I turn first, therefore, to some general facts about the syntax of complementation in the Balkans and then home in on Albanian, both as to syntax and semantics, with attention to other Balkan languages where appropriate.

## 2 On the syntax and morphosyntax of Balkan complementation

The occurrence of finite complementation in these languages has consequences for the syntax of complement clauses. Moreover, there are two issues of a more morphosyntactic nature that need to be addressed. Thus before moving into a consideration of the semantics of Balkan complementation and into Albanian per se, some discussion of the syntax and morphosyntax is in order.

First, as to the verb forms themselves that occur in the complement clauses, for the indicative clauses there is nothing particularly noteworthy: the full range of verb forms that can occur in main clauses is available for use in Balkan indicative complement clauses - present tense, future tense, perfect forms, and any of the various past tenses for those languages that, for instance, distinguish imperfect (past imperfective) from aorist (past perfective). All of these can occur in subordinate clauses with the indicative complementizer (e.g. Bulgarian da, Greek oti, Macedonian deka etc.), embedded under suitable matrix verbs; in place of the subordinate verb in the indicative sentences in (1), for instance, other indicative verbs could be used, as in the Greek examples in (3) - similar examples can be constructed for the other languages.
(3) a. emis pistevu-me [oti nikis-e i omaðа mas]
we.nom believe-1pl that won.PFv-3SG the team.nom our
'We believe that our team won.'

[^2]b. emis pistevu-me [oti nikus-e i omaða mas] we.nom believe-1PL that won.IPFv-3sG the team.nom our 'We believe that our team was winning.'
c. emis pistev-ume [oti ex-i nikisi i omaða mas] we.nOm believe-1PL that has-3sG win.PRF the team.nom our 'We believe that our team has won.'
d. emis pistevu-me [oti $\theta a$ nikuse $i$ omaða mas], (an ...) we.nom believe-1pl that fut win.3SG.IPFV the team.nom our if 'We believe that our team would win (if ...)'

The indicative complementizer seen here in Greek, oti, is used for nonfactive complements; it varies with another form pos, most likely derived from the question word for 'how' (also pos), which covers the same semantic range as oti so that the choice between the two seems to be a matter of stylistics. For factives, where the truth of the complement is presupposed, Greek uses a different indicative complementizer, $p u$, perhaps derived from the earlier locative relative (h) opou 'where, (in a place) in which'. Thus the Greek examples in (3) can have pos instead of oti but not pu (so that emis pistevume pos nikise i omaða mas is an acceptable variation on (3a) but *emis pistevume pu nikise i omaða mas is not). An acceptable example of complementation with $p u$ is given in (4), with the factive verb ksexno 'forget'.
(4) ksexas-a [pu i-ne jatro-s o petro-s]
forgot-1SG COMP is-3SG doctor-NOM the.NOM Peter-NOM
'I forgot that Peter is a doctor.'
In (4), the truth of the complement is not in question, i.e. Peter is indeed a doctor. Other factive complement-taking-verbs in Greek include lipume 'be sorry', xerome 'be glad', and ime perifanos 'be proud', inter alia. Other Balkan languages seem not to have a specialized complementizer for factivity; in Albanian, for instance, the indicative complementizers $q e \ddot{e}$ and se are used, essentially interchangeably, with both factive and nonfactive complements:
(5) а. Мё vjen keq [që vdiq-ën dy njerëz tërinj] me.dat come-3sg bad Comp died-3pl two men young 'I am sorry that two young men died.' (literally: "It-comes to-me badly that ...")
b. Мё vjen keq [se përfundov-e] me.dat come-3sg bad comp finished-2sG 'I am sorry that you finished.' (literally: "It-comes to-me badly that ...")

In the modal complement clauses, however, most of the languages show a restriction of some sort regarding which verb forms can occur. In particular, in all of them, modal clauses allow for the occurrence of special verb forms that cannot occur, or do not freely occur, as such independently in main clauses. This restric-
tion takes a different form in the different languages, and, in certain ways, is not unlike the occurrence in some languages of western Europe (and elsewhere) of special "subjunctive" verb forms that are tied to subordination. In fact, in Albanian and in the Balkan Romance languages, there are some morphologically distinct mood forms ${ }^{10}$ to be found that are traditionally referred to as "subjunctive", ${ }^{11}$ and, with certain definable exceptions, ${ }^{12}$ they occur only in subordinate clauses with a DMS; some examples showing these forms specifically in Albanian, which are morphologically distinct from indicative forms generally only in $2^{\text {nd }}$ and $3^{\text {rd }}$ person singular forms in the present subjunctive, ${ }^{13}$ are given in (6):
(6) a. Dua [të shko-sh në Shqipëri dikur].
want.1sG DMS go-2sG.SBJV to Albania sometime
'I want you to go to Albania sometime.'
(literally: "I-want that you-go ...", cf. shko-n 'go-2sG.IND')
b. Dua [të ke-të Agim=i dhurat-ën].
want.1sG DMS have-3sG.SBJV Agim=ART.NOM gift-DEF.ACC
'I want Agim to have the gift.'
(literally: "I-want that he-have ..."; cf. $k a$ 'has.3sG.IND')
The examples in (7) show that these particular forms, tout court, are excluded in main clauses:
(7) a. *Shko-sh në Shqipëri / ok Shko-n në Shqipëri go-2SG.SBJV go-2SG.IND

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10 See endnote 11 on the Albanian forms; in Daco-Romanian there are distinct subjunctive endings only in the $3^{\text {rd }}$ person singular and plural, whereas Aromanian has special subjunctive forms only for hiu 'be', am 'have', and ştiu 'know'.
11 The native term in Albanian is lidhore (from lidh 'tie, connect'), and in Daco-Romanian conjunctiv. Albanian actually has a mood system that, from a morphological standpoint, is quite well developed, with more distinct categories than any other Balkan language. Besides an indicative and subjunctive, Albanian has a morphological optative, e.g. rrofsh 'may he live' (root rro'live'), an imperative, e.g. jini '(you all) be!' (root je-), and admirative (marking nonconfirmativity), consisting of a truncated form of the perfect participle fused with an inflected form of 'have' e.g. qenke '(I can't believe) you are ...! / are you really...?!' (root qe- 'be', and cf. ke 'you have').

