

Balkan Infinitive Loss, Event Structure and Switch Reference

Brian D. Joseph

The Ohio State University

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It is such a pleasure to be able to offer a small token — a scholarly paper, the coin of the realm in academia — to show my appreciation of my friend Christina Kramer as a person and as a scholar. I have known Christina for years, and have long admired the fine work that she has done to advance the cause of Balkan linguistics. I can truly say that I have always found her enthusiasm for scholarship and for life to be inspiring.

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1. Introduction

Infinitives — verbal forms with no person and number marking, viewed from a morphosyntactic perspective, and with certain recurring uses, viewed from a functional perspective — are quintessential dependent elements. They typically occur as complements and adjuncts, *e.g.*, in purpose expressions, and therefore do usually not stand alone.¹ Moreover, they typically have no overt subject of their own, but rather, gain their subject-reference from other nominals in the sentence. These properties make them very useful syntactic elements, and they allow for a certain “streamlining” in the syntax of clause-combining.

Nonetheless, despite their handy character, infinitives suffered a demise in the languages of the Balkans — Albanian, the South Slavic languages Bulgarian and Macedonian, the Eastern Romance languages Aromanian, Megleno-Romanian and Romanian, Greek, and Romani (the Indic language of the Roms). The unfolding of the millennium-plus-long loss of the infinitive is a well-known and well-studied feature characterizing this linguistic region.² Briefly put, and focusing just on Greek, although the facts are similar in the other languages, from a stage of the language with a robustness in the number of distinct infinitival forms and in their functions,

Greek evolved into a language with no infinitives whatsoever, using finite (with person/number marking) verbs in their place. This process had its origins in the Koine Greek period, roughly 300 BC to 300 AD, and is evident in a comparison of infinitival usage in the New Testament with that seen in Classical Greek of several centuries earlier.³

A key observation about this process as it unfolded over these many centuries in Greek is that the very verbs and predicates that obligatorily occur with the infinitive in New Testament Greek are the ones that occur optionally with either an infinitival or a finite complement in Medieval Greek. For instance, one finds that the obligatorily-infinitival complementation with *τολμῶ* (*tolmō*) ‘dare,’ *δύναμαι* (*dynamai*) ‘be able’ (and its more common innovative lexical replacement *ἔμπορώ* (*ēmporō*)) and *ἀρχάζω* (*arkhazō*) ‘begin’ gives way to both complement types in Medieval Greek with these same verbs. And further, verbs that optionally governed infinitives in New Testament Greek, *e.g.*, *ζητῶ* (*zētō*) ‘seek,’ no longer could take infinitival complements in Medieval Greek. This parallelism in verbs classified according to their control of infinitives is evidence of an orderly progression to the way in which the infinitive-replacement process was realized in the lexicon of Greek; in essence, all verbs reduced their infinitival usage by one degree (from optional infinitives to no infinitives, and from obligatory infinitives to optional infinitives).

These facts about the spread of the retreat of the infinitive in Greek are important from a Balkan perspective, as they are replicated in the other Balkan languages. In particular, in language after language, the same verbs are the last to be affected by the infinitive-replacement process so that the same verbs are the holdouts for infinitival complementation. Thus, one finds that modal verbs, *e.g.*, those meaning ‘can’ and ‘must’ and the like, and aspectual verbs, *e.g.*, those meaning ‘begin,’ ‘stop’ and such,⁴ are especially resistant to losing their infinitival complement and hang on to infinitival complementation the longest of any verb; items (1)-(3) list some of the verbs in various languages that show retention of infinitival complementation as at least an option (Middle Bulgarian data from Mirčev (1978:234) and Haralampiev (2001:172)):

- (1) ‘can’
 Medieval Greek *ἔμπορῶ* (*ēmborō*)
 (contemporary) South Italian Greek (Grico) *sonno/sozo*
 Middle Bulgarian *oumjati*
 Modern Bulgarian *može*
 Megleno-Romanian *puteari*
 Daco-Romanian *a putea*