12 For instance, in Albanian colloquial usage, the DMS të can be omitted in future forms, so that, for instance, do shkosh is an acceptable variant of do të shkosh for 'you will go'. It is admittedly debatable as to whether even the fuller form, do të shkosh, involves subordination; that is, it would take a fairly abstract analysis, with do, as the marker of futurity, being represented as a higher verb that takes të shkosh as its complement. Such analyses have been proposed, and were especially popular in the era of Generative Semantics, but this is not the place to engage this debate further.
13 The auxiliary verbs jam 'be' and kam 'have' have distinct subjunctive forms also in the 1SG and 3PL forms (jem/kem and jenë/kenë, respectively). Albanian can be said to have a past and a perfect subjunctive in the analysis of $t e \ddot{\text { given below. }}$

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b. *Ke-të Agimi dhuratën / \({ }^{\mathrm{ok}} \mathrm{Ka}\) Agimi dhuratën
    have-3sG.SBJv have.3sG.IND
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In addition, other forms that are identical with the indicative, especially the imperfective past ("imperfect") but also, with the subjunctive forms of 'have', a perfect formation (and pluperfect and future perfect, through the availability of a past and future of 'have', respectively) can occur in DMS clauses together with $t e ̈$.

In Greek and Balkan Slavic (Bulgarian and Macedonian), however, the restriction is tied to aspect: present perfective aspect forms can never occur as bare forms in main clauses, i.e. without some sort of "supporting" element; they are always accompanied by, and actually introduced by, a marker of some sort, most notably the future tense marker or, in Greek, a hortative marker, as in (8).


Imperfective forms are not subject to such a restriction, as a comparison of (8a) with (9) shows:
(9) aku-o kaӨara tora ja proti fora
hear.IPFV-1SG.PRS cleanly now for first time
'I hear clearly now for the first time'
In subordinate clauses of various sorts, as in (10a), such perfective forms will always have some sort of "supporting" element, e.g. a subordinating conjunction or an indefinite relative word, and in modal complementation, as in (10b), the DMS provides the support:


There is more that can be said about the distribution of these verb forms. However, since the attention in this study is primarily on the semantics of complementizers and complementation, with Albanian as the main language focus, further discus-
sion of these restrictions can be left to other venues, ${ }^{14}$ and other morphosyntactic and syntactic issues that Balkan finite complementation raises can be addressed.

A second syntactic issue has to do with the characterization of the element (for want of a better neutral term) that introduces the complementation. As suggested in Section 1, the issue is whether all the elements that introduce or are associated with complementation in these languages, that is forms like deka, oti, $d a$, na, etc., are complementizers or are instead something else. This question assumes that there is some empirical content to the designation "complementizer", some consequences that follow from this morphosyntactic category label. "Complementizer", following Noonan (2007: 55) can be taken to be "a word, particle, clitic, or affix, one of whose functions is to identify the entity [i.e., a complement type] as a complement", i.e. a notional sentence that fills an argument role (see endnote 3). This is admittedly a broad definition, but it focuses, quite properly, on those elements that allow a clause to function as a complement. However, for head-initial (right-branching) languages like those in the Balkans, such elements can be further differentiated by an added characteristic that at least some complementizers in other languages show, namely that of sharply delimiting a clause boundary. ${ }^{15}$ Admittedly, this is not a part of Noonan's now-standard definition, but it is consistent with the function served by elements given the label "complementizer" in various accounts of diverse languages. This added characterization of complementizer introduces some gradience into the identification of complementizers, ${ }^{16}$ but with it, the indicative subordinators like the Greek oti and Macedonian deka can be recognized as true, i.e. canonical, complementizers as they do not allow pieces of the clause they introduce to "leak" and occur

[^3](i) John stated that for nourishment nothing beats beans.
(ii) *John stated for nourishment that nothing beats beans.

I say "immediate left" because typically, subordinate clause elements can be fronted to the left periphery of the main clause, in, e.g., a topicalized or focalized construction.
16 Note that Noonan (2007: 55), despite recognizing affixes as possible complementizers (see above), excludes "derivational affixes, like English -ing, which are used to convert a form from one part of speech to another". The suffix -ing, however, allows a verb, through the creation of a deverbal noun, to serve in an argument role; cf. Walking daily is healthy, where walking is comparable to an infinitive (To walk daily is healthy), which Noonan does see as a complement (and to thus as a complementizer). Noonan's decision ultimately to treat -ing forms under the rubric of complementation (Noonan 2007: 118) may reflect a realization on his part of complementizer-like properties, under his functional definition, of these nominalized forms.
to their immediate left, ${ }^{17}$ as shown in (11), for instance, to illustrate this property just with Greek:
(11) *emis pistevu-me i omaða mas oti nikis-e
we.nom believe-1pl the.nом team.nom our that won-3sG.PST Intended: 'We believe that our team won.'

By this test, the DMS elements found in the various Balkan languages are not as fully complementizer-like as the indicative subordinators. Again illustrating from Greek, sentences such as (12) show that the DMS na does not demarcate a clause boundary, since subordinate-clause elements can be positioned on its immediate left: ${ }^{18}$
(12) emis elpizu-me i omaða mas na nikis-i
we.nom hope-1PL the.nom team.nom our DMS win.PFv-3sG
'We hope that our team will win'.
This issue has been much discussed in the literature on Greek. Most recently, Sampanis $(2011,2013)$ argues that $n a$ is a mood marker and not a complementizer, stating (2013: 168): "the na+verbal form configuration is a genuine mood. The particle na is an affix-like inflectional element and the host of the semantic features -assertion/-realis. In consequence, any analysis in terms of derivational syntax should take into account the morphological and the semantic properties of the M[odern]G[reek] subjunctive; hence the "particle" na should not be considered a complementiser." Parallel considerations hold for the DMS elements in the other languages, with similar kinds of evidence available to be brought to bear on the question. ${ }^{19}$

This analytic decision concerning the status of the DMS means that DMS clauses, while functionally being able to serve as complementation in that they fill

17 Regarding the need to specify "immediate left", see endnote 15.
18 Noonan (2007: 77, 80) labels Albanian të with "COMP" (i.e., a complementizer) due to his reliance on a functionally based definition; his example (114) has ordering parallel to that in (12), with a subordinate clause subject to the immediate left of $t e \ddot{ }$.
19 There are other interpretations possible here. It has been suggested by Petar Kehayov, for instance, that the DMS could indeed be a complementizer but one with narrower scope, introducing not propositional complements, but rather only complements that designate events (states-of-affairs). As such, one could say that it must occur closer to the core of a sentence's predication, that is, to the verb. I welcome such added functional perspectives but for here, choose to stay with the use of a formal criterion to characterize a key way in which the indicative subordinators in the Balkans and the DMS elements differ.
the object argument slot for verbs like 'want', 'try', 'hope', 'begin' and so on, ${ }^{20}$ do not have a complementizer per se introducing them; this fact can be represented formally by positing a null ("zero") complementizer that heads the DMS clauses in the usual case. This last qualifier is needed because in some instances, DMS clauses can co-occur with canonical complementizers; in Greek, for example, the factive complementizer $p u$ 'that', as seen in (4), repeated here as (13a), can also introduce restrictive relative clauses (much as that does in English), as seen in (13b), and can be followed by a na-clause, as seen in (13c).
(13) a. ksexas-a [pu i-ne jatro-s o petro-s] forgot-1SG COMP is-3SG doctor-NOM the.NOM Peter-NOM 'I forgot that Peter is a doctor' (NB: this entails that Peter is a doctor)
b. o tipo-s pu bik-e i-ne o filo-s mu the.nom guy-Nom comp entered-3sG is-3sG the.NOM friend-nom my 'The guy who came in is my friend'
c. psaxn-o kapjo-n pu na me voiӨis-i search-1sG someone-ACC COMP DMS me.ACC help-3sG 'I am looking for someone that might help me'.

In (14a), an example from Albanian that matches (13c) is given, where që is parallel to Greek $p u$ as an invariant form that is able to introduce relative clauses, though (14b) offers a case where a clause that is the complement to a nominal predicate is introduced by që together with a co-occurring DMS: ${ }^{21}$
(14) a. Po kërko-ja ndonjë që të ish-te pak ijashtëm

PROG seek-1SG.IPFV someone COMP DMS was-3SG little outside
'I was searching for someone who might be a bit of an outsider'
b. Por detyra ime si komunist ësh-të qü ta ${ }^{22}$
but duty.NOM my as Communist be-3sG COMP DMS;it.ACC
shpejto-j këtë ditë
accelerate-1sG this day
'But my duty as a Communist is to accelerate this day.'
(literally: "...duty ... is that I might accelerate ...")

Here we have another reason to treat the DMS markers as being less complemen-tizer-like than the indicative subordinators: DMS can themselves co-occur with

[^4]complementizers (such as Greek pu or Albanian që); ${ }^{23}$ see the end of Section 3 for more on combinations of these elements.

The analysis of the DMS as a mood marker combines with the range of verb forms that can appear with the DMS elements to give a rather elaborated set of moods in the various languages. As noted in endnote 13, Albanian is thus said to have not only a present tense subjunctive but also a past subjunctive and a perfect subjunctive (so Newmark, Hubbard \& Prifti 1982; Camaj 1984); the same could be said about Greek, as noted in Joseph (2012), although few linguists and grammarians have taken that analytic step.

Moving beyond morphosyntax and node labels, there are other aspects of the syntax of complementation that are affected by the pervasive occurrence of finite complementation in each of the Balkan languages. Most importantly, while there is no overt nominative subject in the complement clauses in the example sentences in (1), these verbs can in principle, under appropriate conditions of emphasis or contrast, occur with an overt subject nominal that is in the same form as in a main clause, e.g. nominative case in the languages that distinguish case in the nominal system; thus, (15a) in Greek is an acceptable variant of (1bi), repeated here as (15b) for convenience of reference. ${ }^{24}$
(15) a. Өelu-me [na sizitisu-me 'mis tin apofasi sas]
want-1PL DMS discuss-1pl we.nom the.ACC decision.ACC your
'We want to discuss your decision'
$\begin{array}{lllllll}\text { b. emis } & \theta e l u-m e & {[\text { na }} & \text { sizitisu-me } & \text { tin } & \text { apofasi } & \text { sas }] \\ \text { we.NOM } & \text { want-1PL } & \text { DMS } & \text { discuss-1PL } & \text { the.ACC } & \text { decision.ACC } & \text { your }\end{array}$
This means that when a complement clause in Greek or another Balkan language with finite complementation lacks an overt subject, this absence is due to whatever process or processes allow for the absence of unemphatic subjects in surface clauses, and not some special process associated with complementation. ${ }^{25}$

[^5]There is a further consequence of this interpretation of complement structures and complementizers. Complementation always involves two verbs in a particular relation to one another, with one verb heading the main clause and one heading the subordinate clause. Moreover, there are combinations of two verbs for which one might propose a complementation relation since one verb "completes" the argument requirements of another verb. For instance, all of the Balkan languages have formations with 'have' or 'be' plus a participial form that are past tenses or perfect tenses, e.g. Albanian kam ardhur 'I-have come' or Macedonian rešil sum 'I solved (literally, "solved I-am"), and one could view these, at a somewhat abstract level perhaps, as involving some kind of main-verb/subordinateverb relation, with, e.g., ardhur completing the combinatoric needs of kam in this particular construction. ${ }^{26}$ However, with the view of how to identify complementation and complementizers taken here, since there is no subordinating word that delimits the break between the two verbs, i.e. no overt complementataion marker, ==> tation these are to be analyzed as having no complementizer node at all occurring with the second verb. The second verb would thus be an instance of a Verb(Phrase) rather than a ComplementizerPhrase (or Sentence), ${ }^{27}$ so that these combinations would not represent complementation but instead should be taken as auxiliary-plus-main-verb constructions, i.e. with a somewhat "flat" linear structure rather than a more hierarchical one with a level of clausal embedding.

Given that DMS clauses do not involve overt complementizers in the analysis adopted here, extending the scope of this chapter to clauses with complementation markers in general as opposed to just complementizers allows for the semantically very interesting DMS clauses to be included. That is, if one were to focus just on the semantics of complementizer elements per se, then DMS clauses would not get any attention inasmuch as they lack an overt complementizer. It is only once the syntactic argumentation is made, as here in Section 2, that DMS clauses do contain a complementizer position or node but one that is unfilled,

[^6]and are thus with a "zero" or "implicit" complementizer, that the semantics of DMS clauses become relevant for complementizer semantics, through an examination of the semantics of the zero complementizer plus the DMS clause.

Finally, it is important to realize that the notions "complementation" and "complementizer" overlap but are not coextensive. That is, complement clauses fill argument positions, as noted at the outset in Section 1, but complementizers, i.e. delimitors of clause boundaries, introduce not just argument clauses but also adjunct clauses. Clause-demarcating words are found with adjuncts too, and express various sorts of semantic functions, including temporal relations, concession, conditions, and the like. These functions are discussed, where appropriate, in the sections that follow, serving as reflections of the range of complementizer semantics that go beyond complementation. Other ways in which complement clauses go beyond simple complementation are also presented.