- (2) ‘must’
 Medieval Greek *ὀφείλω* (*opheilō*)
 Daco-Romanian *trebui*

- (3) ‘begin’ (with infinitive)⁵
 Medieval Greek *ἀρχομαι, αρχάζω, ἀρχίζω, ἀρχινῶ* (*arkhomai, arkhazō, arkhizō, arkhinō*)
 Medieval Macedonian *poče* (Joseph 1983:107)
 Middle Bulgarian *načeti*
 Old Romanian *a începe*
 (contemporary) Maramureș Romanian *a se pune*
 (contemporary) Daco-Romanian *da* ‘be on the point of,’ *începe, prinde, a se pune* ‘begin’

Along a similar vein, in New Testament Greek, resistance to infinitival replacement extends to same-subject (coreference) contexts, *i.e.*, parallel to ‘John_i expects Ø_i to win,’ as compared to unlike-subject (disjoint reference) contexts, *i.e.*, parallel to ‘John expects Mary to win.’

Moreover, to this listing of resistant formations can be added various tense or tense-like formations with the infinitive, as they also represent a stronghold of infinitival usage.⁶ These include: (a) the Modern Greek perfect tense with *έχω* (*exo*) ‘have’ plus a remnant of the older infinitive, *e.g.*, *έχω γράψει* (*exo γrapsi*) ‘I have written,’ a Medieval Greek innovation, but one that came during a period when the infinitive was still a living, albeit restricted, part of the grammar; (b) the innovative Medieval Greek future tense formation consists of the verb *θέλω* (*thelō*) ‘want’ and an infinitive, *e.g.*, *θέλω γράφει* (*thelō graphei*) ‘I will be writing,’ with parallels in Albanian, Balkan Slavic and Balkan Romance, all involving an innovative use of the infinitive controlled by an ostensible verb of volition but with the meaning of futurity

for the construction; (c) prohibitives in Bulgarian *nedej/nedejte* ‘don’t’ (sg/pl, from negative *ne* with an imperative form of *de-* ‘do, let’), e.g., *nedej(te) hodi* ‘don’t go!’ and Macedonian *nemoj/nemojte* ‘don’t’ (sg/pl, from negative *ne* with a form of *mog-* ‘can’), e.g., *nemoj(te) vika* ‘don’t call!’

Pană Dindelegan (2013:221) gives a particularly clear statement about the infinitival holdouts in Daco-Romanian today. While it does recapitulate some of what is given above, it is worth quoting as it is so complete, and thus so relevant here:

In contemporary Romanian, the infinitive-subjunctive replacement process is far from over (Vulpe 2006:225). Its stage of evolution depends on geography (north vs. south); control and the syntactic type of the governing constituent; and register The infinitive is best preserved in the northern area of Maramureş and Crişana, especially in quasi-frozen structures, after modal verbs (*putea* ‘can,’ *trebui* ‘must,’ *vrea* ‘want,’ *avea* ‘have’) and aspectual verbs (*da* ‘be on the point of,’ *începe*, *prinde*, *a se pune* ‘begin’) (Farcaş 2006) The modal control verb *putea* ‘can’ is the most conservative, and in contemporary Romanian it selects either the infinitive or the subjunctive in free variation ... There are certain verbs which also select the infinitive, but not in the same proportion as *putea* ... *binevoieşte* ‘be willing,’ *caută* ‘tries,’ *continua* ‘continues,’ *începe* ‘begins,’ *îndrăzneşte* ‘dares,’ *reuşeşte* ‘manages.’

These key facts add up to a key question that is to be asked here, given in (4):

- (4) What is it that ties the modals, aspectuals and tense constructions together as a group and differentiates them from other verbs, especially other unlike-subject verbs, as a group, such that infinitival usage would be more usual and more expected (and thus more persistent) with the former group but not the latter?

In other words, why do we see this behavior with modals, aspectuals and tense as governing verbs *vis-à-vis* the infinitive, and why is it a recurring phenomenon in the Balkans?

The import of these key facts and an answer to the key question are taken up in the section that follows.

2. Infinitives and Switch Reference

Some of the key facts about the spread of the replacement of the infinitive discussed in the previous section have been approached by various scholars using different frameworks, though, as it happens, little is said about the tense formations with infinitives; rather, the focus has been on modals and aspectuals and predicates similar to them. Nonetheless, while a particular account is offered here for these facts, it is useful to review what others have said about them and what the elements of other accounts are.