## 3 Complementation in Albanian

It is appropriate at this point to offer more perspective on Albanian as it allows for the exploration within a single language of the two types of complement structure - finite and nonfinite - found in the Balkans. This is due to the fact that Albanian as a language is one of those in the Balkans that shows both finite and nonfinite complementation, both as a key isogloss separating the Geg and Tosk dialects and as variation within both dialects but especially within the generally Tosk-based standard language. Accordingly, examples of infinitival usage from Geg are given in (16) and from Tosk in (17), with finite complement counterparts given in (18) for Geg, where such variants are possible, and in (19) for Tosk (cf. example [6] above for other Tosk examples).
(16) a. fillo-va [me qeshun] begin-1SG.PST INFM laugh 'I began to laugh.'
b. ka pasë fat-in [me njohun shumë njerëz të letrave] has.3sG had luck-def.acc infm know many men of letters 'he has had the good fortune to know many men of letters'
c. mund të je-të e vështirë [me ngrënë] dhe [me pi] can DMS be-3sg.sbjv difficult INFM eat and INFM drink 'It can be difficult to eat and to drink.'
d. [me i ikë rrezik-ut] nuk âsh-t ligështí por urti infm it.dat leave risk-def.dat neg be-3sg cowardice but prudence 'To avoid danger is not cowardice but prudence.'
(Camaj 1984: 247)
(17)

| a. | Mos luftërat <br> NEG.Q wars |  | $\begin{aligned} & \text { et-jnë } \\ & \text { e-3PL } \end{aligned}$ | [për të <br> INFM | shitur sell |  |  | ==> ejne |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 'Do wars not serve to sell weapons?!' |  |  |  |  |  |  |  |  |
| b. | propozimi the.proposal | për të <br> INFM | ndry chan |  | pjes-ën part-DE |  |  | zzolutës <br> the.reso |
| 'the proposal to change part of the resolution' |  |  |  |  |  |  |  |  |
|  | ësh-të e | $e$ vështirë [për të thënë] |  |  |  |  |  |  |
|  | be-3SG.PRS d | difficult | INFM say |  |  |  |  |  |
|  | 'It is difficult to | say.' |  |  |  |  |  |  |

(18) mund-em [ta mbaro-nj] can-1SG.NACT DMS;it.ACC make-1SG
'I can make it.'(Camaj 1984: 247)
(19) a. po fillo-ni [të kupto-ni tani]

PROG begin-2PL DMS understand-2PL now
'You are beginning to understand now.'
b. do të vazhdo-jmë [të ul-emi atje]

FUT DMS continue-1PL DMS sit-1PL.NACT here
'We will continue to sit here.' (literally: "We will continue that we sit here")
c. ësh-të evështirë [të qesh-in]
be-3sG.PRS difficult DMS laugh-3pL
'It is difficult for them to laugh' (literally: "It is difficult that they laugh")
d. mund [të shko-ni në Tiranë]
can DMS go-2pL to Tirana
'You(-all) can go to Tirana' (literally: "It-can that you(-all) go to Tirana")
For the most part, these complement clauses fill object argument slots, though the Geg infinitive offers the possibility of a subject complement occurring preverbally in sentence-initial position, as (16d) shows. Besides these DMS complements, indicative complementation with se is also to be considered; examples include (20) from Geg and (21) from Tosk (cf. also [5b] above for another example).
(20) a. plak-a tha [se kish-te bâ gadi giithshká] old.woman-DEF him.DAT said.3sG COMP had-3sG made ready all 'The old woman said that she had prepared everything.'
(Camaj 1984: 247)
b. u bë mire [se u takua-m pasdrekë] ==> mirë NACT made.3sG good COMP NACT met-1PL afternoon 'It was (literally: "became/was-made") good that we met in the afternoon'. (Camaj 1984: 246)

[^7](21) a. mendo-j [se Saranda ësh-të në jug] think-1SG.PRS COMP Saranda is-3sG in south 'I think that Saranda is in the south'
b. beso-jnë [se këto problem nuk zgjidh-en lehtë] ==> probleme believe-3pl.PRS COMP these problems NEG solve-3PL.NACT easy 'They believe that these problems cannot be solved easily'

In (20b), the se-complement is positioned post-verbally ("extraposed") but is still arguably filling a subject slot; unlike the subject infinitive of (16d), however, preverbal positioning is not possible here (cf. *Se u takuam pasdrekë u bë mire). ==> mirë

The sentences given here in (16) through (21) thus go together with the earlier examples in (1)-(4) from other languages to demonstrate the Balkan realization of indicative and modal finite complementation in Albanian, though with the infinitival possibility as well. Infinitival usage is more prevalent in Geg than in Tosk, and accordingly, DMS clauses are more frequent in complement positions in Tosk than in Geg.

It is noted above, à propos of examples (13) and (14), that certain combinations of subordination markers are possible. For instance, pu na occurs in Greek, though $p u$ here is probably better taken as a relative marker per se and not as a factive complementizer. And, in Albanian, the combination që të occurs; recall the examples in (14). The combination oti na is not possible in Greek, nor pos na (except if it is the question-word pos 'how?'), nor pu oti (cf. endnote 23 ). It is inter- ?? ==> footnote esting to note further that the Albanian form se can co-occur with modal të, as in (22), in what looks on the face of it like the indicative complementizer joining up with the subjunctive marker. ${ }^{29}$
(22) a. para se të bi-nte ...
before se DMs fall-3sG.IPFV
'Before he fell ...' (literally: "before that that he fell")
b. Përpara se të nise-jë nga Kanadaja drejt Tiranë-s ... before se DMS set.out-3SG.SBJV from Canada to Tirana-DAT 'Before he sets out from Canada to Tirana, ...'

Such examples are problematic if se is the indicative (canonical) complementizer, for the usual (indicative) mood-selecting properties of se would seem to be at
 gests that se here has a quite different function, as it is combining with a certain subordinator (the DMS të) to introduce adjunct clauses, not the argument clauses introduced by the indicative se. In fact, it is especially common to see se të in these expressions for 'before', and it may only be a matter of convention that (për)

29 No complement-marking brackets are given in (22) owing to the ambiguities in the analysis of $s e$.
para se is written as two words, thus inviting an analysis of se as the indicative complementizer. Interestingly, the conjunction megjithëse 'although', as in (23):

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(23) Megjithëse të je-mi të sinqertë,...
    although.se DMS are-1PL sincere
    'Although we are sincere, ...'
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is conventionally written (now at least) as one word, even though, from an historical perspective, it is built up of me 'with' + gjithë 'all' + a form se, presumably, but not necessarily, at one time the indicative complementizer. Such combinations may date to a time when se had a wider functional range than it does now and may thus show complementizer se co-occurring with modal të only from an historical perspective and not synchronically for contemporary Albanian.

## 4 The semantics of complementation in Albanian

The previous sections offer the essential background for viewing the specifically semantic properties of complementation in Albanian, as representative of the situation in the Balkans more generally. As the detail given in those sections shows, there is a considerable amount of morphology and syntax needed as background in order to make sense of complement structures, but with that information in place, the semantic distribution can be discussed more meaningfully.

As has been emphasized already, the key distinction for Albanian (and Balkan) complements is modal versus nonmodal (indicative), as seen in complements with a DMS versus those with canonical complementizers oti/că/se/etc. Thus, the key semantic element lies in this distinction. Indicative complementation, as Newmark, Hubbard and Prifti (1982: 78) put it, "affirms the independent reality of the action". It is probably fair to say that the indicative complement clauses do not have particularly unusual - and therefore, in a sense, not particularly interesting - semantics, inasmuch as they always present information that is rooted in the real world, dealing with the observable and the knowable. Verbs that govern indicative complements include besoj 'believe', mendoj 'think', njoftoj 'inform', them 'say', and the like, that is, verbs of assertion and the expression of a propositional attitude; the complements then provide the content of the assertion or the focus of the attitude. In this way, all of these verbs govern complements that have a truth value, so that their semantics are tied in some way to realia; the propositions that are reported with such verbs can of course, however, range over the fantastic and the unreal.

With the modal complements, by contrast, the semantics begin to get interesting, as a wider range of meanings must be considered. Newmark, Hubbard and Prifti (1982: 78) describe the essential use of the Albanian subjunctive, i.e. clauses with the DMS të, in the following way: "[t]he subjunctive mood is basically the mood that indicates dependency of the verb. In most sentences a subjunctive verb form will be preceded by an antecedent modal, verb, adjective, adverb, conjunction, noun, or particle to which it is subjoined. [...] Using subjunctive forms [...] express[es] possibility, desirability, or obligation". Given that such DMS clauses are syntactically dependent, their semantics in part depend on the particular combination of controlling predicate plus të clause. Some examples of such semantic (and syntactic) dependency are given above in (18) and (19), with controlling verbs that are modal (mund(em) 'can') or phasal (filloj 'begin', vazhdoj 'continue'), but a clearer sense of the semantics of these complement clauses comes from a fuller description of the range of predicates that subjunctives can be dependent upon and that they complete and thus combine with. Predicates that take the subjunctive include modal predicates that convey obligation, with examples in (24a), desiderative predicates that express a speaker's will, as given in (24b), manipulative predicates that express the imposition of will, exemplified in (24c), and those that express a speaker's inner state, as listed in (24d):
(24) a. duhet 'must, need, should', është e nevojshme '(it) is necessary', ka nevojë 'there is need', lipset 'must, need, should'
b. dëshiroj 'desire’, kërkoj ‘seek’, përpiqem 'try’, synoj 'intend’, uroj ‘congratulate, wish well'
c. këshilloj ‘advise', lejoj 'permit', lut 'pray', ndaloj 'forbid', porosit 'request', urdhëroj 'order'
d. di 'know how', dua 'like, love', dyshoj 'doubt', guxoj 'dare', mendoj 'think', nuk besoj 'disbelieve', më pëlqen 'like' (literally: "to-me it-pleases"), preferoj 'prefer', pres 'expect', vendos 'resolve, decide'

Comparing indicative complementation with modal complementation, then, one can see that the indicative combinations generally involve propositional complements while the modal combinations designate states-of-affairs. From a crosslinguistic perspective, this range of governing predicates and thus this range of semantics for modal and indicative complementation is in itself perhaps not unusual. Still, the reliance, in Tosk especially, on finite means of expressing such complement modality makes Albanian, along with the other Balkan languages, somewhat unusual, particularly in the European context where propositions tend to go with finiteness and states-of-affairs with nonfiniteness (Cristofaro 2003).

The subjunctive can also be used without a governing predicate, also by way of expressing various kinds of modality. This type of subjunctive use, found as well in other Balkan languages, is taken up in Section 5.

One phenomenon that is mostly restricted to Albanian among the Balkan languages that affects the semantics of complement forms is a sequencing of tenses when DMS complements are involved. Thus, in (25), the imperfect subjunctive is the norm in standard/literary usage with a past tense main verb.

| (25) | ai | vendos-i | $[$ të | qëndro-nte $]$ |
| :--- | :--- | :--- | :--- | :--- |
|  | he.NOM | decided-3SG | DMS | stay-3SG.IPFV |

'He resolved to stay.' (literally: "He resolved that he stayed'")
A form of (25) with the present subjunctive (ai vendosi të qëndrojë) is possible colloquially (Newmark, Hubbard \& Prifti 1982: 80). Nonetheless, the pattern of tense-matching as in (25) is quite regular in Albanian and is apparently the source of a parallel construction found in Aromanian. Sandfeld (1930: 117-118) cites the Aromanian example in (26):
(26) $с и$ vruta $n u$ putea-m $s$ me adunea-m with beloved NEG was.able-1sG DMS REFL met-1sG 'I was unable to meet with my sweetheart'
and explains it as the process from Albanian ("le procédé de l'albanais") manifesting itself in Aromanian. Still, this tense-matching appears to be far more extensive in Albanian than in Aromanian.

This requirement of tense-matching affects the complement semantics in the sense that the imperfect form, e.g. qëndronte in (25), does not have its usual interpretation as a past tense progressive aspect form; rather, it has a special meaning in conjunction with $t e \ddot{\text { and a past tense matrix verb. It is as if the use of just the }}$ subjunctive here in a past tense form is elliptical for '(decided) that he would stay' (ai vendosi se do të qëndronte) with an indicative complementizer se and the conditional form of the verb, consisting of the future marker do plus the DMS të with the imperfect tense form qëndronte, meaning 'he would stay'. However, the pattern, even if elliptical in some sense, perhaps in origin, has taken on a value as a grammatical requirement for at least some styles and some speakers; note too that the Aromanian example does not lend itself to an elliptical interpretation, suggesting a grammatical value there, with language contact, via calquing, at its core.

## 5 Beyond complementation

Although the focus here has been on complementation in the strict sense of clauses that fill sentential argument requirements, and on the complementizers and markers, or the absence thereof, that signal them, there are related uses of
these elements that show their versatility and semantic range. Two key aspects in this regard are treated here.

DMS clauses, as argued in Section 2, are mood-marked clauses with zero (null) complementizers. While they are generally restricted to occurring thus in clauses that are subordinated to main clauses, DMS clauses - the same clauses that figure in modal complementation - can also occur as main clauses and impart a modal sense to an utterance. Since this usage involves the extension into a matrix clause of a verb form typically associated with use in a subordinate clause, it can be called, following Evans (2007), "insubordination".

Newmark, Hubbard and Prifti (1982: 80) describe the meanings associated with such main clause DMS clauses in Albanian as "the modality of possibility, obligation, or desirability... [expressing] the speaker's desire for an action"; moreover, there are nuances of uncertainty and deliberation as well, in addition to some jussivity and hope. Examples include the following.
(27)
a. $К и \quad \boldsymbol{t a}$ vë-më?
where DMs;it put-1pl
'Where might we put it?'
b. Kush të je-të kaq vonë? who DMS be-3sG.SBJV so late 'Who can it be this late?'
c. Ç' fjalë t' i shpie t-im at-i? what word dMs him.dat lead.1sG dat-my father-dat 'What message am I to take to my father?'
d. Të vendos-im! DMS decide-1PL 'Let’s decide!'
e. Tё $\quad$ rro-jë $\quad$ Parti=a

DMS live-3SG.SBJV Party=ART
'May the Party live on!'
As the examples in (27) show, the range of semantics for such insubordinate uses in Albanian is quite extensive, covering various kinds of modal force. Similar examples can be found from the other languages, such as those in (28) from Greek and in (29) from Bulgarian.
(28) a. $p u$ na kaӨisu-me?
where DMS sit-1PL
'Where shall we sit?'
b. na sas zis-i to moro DMS you.DAT live-3SG the.NOM baby.NOM 'May (your) baby live (long) for you!'
c. na $\quad$ ди бosi-s ta resta amesos DMS me.DAT give-2SG the change immediately 'Give me the change at once.'
(29) a. Da s-te živi i zdravi! DMS be-2PL.PRS alive and healthy 'I wish you many happy years' (literally: "May you be alive and healthy")
b. Da ti se ispăln-jat vsički-te ti želanija! DMS you.DAT REFL come.true.PFV-3pl.PRS all-ART you.DAT wishes 'May all your wishes come true for you!'
c. Da na-piše-š tova pismo!