One account is to be found in Cristofaro 2003, with the Balkan situation specifically commented upon on p. 301. She enunciates a “Subordination Deranking Hierarchy” (p. 5 and Chapter 8) and starting with the premise that subordination involves the grammatical encoding of a “cognitive relation between two events” (p. 4), she argues that the hierarchy governs complement choices and shows correlations with “degree of semantic integration between linked events and predetermination of information concerning the dependent event.” She goes on to suggest that “modals and phasals [*i.e.*, aspectuals; *cf.* Note 3] involve the highest degree of semantic integration” (p. 234), and thus explains the Balkan situation as following the dictates of the hierarchy. However, though, she is following the lead of Givón 2001 (and earlier works) and his distinction between “modality verbs,” “manipulative verbs” and “perception-cognition-utterance verbs” (pp. 40-41) and the relationship between verb type and event integration, at no time does she (or Givón, for that matter) explain why modals and phasals offer the degree of semantic integration that most agree that they do. Moreover, there are other verbs, in particular, those participating in tense formations, that Cristofaro does not discuss. So this account provides a key insight but falls short of accounting for all the Balkan facts.

The Balkan infinitival developments are also discussed in Krapova and Cinque (2018). While recognizing, in their §3, that “the ‘subjunctive’ verb selected by the modal/aspectual verb forms a single event with the latter,” they nonetheless take a mostly syntactic approach to the Balkan facts. They focus on Bulgarian, but extend their analysis to other Balkan languages, and they argue that most of the verbs that retain infinitives are restructuring verbs which undergo a kind of “Clause Union,” giving a reduction of clausal structure; as a consequence of this

restructuring, they allow Clitic Climbing (“CC,” the movement of an object clitic pronoun controlled by a subordinate verb to attach to a higher (superordinate) verb). They describe the Middle Bulgarian situation and their explanation of it is as follows in their §4:

... the infinitive would persist most often after modal and auxiliary verbs (Joseph 1983:120). Mirčev (1978:234) and Haralampiev (2001:172) mention instances, from the Troya legend, of *hotjati* ‘want,’ *mošti* ‘can,’ *načeti* ‘begin,’ *smjati* ‘dare,’ *oumjati* ‘can = be able to,’ which would preserve the infinitive even though in a reduced form ... all of these verbs are restructuring and moreover, a selection of these allowed CC already in Old Bulgarian/Old Church Slavonic.

There are other ways of analyzing clause combining that are relevant here even if they do not explicitly mention the Balkans or apply their approach to the Balkan infinitival developments. In particular, Foley and Van Valin (1984:268-69) develop an “interclausal semantic relations hierarchy,” which, drawing to some extent on Silverstein 1976, models the degree of closeness exhibited by verbs in multiclausal constructions, with non-overlapping sequential actions being near the low end of semantic closeness and “modality” — represented by verbal meanings like “*try, start, manage, stop, cease, and continue*” (p. 269) and thus encompassing aspectuals — being at the high end (just below causativity). There is a syntactic counterpart, based on “bondedness,” described in part as follows (p. 265):

A junct [one element in a conjunct or subordinate pair] which has its own operators is more sentential than one which is dependent upon another clause for some operator. In subordination, the embedded junct is less sentential than the juncts in coordinate nexus.

However, there need not be a correlation between the two hierarchies. Applied to the Balkan infinitival facts, modality, showing semantic closeness and syntactic bondedness, would be expected to retain the infinitive. But nothing is said about the tense formations, unless they would be subsumed under modality, and nothing ensures any relevance of same-subject versus different-subject, given that semantic and syntactic closeness need not match up.

Thus in these previous approaches, there are elements that point in the direction taken here, but overall they do not go far enough. Moreover, despite the insight that these approaches show, in some instances they are merely formally encoding the fact of a predicate being particularly resistant to the replacement of the infinitive in one framework or another. In that way, a deeper explanation is lacking as to just why these predicates should be able to be formalized in this way. That is, what is not being asked is what is it about these predicates that makes them resistant; positing a formal structure accomplishes the end of making them resistant but it does not explain why this verb or that predicate should behave as it does regarding the infinitive and thus should control a particular formal structure. I would like to suggest that there is a semantic basis for the facts, based on event structure, and thus not unlike the account pointed to by Cristofaro and by Krapova and Cinque but more fully embellished. To argue for this approach, a foray into the realm of switch reference is needed.