DMS pFv-write-2sG.PRS this letter
'You should really write this letter!'
d. $\boldsymbol{D a}$ za-tvori-š vrata-ta!

DMS pFV-close-2SG.PRS door-ART
'Close the door!' (literally: "You should/might close the door.")
From a structural standpoint, it is noteworthy that there are instances with insubordinate DMS clauses in which a WH-word fills the complementizer position, as in (27a)-(27c) and (28a).

As an aside, it should be noted that insubordination is possible only with the modal complement clauses, not the indicative clauses; that is, there are no standalone clauses with just the indicative complementizer, as (30a) from Albanian and (30b) from Greek (where the glosses are an attempt to give a meaning that such an utterance might have).
(30) a. *Se u takuam pasdrekë
'Had we (only) met in the afternoon!'
b. *Oti Өa nikisi i omaða mas
'(0) that our team will win!'

The facts of insubordination with DMS clauses and those in (30) provide another argument that the DMS, as far as the Balkan languages are concerned, is not a complementizer (see Section 2) but rather a mood marker, since its main-clause

30 There is one interesting example in Newmark, Hubbard \& Prifti (1982: 84) that has a clause headed by the invariant complementizer $q e ̈$ (seen above in [5a] and [14]) occurring independently:
(iii) Po, që t' I ke-të vajtur mendja asaj apo mиa but COMP DMS him.DAT has-3sG.SBJV gone mind him.dAT or me.dat
se ... kurrë
that never
'But, that it may have crossed her mind or mine that ... Never!'
This may be elliptical for "the idea that ..." or the like, but it suggests an insubordination for at least some non-modal complementizer clauses. This merits further investigation, to be sure.
behavior is different from that of the canonical complementizers like Albanian se and Greek oti. ${ }^{31}$

Once one moves away from complementation per se, and looks at subordinate clauses more generally (even those used insubordinately), as the examples in (22) and (23) at the end of Section 3 indicate, one finds subjunctive clauses with the Albanian $t e \ddot{\text { occurring far more widely in combinations with other subordi- }}$ nating elements, even if they do not function as argument complements. A few examples are given in (31), including some that are like (27) with WH-words but in this case, embedded.
(31) a. po t' $i$ zgurdullo-sh sytè if dMS him.dat pop.open-2sG.Sbjv eyes 'if you make his eyes pop out ...'
b. edhe sikur ta vi-nin re even as.if dMs;it.ACC put-3PL.IPFV novelty 'Even if they noticed it ...'
c. pasi të na ke-në lёиё after dMS us.acc have-3pl.Sbjv left 'after they have left us ...'
d. Këtu ka qiell sa të dua-sh here has.3SG sky however.much DMs want-2sG
'Here you have however much sky you may want!'
Example (31a) is important, as it brings to light a way in which Albanian differs from Greek. In particular, Albanian allows the DMS to occur with the conditional subordinator po 'if'; Greek here has only the pattern in (32a) without the DMS and never allows the pattern in (32b) with the DMS:
(32) a. an kani-s fasaria, ...
if make-2sG fuss
'if you make a fuss, ...'
b. *an na kani-s fasaria
if DMS make-2SG fuss
'if you make a fuss, ...'
Moreover, the Greek verb with an 'if' is demonstrably not subjunctive, because the negator used is the indicative negator ðen and not the modal negator min (cf. an ðen kanis / *an min kanis 'if you do not do'). ${ }^{32}$ However, when 'if' is used as a

[^8]canonical complementizer, for which the translation 'whether' is appropriate, a different Albanian form is used, në or nëse, ${ }^{33}$ and të is excluded:
(33) $S$ ' ësht-të puna [nëse e njoh apo jo] NEG be-3SG matter whether him know.1SG or not 'It is not a matter of whether I know him or not'

Greek here uses the same form as the conditional subordinator in (32), an: ${ }^{34}$
(34) ðen ksero [an exi-s ðikio $i$ oxi]

NEG know-1sG whether have-2SG right or not
'I don't know if you are right or not'.
Thus for all the parallelism in the complementation and subordination systems of different Balkan languages, there are differences in detail as well that are equally noteworthy, all the more so in the face of the convergences.

## 6 Concluding remarks: The role of language contact

This chapter begins in Section 1 with a consideration of how complementation fits into the complex of structural properties that define the Balkan Sprachbund, a construct born of language contact. Thus, in closing this chapter, it is fitting to

| (iv) $\boldsymbol{n a}$ | $\boldsymbol{m i}$ | $m e$ | kitaz-is | etsi |
| :--- | :--- | :--- | :--- | :--- |
| DMS | NEG | me.ACC | look.AT-2SG | thus |

'You should not be looking at me in that way'
Using the indicative negator ðe(n) in that context is impossible: *na ðe me kitazis etsi. On the modal negator in Greek, see Janda \& Joseph (1999), and with a comparative look at the Greek modal negator and its corresponding modal negator in Albanian, see Joseph (2002). Only Romani among the other Balkan languages shows an indicative/modal distinction in negation.
33 Nëse, of course, appears to contain the indicative complementizer.
34 This example highlights an interesting property of the Greek verb ksero 'know': besides occurring with the conditional complementizer, it can also occur with a modal (DMS) complement with slightly different semantics, meaning 'know how', and with an indicative complement in the meaning 'know that', e.g.:
(v) kser-o [na kolimbis-o] know-1SG DMS swim-1SG 'I know how to swim'
(vi) kser-o [oti i-se kalos an日ropos] know-1sG COMP are-2sG good man 'I know that you are a good man'.
turn once again to a further consideration of the role of language contact in complementation in the Balkans, by way of seeing how language contact is responsible, or not, as the case may be, for the facts discussed herein. Besides shedding light on the Balkans per se, this final section offers a view of how complementation fares in situations of language contact.

One key point about language contact and complementation in the Balkans is that Balkan complementizer words themselves show evidence of borrowing. This is an interesting development because complementizers are function words, part of a closed class of grammatical items. As such, they are a kind of word-class that is often held to be among the less-easily borrowed items, like pronouns or adpositions or low numerals. ${ }^{35}$ Nonetheless, despite this status, Matras (2009: 196) offers many well-documented instances of the borrowing of complementizers, which he attributes to their use in discourse; see also Matras and Tenser (this volume) for more examples, all involving Romani, and Friedman and Joseph (2016: §4.3.3.4) for other cases from the Balkans with additional discussion. And, indeed, in the Balkans, the borrowing of such elements in a variety of functions is widespread, with examples including temporal (35a), causal (35b-d), conditional (35e), and concessive (35f) subordinators. The Bulgarian examples in (35) reflect now-obsolete usage that was more current during the period of the Ottoman Empire, but the fact of the borrowing remains even if the loans are now obsolete. The concessives in (f) are based on Greek makari, from Ancient Greek makar 'blessed’, used in later Greek to mean ‘God willing’ and thus to serve complemen-tizer-like functions introducing wishes, augmented with native subordinators.
(35) a. Ayia Varvara Romani molis ‘as soon as’ < Greek molis ‘as soon as’ (Igla 1996: s.v.)
b. Bulgarian zerem 'because' < Turkish zira 'because' (Grannes, Rå Hauge \& Süleymenoğlu 2002: s.v.)
c. Bulgarian čunki(m) 'because’ < Balkan Turkish çünki ‘because’36 (Grannes, Rå Hauge \& Süleymenoğlu 2002: s.v).
d. Bulgarian and Macedonian oti 'because, for that reason’ < Byzantine Greek óti '(for) that which'
e. Aromanian ama că 'if"' < Greek áma 'when, if' (with Aromanian subordinator)
f. Aromanian macar(im) si 'even if' Bulgarian makar če 'even though', makar i da 'even if; although' Macedonian makar što 'even though', makar i da for 'even if; although' Vlax Romani màkar kẹ for 'although', màkar te 'even if' (Hancock 1995: 113)

[^9]36 The contemporary Standard Turkish form is çünkü, but the form as given reflects Balkan Turkish phonology.

Moreover, throughout Balkan Romani, as discussed more fully in Matras and Tenser (this volume), although there is a native form, kaj (from earlier 'where?') that serves as an indicative complementizer, it is also the case that forms borrowed from the co-territorial dominant language are often used; thus in the Romani of Greece oti 'that' occurs, from Greek oti 'that', while in the Romani of Bulgaria či 'that' occurs, from Bulgarian če, and in the Romani of Romania ke occurs, from Daco-Romanian că. The occurrence of borrowed indicative complementizers in Romani correlates with a grammatical effect that goes beyond the mere addition of a complementizer lexeme to the language. In particular, the borrowed indicative complementizer comes to occur alongside the (native) DMS te, thus giving the language a structural distinction of indicative versus modal complementation just like that found in the other Balkan languages, as discussed earlier. It seems, then, that this Balkan distinction has been carried over into Romani and established through the language contact that gave rise to these indicative complementizer borrowings. It may be, however, that what we see in Romani is the maintaining of an already-existing distinction through the borrowing; that is, this distinction might have predated the entry of Romani into the Balkans. ${ }^{37}$ Still, the situation is suggestive of the potential that intense speaker contact with other languages can have to reach even into a native language's semantics of complementation and into the network of interrelationships among subordinating elements.

In addition, there is calquing of complex complementizers in which speakers of one language produce a morpheme-by-morpheme loan translation of a composite form in another language. For example, Aromanian has the composite forms s-easte că / s-fúre că for 'if', both based on forms of the verb 'be'. Inasmuch as fúre is from fuerit, the Latin perfect subjunctive of 'be', s-fúre că looks rather like Albanian në qoftë se 'if; in case that', literally "in may-it-be (optative) that", so that the similarity can be accounted for by positing a loan translation by speakers of the one language, calquing the form of the other language; what is uncertain here, however, is the directionality of the loan translation, specifically who calqued from whom.

In some instances, the calquing leads to parallelism in usage. Again without any clear indication as to the directionality, one finds in Greek, Bulgarian, and Macedonian, in the standard languages, in varieties of Albanian and Romani,

[^10]and in Old Romanian ${ }^{38}$ the use of the preposition meaning 'for' (ja/za/za/për/za/ pentru, respectively) ${ }^{39}$ together with the language-specific DMS and a finite verb in the meaning 'in order that ...'; these are illustrated in (36) with the first person singular of the verb 'write', thus 'in order that I write / in order for me to write'.
a. për të shkruaj
b. $z a$ da piša
c. ja na yrapso
d. za da pišam
e. pentru să scriu`
f. za te čhinav
(Albanian)
(Bulgarian)
(Greek)
(Macedonian)
(Old Romanian)
(Romani, Goli Cigani dialect, Bulgaria [Matras \& Tenser, this volume])

In each case in (36), the formation is synchronically somewhat anomalous in having a DMS-headed verb ostensibly governed by a preposition, a word that in principle looks for a noun phrase, not a verb, as its complement.

As a final point about language contact and complementation, it is important to realize that not all convergence is due to contact. Languages can show convergent features due to common inheritance from a proto-language, if they are members of the same language family. However, besides contact and inheritance, there can be chance convergences between languages, i.e. the result of completely independent developments in each language, as well as similarities due to universalities, traits that recur cross-linguistically that are due to general properties of human language or the ways in which humans interact with one another or with the world at large.

All this being the case, it is worth considering what aspects of Balkan complementation might be due to factors other than language contact. For instance, the very presence of an indicative-versus-modal distinction itself is not restricted to the Balkans: most Indo-European languages have, or have had, the same or a similar distinction in modality - it is widespread across Romance, was a robust part of earlier Germanic languages, is found in Indic languages, and so on. Thus

[^11]it could simply be present in Balkan languages by virtue of their Indo-European legacy. However, this distinction is also found in Turkish, presumably an inheritance from Proto-Turkic as it is found in other Turkic languages, such as Uzbek, and in such diverse languages as Cree, an Algonquian language of Canada, and Arabic, a Semitic language. The Balkan convergence of having such a distinction could just as well constitute a universal aspect of human language, reflecting a need to comment on realia, for which indicative would be appropriate, and on irrealis conditions, for which modal would be appropriate. ${ }^{40}$ However, the particular formal manifestation of the distinction, in the Balkan case via the choice of complementizer and the use of verbal markers, as opposed to marking via suffixes in the Turkic case, and via a combination of prefixes and special verbal endings in the Cree and Arabic cases, would not be universal. As such, it thus could well be affected by language contact, and could show convergence due to contact.

In closing, it can be noted, in light of this last point, that even in the unlikely event that language contact has played no role in Balkan complementation, the similarities seen among the various languages discussed here would remain as interesting from a typological standpoint. Contact, however, is very likely to have been the source of the similarities, so the intrinsic linguistic interest of the region with regard to the semantics of complementation is thereby enhanced. That is, there is not just a typological motivation for examining complementation in the Balkans, but there is the added dimension of language contact to take into consideration in the study of this aspect of meaning cross-linguistically.