2.1. Switch Reference

Switch Reference, henceforth “SR,” is the overt morphological signaling of a shift of subject between main clause and subordinate clause. That is, SR marking is unlike English where *I think (that) I will win* and *I think (that) you will win* have no special indication of a shift in subject, and indeed the same complementizer, *that*, can appear (or not) in each case and the same type of finite complement clause is possible. Thus English is a non-SR language. However, many languages do mark SR overtly in some way, usually via specific morphemes that typically manifest as verbal affixes. In addition, complement selection can serve a switch-reference marking function, as Silverstein (1976:147) points out regarding English *The man_i wants Ø_{i/*j} to go there* versus *The man_i wants him_{j/*i} to go there*, where a bare infinitival complement signals coreference, *i.e.*, no SR, and an overt accusative subject with the infinitive signals lack of coreference, *i.e.*, SR. What is sometimes referred to as an “obviation effect” in complement choice in various western European languages can thus be seen as a kind of SR marking. That is, in French, as in (5) but with parallels in German and other neighboring languages, one can observe the use of infinitives as opposed to finite complementation in ways that signal SR; that is, one type of complement is found in the *same-subject* condition while a different complement-type occurs in a *different-subject* condition:

- (5) a. Je veux gagner/*Je veux que je gagne
 I want win.INF that I win/1sg
 ‘I want to win.’
- b. Je veux que vous gagniez
 I want that you win.2Pl
 /*Je vous veux gagner
 ‘I want you to win.’

The difference between an infinitive in (5a) and a finite (person-marked) subjunctive in (5b) correlates with no switch in subject in the former case and a switch in subject in the latter case, thus effecting a grammatical encoding of SR via complementation choice.

2.2. Switch Reference and Event Structure

An advance in our understanding of SR has come from tying SR to event structure. Weisser 2012, in particular, recognized a distinction between “tight coordination” and “loose coordination,” essentially natural pairings as in (6a) versus adventitious ones as in (6b):

- (6) a. *eyes and ears* (“tight coordination”), as in *Keep your **eyes and ears** open to anything out of the ordinary.*
- b. *eyes and books* (“loose coordination”), as in *They make a perfect couple, thanks to **eyes and books**: same color eyes and same taste in books.*

Weisser then applied this distinction to the coordination of clauses and to the possibility, or not, of SR between the clauses, suggesting that when there was no switch in subject between the coordinated clauses, *i.e.*, no SR, there is tight coordination and in cases where there was a switch in subject between the coordinated clauses, *i.e.*, SR, there is loose coordination. He then linked this distinction (building on Bugenhagen 1995) to event structure, whereby tight coordination represents “successive aspects of a single event” and loose coordination

signals distinct events. In this way, event structure offers a useful way of understanding SR-like phenomena in coordinate structures.

Drawing on this idea, and thus fleshing out Cristofaro's and Krapova and Cinque's invoking of events in analyzing complementation, I suggest here that the recognition of the role of event structure allows for some insight into an important generalization about infinitive-replacement in the Balkans, as discussed more fully in the next section. That is, just as Silverstein 1976 discussed SR in broad terms as essentially the discourse equivalent of certain types of case-marking at the clause-internal level, I similarly attempt a broad view of SR and clause-combining, extending to subordination Weisser's application of event structure to SR in coordination.

2.3. *Infinitivals and Event Structure*

As seen in §1 above, the replacement of the infinitive in language after language in the Balkans is achieved later in *same-subject* situations than in *different-subject* situations, and within *like-subject* situations, later in those cases that include modal verbs, aspectual verbs and tense formations. An attempt at an answer involving event structure is possible. In particular, the infinitival stronghold verbs are precisely those where a single event — to be understood as the complementation equivalent of Weisser's "tight coordination" — is virtually necessitated by the semantics. That is, with modal verbs like 'can,' the combination of 'can' plus its complement constitutes a single event, because the ability to do an action and the action itself are tied together. The same can be said about aspectual verbs, since all actions must be begun; thus the beginning and the action are necessarily tied together and constitute a single event.⁷ Similarly, with tense formations — the perfect and future — the combination of an auxiliary verb and the main verb represent a single event, as there is no event differentiation between what the auxiliary signals and what the main verb signals; the auxiliary merely offers a modification (here, as to temporal reference) of the event expressed in the main verb.

It is admittedly difficult to gauge what a single event is, and for the most part, the assessment must rely as much on intuition as on anything. There might well be ways, *e.g.*, involving psycholinguistic experimentation, of tapping those intuitions and reifying them to some extent, but such ways go well beyond the scope of what can be considered here. Thus, as imperfect as they are, it is hoped that the intuitions are clear enough to point the way towards the intended solution here.

An important facet to this event-based account is that it explains the fact that unlike-subject contexts are affected sooner by the replacement of the infinitive than like-subject contexts. That is, in unlike-subject contexts, there necessarily is not a single event; rather, a single event is precluded by the switch in subject. Two actors — the two unlike subjects — are involved so there necessarily must be two events; for example, for a sentence like *I want her to leave*, there is an event of my wanting as well as a (desired) event of her leaving, with each actor's contribution to the overall scenario essentially constituting a different event (even if the two events might be considered to be tightly coordinated).

And even same-subject combinations for some predicates represent multiple events; for example, in a sentence such as *They want to kill*, there is an event of “wanting” that precedes the event of “killing,” and the same can be said of a sentence such as *I am not worthy to untie his sandals*, where there is an event (actually a state, but a prior achieved state) of “worthiness” that precedes the event of “untying.”⁸ But same-subject conditions with modals and aspectuals, as well as with tense formations, do not show the possibility of multiple events. The event structure therefore dictates the gross order in which classes of verbs are affected by the infinitive-replacement process.

Infinitives, as argued above in *Section 1*, achieve a syntactic “streamlining” of the expression of a proposition through their being essentially syntactically dependent elements that show a special cohesion — rather like a unit or a monoclausal structure, as in Krapova and Cinque's formulation — with their controlling verb. In that way, they are ideally suited for the expression of single (but internally complex) events.⁹

2.4. Summary of the Thread of the Argument Here

To summarize the argument given here, the evidence of French complementation shows that infinitives can participate in SR-like behavior, the dependency of infinitives shows that they cohere with their controlling verb syntactically, and there are certain verbs (e.g., modals and aspectuals) that fuse semantically with their main verb to give a single event. Moreover, SR has been linked to event structure. Therefore, recognizing the extension of SR to event structure and applying it to infinitival developments in the Balkans is a natural step to take. Furthermore, it is an explanatory step, with the benefit of explaining, rather than just encoding, an

interesting fact about the path the infinitive-replacement process took in various Balkan languages as to with which verbs infinitives survive the longest.

It must be emphasized that the replacement of the infinitive did in fact proceed to completion or near-completion (*cf.* the statement about contemporary Romanian in §1) in all of the Balkan languages, eventually affecting modal verbs and aspectuals in Greek, in Balkan Slavic, and, for the most part, in Balkan Romance. Thus, in Modern Greek, ‘can’ and ‘begin’ and in fact all complement-taking verbs occur with finite complements introduced by the subordinating marker *να* (*na*), as in (7):¹⁰

- (7) a. *μπορ-ώ* *να* *πά-ω* *βόλτα* *τόρα*
 boro *na* *pao* *volta* *tora*
 can-1Sg DMS go-1Sg walk now
 ‘I can go for a walk now.’
- b. *αρχίζ-ω* *να* *πά-ω* *βόλτα* *τόρα*
 arxiz-o *na* *pa-o* *volta* *tora*
 begin-1Sg DMS go-1Sg walk now
 ‘I am beginning to go for a walk now.’

Such developments seemingly run counter to the dictates — and linkage — of event structure and SR as advocated here. However, they can be viewed as being due to the extension of the infinitive-replacement process as a syntactic generalization, *i.e.*, along purely syntactic, and not semantically driven, lines. The recognition of the role of event structure thus gives a basis for a clear categorization of the different forces in language change and from that, one can derive a clear indication of where to draw the line between change that is at its basis semantic in nature and change that is at its basis syntactic in nature.

2.5. Language Contact in the Balkan Infinitive Developments

The repeated mention of the languages of the Balkans throughout the discussion so far means that it is impossible to consider the loss of the infinitive, in Greek or in any Balkan language, in an isolated manner, without any reference to the realization of this phenomenon in the other languages. The specter of language contact playing a causal role, therefore, cannot be ignored. It must be realized, however, that the event-structure account of infinitive replacement advocated here gives a coherent

and plausible *language-internal* (generally semantically driven) account for the spread of the loss of the infinitive within each language, and even of the persistence of future formations involving an infinitive.

A language-external account for the pan-Balkan replacement of the infinitive and the ensuing structural parallelism across the various languages with infinitival complements giving way to finite complements with a DMS, could take various shapes. For instance, the developments with the infinitive can be seen as part of a general move towards analytic structures in contact situations, whereby analytism gives redundancy — *e.g.*, with finite complementation, the multiple occurrence of person and number marking on verbs — and thus enhances communication by giving hearers more chances to understand who the participants in a given verbal scenario are. Also, since all of the languages had finite complementation as a possible structure (much like English *I hope to win/I hope that I will win*), generalization of finite complementation is interpretable as the selection among variants of one that matches the interlocutor's language patterns, with speakers drawing from a pool of shared features. Finally, the spread of infinitival replacement could represent calquing of patterns across languages, with second-language learners of one language taking a pattern from their target language as the basis for an innovative pattern in their first language, or the result of interference from a speaker's first language into his/her target second language.

This last possibility is behind much of the recent interest in what has been called “contact-induced grammaticalization” (*cf.* Heine and Kuteva 2005). By way of painting a fuller picture of this scenario, it needs to be considered first whether a *process* can be borrowed. Since processes are abstractions, involving certain mechanisms that lead to the introduction and spread of patterns, it is hard to see how they could be borrowed *per se*. If so, and if all the languages in the Balkan *Sprachbund* show similar processes and patterns of infinitival replacement, it is fair to ask how much of that could be due to contact and where contact could have come into play. Contact effects between languages, at their very root, have to be based on *surface* forms, since what passes between speakers are the surface forms with which communication is attempted.¹¹ Thus, the calquing/modeling/replication scenario could mean that speakers with native knowledge of one language and some competence in another language — the “other” language in their region (as, *e.g.*, with Slavic-Albanian contact and Greek-Slavic contact in the central Balkans) — would recognize that their infinitival complement element in subordinate clauses

corresponded to a finite element in the other language's future, and that the other language had a person-marked verb form that was unlike their infinitive, and would then have acted on this perceived parallelism. This process can be schematized as in *Figure 1*:

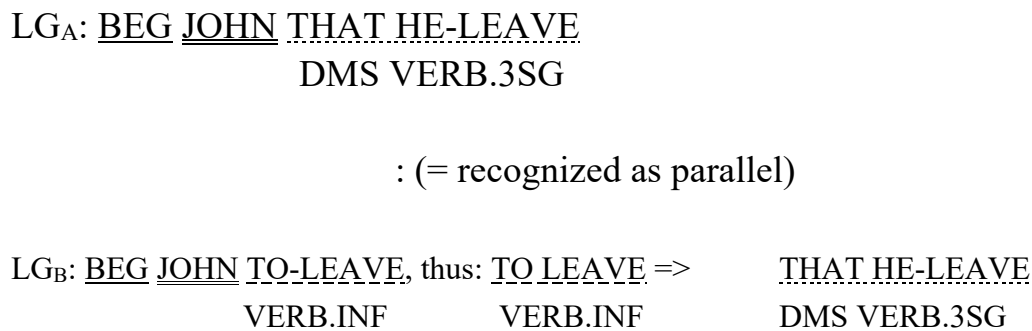


Figure 1:
Calquing Scenario, Fleshed Out

That is, LG_A and LG_B match in gross syntax, their main verbs match (thus both underlined), the patients match (thus both double-underlined), the complement verbs almost match but not quite (thus different types of underlining here) but with a shift to finite complementation, they match perfectly, effecting more straightforward communication between speakers of different languages. These languages thus have the same syntax but different lexicons, in much the same way that Kopitar 1829 characterized the Balkans: “nur eine Sprachform herrscht, aber mit dreierlei Sprachmaterie” (‘only one grammar holds sway, but with three lexicons’).¹² In many ways, this sort of scenario is essentially the traditional notion of calquing, but with some fleshing out.¹³

These possible language-contact-based scenarios involving interference, transfer and calquing are not mutually exclusive, so that in principle there could be multiple external forces at work in the spread of finite complementation around the Balkans. Still, even with such a contact-based scenario for the spread of infinitival replacement across languages in the Balkans, it must be emphasized that once the loss of the infinitive took root in a language, the parallelism seen in the propagation of the process through the grammar of each language would have been a purely language-internal process in each case, governed — as suggested here — by semantic factors such as event structure.

3. Conclusion

The study offered here depends on aspects of infinitival cohesion with controlling verbs, not just syntactically but also semantically; it shows that a diachronic and in some sense philological issue like tracing the progression of the loss of the infinitive in various languages of the Balkans has much to gain from a consideration of theoretical issues in general linguistics. In this case, recognizing the relevance of advances in the understanding of the phenomenon of Switch Reference has contributed to furthering the understanding of the Greek and more generally Balkan infinitival developments.

Notes

1. There are some constructions in various languages with seemingly independent infinitives, *e.g.*, prohibitions in some Romance languages, such as Italian *non fumare!* ‘Do not smoke!’ and affirmative commands in some Slavic languages, such as Russian *molčat* ‘shut up!’). These are plausibly analyzed, however, as dependent on an understood abstract higher controlling verb.
2. See Joseph 1983 and Friedman and Joseph (2019:Chapter 7) for an overview of the Balkan situation, with reference to earlier literature, and Burguière 1960 for Greek in particular.
3. See the references in Note 2, as well as Blass, Debrunner and Funk 1961 and Joseph 1978/1990.
4. These are also referred to in the literature as “phasal” verbs.
5. Note also Bulgarian (and dialectal Macedonian) *stiga* ‘enough (of), stop!’, an aspectual like ‘begin’ that governed the infinitive into the 20th century.
6. The Greek verb *μέλλω* (*mellō*) ‘be about to’ is noteworthy here, too, as it forms a future-like periphrasis with an infinitive and in New Testament Greek occurs exclusively with infinitival complementation; it continues into Medieval Greek as a verb optionally taking an infinitive complement; see Markopoulos 2009 and Lucas 2012 for some discussion of this construction.
7. Recall that Krapova and Cinque 2018 take a similar view with regard to aspectuals, as cited in *Section 2* above, though their focus was on the combinations of aspectual verbs with subjunctive complements.
8. These examples from English are chosen because they represent translations of key post-Classical Greek examples, discussed in Joseph 1983, 2002.

9. One way of characterizing this relationship is that the governing verb-plus-infinitive iconically is a unitary but internally complex combination, and what the combination expresses is a singular event but with some internal complexity.
10. “DMS” in the glosses in (7) and elsewhere stands for “dental modal subordinator,” a term coined by Victor Friedman (1985) for the subordinating markers that head up subjunctive clauses in the Balkans replacing earlier infinitives. By chance, these elements — *na* in Greek, *da* in Balkan Slavic, *să* (*vel sim.*) in Balkan Romance, *të* in Albanian and *te* in Romani — all start with a dental (*n/d/s/t*), all are involved in the expression of modality, and all generally indicate grammatical subordination, hence, DMS.
11. And one can note that loanwords, the most common effect of contact, are quintessentially surface elements.
12. See Sims and Joseph 2018 for a detailed discussion of this sort of approach applied to parallels in the Balkan verbal complex (the combination of verb plus clitic-like modifiers for tense, mood, negation, and argument structure).
13. This scenario is like what Matras and Sakel (2007:836) call “pattern replication,” in which there is the identification first of constructions in the contact languages that are functionally parallel, then of a functional “pivot” that is the basis for the construction serving as the model, and then of a pivot in the other language that is parallel, with eventual accommodation that satisfies the parallel functional scope and does not violate any linguistic universals.

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