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[^0]:    1 The German term Sprachbund is commonly used in English, as here, although phrases such as "linguistic area" or "convergence area" are also in use.
    2 For overviews of the Balkan Sprachbund, see Friedman (2006), Joseph ([2003, 2010); a more comprehensive presentation is to be found in Friedman \& Joseph (2016).
    3 This definition essentially follows a now-standard view of what complementation is, that given by Noonan (2007: 52): "the syntactic situation that arises when a notional sentence or predication is an argument of a predicate", where serving as subject or object of the predicate is the most usual circumstance.

[^1]:    4 See Section 2 regarding one construction in these languages that under certain definitions not adopted here, could be interpreted to show nonfinite complementation.
    5 The occurrence of nonfinite complement forms in Tosk and in Geg represents different diachronic trajectories for each dialect: Geg most likely has had infinitives for centuries, possibly since proto-Albanian, and has not undergone as much infinitival replacement as has Tosk (Altimari 2011); Tosk, especially as represented in the Tosk-based now-standard language (in Albanian: gjuha standarde 'standard language' or gjuha letrare 'literary language') has undergone an expansion in the use of a relatively new infinitive, as discussed below.
    6 The characterization "veridical" could also be used for such complements.
    7 The term DMS was coined by Victor Friedman, drawing on the adventitious fact that the subordinating element with modal value in all of the languages in question happens to begin with a dental consonant (Albanian të, Greek na, Balkan Slavic da, Balkan Romance să, Romani te). I say "informally" here so as not to imply that "DMS" is a syntactic category that needs to be recognized in syntactic theory.
    8 Here and throughout, the Greek sentences are constructed but are based on my 40 years of work on the language and on examples in the literature or heard in common use. The Albanian

[^2]:    9 Albanian is the official language of both Albania and Kosovo.

[^3]:    14 See Joseph 2012 for some relevant discussion and references regarding Greek.
    15 Compare English that, which allows topicalization by fronting of a complement-clause constituent within its bounds but not to its immediate left, as in the acceptable (i) compared with the unacceptable (ii):

[^4]:    20 DMS clauses can fill other functions, such as the expression of purpose, hence the phrasing "being able to serve".
    21 The combination $q e ̈ t e \ddot{e}$ also occurs in the meaning of 'so that', i.e., in an adjunct, not argument, usage, though (14b) seems not to show that meaning.
    22 The form $t a$ is a portmanteau combination of DMS të and the weak object pronoun $e$.

[^5]:    23 There are of course languages, such as earlier stages of English that allow for "doubly-filled" COMP nodes, but beyond this combination of $p u$ with $n a$, there does not seem to be any independent justification for such a construct in Greek. In particular, pu oti is not a possible combination (nor is që se in Albanian), so there is this additional point of differentiation between the DMS elements and the indicative subordinators.
    24 The form 'mis in (15b) with the initial $e$ - elided is a phonological variant of emis, the use of which is dictated by its occurring after the vowel-final ending of $\theta$ elume.
    25 Noonan (2007: 75-79) discusses the absence of subjects with complement verbs under the rubric of "Equi-deletion", drawing on classical Transformational Generative Grammar notions and terminology and illustrating the phenomenon with examples such as English Zeke wants to plant the corn. However, he is careful to distinguish the Balkan finite-complement situation, using Albanian sentences as his examples, and opts instead for an analysis of it in which the absence of the complement-clause subject "follows the usual discourse conditions on anaphoric

[^6]:    ellipsis and is not the product of a sentence-internal process like equi" (Noonan 2007: 77-78). In a syntactic theory such as the Principles and Parameters model (also known as Government and Binding; Chomsky 1981, 1982), a missing subject pronoun with a finite verb, e.g. Өelume in (15a), would be described as involving "Subject pro-Drop" or as adhering to the "Null Subject Parameter"; moreover, with regard to the different null subjects recognized in that framework pro ("little pro") for the "dropped" null subject and PRO ("big PRO") for "Equi-deletion" cases (more usually referred to now rather as "control" cases) - complement clauses like that in (15b) would have pro and not PRO.
    26 Such analyses were adopted within the framework of Generative Semantics in the late 1960s and early 1970s, the locus classicus being Ross 1969.
    27 This means distinguishing between the absence of a complementizer node altogether, as here, and the presence of such a node but with nothing filling it, as proposed for DMS clauses.

[^7]:    28 This example has an infinitival clause dependent on a noun, but since the noun propozim is a nominalization from the verb propozoj 'propose', which takes a DMS-clause complement, this can be considered to be complementation in the sense adopted herein.

[^8]:    31 There are languages in which insubordination is found with constructions involving undeniably canonical complementizers (e.g. French and Spanish with their respective realizations of que) so that this behavior would provide a Balkan-specific argument only.
    32 Evidence for $m i(n)$ as a modal negator is the fact that only it can negate a verb marked with the DMS na, so that (iv) is perfectly well-formed.

[^9]:    35 See Thomason \& Kaufman (1988) for relevant discussion; the now-famous "Swadesh list" of meanings resistant to borrowing and replacement (Swadesh 1950) also includes such words, and is thus an early statement of this view.

[^10]:    37 Some equivocation is needed here because it is possible that the Balkan Romani distinction continues one made in earlier Indic. Sanskrit, representing older Indic, and various modern Indic languages do not seem to make the indicative/modal distinction via the choice of complementizer, though there are both complementation via infinitives and complementation with a finite verb that offer a somewhat analogous structural distinction to the Balkan one, if not a semantic one.

[^11]:    38 Old Romanian is given here because Modern Daco-Romanian uses pentru with ca 'as' followed by the subjunctive with the DMS să, or pentru with the infinitive (thus, pentru ca să scriu 'in order that I write' (literally, "for as that I.write") or pentru a scrie 'in order to write' (literally, "for INFM write.INF"), thus with a syntax that is a bit different from the older, more Balkan, construction in (36). Aromanian differs here in having simply ca să (literally, "as DMS") for 'in order that'.
    39 Strictly speaking, the Romani form in (36f) does not really involve a "preposition" $z a$, as it is a borrowed item (from Bulgarian) that seems to be used just in this context; this represents a mix of a calque on the structure of Bulgarian za da and an outright borrowing of $z a$. It is interesting that $z a$ da te also occurs in this dialect, suggesting that $z a$ da was taken to be a unit, but one in need of overt DMS modality.

[^12]:    40 There are some nonconvergent aspects of Balkan complementation that could be due to universality. For instance, Albanian has an infinitive, the type with për të as the infinitival marker, that derives from a purpose expression, being originally "for the-VERB-ing". Given that cross-linguistically, purpose expressions are the most frequent source of infinitives (Haspelmath 1989), the occurrence of such an infinitive in Albanian could be an instantiation of this typologically common strategy.

