

Multiple Causation in Language Contact Change

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0. Introduction

Linguists who explain particular changes in a language or groups of languages by recourse to some aspect of language contact are often countered by others who seek to label the same changes as purely language-internal developments. For example, the development in Indo-Aryan languages of a contrast between dental and retroflex consonants has been explained by some scholars as the result of contact with Dravidian (e.g. Kuiper 1967) or with Munda (e.g. Bloch (1934: 53-54)); others (e.g. Burrow (1955: 90-95), Hock (1975: 98-103)), however, have argued that regular phonetic developments in early Indo-Aryan gave rise to this contrast, as exemplified in the development of the nominative singular viṭ 'clan' (*wik-s > *wiś-ś > *viṣ-ṣ > *viṭṣ > viṭ) versus that of vit 'knowledge' (*wid-s > *vit-s > vit). Similar proposals and counter-proposals have been made for other features of Indo-Aryan that seem to diverge from those of other Indo-European languages, e.g. the use of nonfinite "absolutive" clauses concatenated before a finite clause.¹

Moreover, even in the case of the languages of the Balkan peninsula, which as a group may well be considered the Sprachbund par excellence--and thus an area where language-contact explanations would seem most appropriate--one finds a similar dichotomy between contact explanations and language-internal explanations in accounts of certain pan-Balkan features, especially (but not exclusively) the feature which constitutes the focus of the present

discussion, the general absence of infinitival verb forms, and the use of finite forms in their place. The Balkan languages differ in the degree to which they manifest this feature, with it being most evident in the southern languages, Greek and Tosk Albanian (though Albanian does have a periphrastic infinitive of apparent secondary origin), and increasingly less evident as one moves northward in the Balkans through Bulgarian, Romanian, and Serbo-Croatian, according to standard accounts.² Still, this feature is present to some extent in all the languages, and divergent viewpoints on its origin, including both external and internal causes, are well-represented in the literature on Balkan linguistics.

1. Where the Truth Lies

The extremism one detects in these two opposing types of explanation is somewhat unsettling, for it seems that neither type of explanation in and of itself can explain fully the causes of these phenomena. That is, purely language internal explanations for Sprachbund phenomena have a hard time accounting for any instances of convergence among the languages in question; even if language-internal accounts can be developed for the loss of the infinitive in the Balkan languages, there is no explanation for why all these languages should happen to coincide on this feature to the considerable degree they do-- it becomes totally accidental that these languages which are clustered together geographically should independently have all innovated in the same way. On the other hand, a purely language-contact explanation for such phenomena tends to ignore real facts internal to each language which could, or perhaps must, have made some contribution to the ultimate development of the feature.

These considerations suggest that in the case of South Asian areal features and especially in the case of the Balkan infinitive-loss, the truth (to the

extent that it can be recovered) probably lies somewhere in between the two extremes. Moreover there is no reason to expect that only one type of explanation has to be right in these cases--many, if not most, linguistic changes seem to have multiple causes underlying them. For example, in a change as seemingly trivial as the loss of r and replacement of [-u] by [-yu-] in the colloquial American English pronunciation of February as [fEbyu(w)Eriy] (and not [fEbru(w)Eriy]), at least three factors seem to be at work--the dissimilatory effect of the -r- in a following syllable, the articulatory problems involved in combining a syllable-internal -r- (generally rounded in English) with a following -u- (cf. menstruate, pronounced by many as [mEnstreyt] and not [mEnstru(w)eyt] showing another way of dealing with the troublesome sequence), and finally the morphological influence of the sequentially³ related month name January, suggesting a segmentation of a meaningful unit -uary in month names.⁴ Thus for even a relatively straightforward "sound change" of February to Feb-uary, one can isolate a number of contributing causal factors.⁵ Accordingly, for complex changes such as the Balkan infinitive-loss, one might well expect to find multiple and not unitary causation.

The possibility of multiple causation has been recognized by some scholars for at least some Sprachbund convergences. Hock (1975: 78) notes, regarding the South Asian areal features, that some "linguists, accepting the view that (some of) the phenomena in question can be accounted for as regular, native developments, proposed that at most, the substratum language(s) accelerated or 'helped' these developments". Furthermore, accounts along these lines mentioned by Hock have been proposed at times for various Balkan features. For example, Domi (1975) notes that the infinitival developments in Albanian have their basis in Albanian-internal tendencies and changes, but that the spread of these developments in the southern dialects may have been encouraged by Greek influence.

Still, such multiple-causation explanations have not been carried through systematically, especially in the case of the Balkan infinitive-loss--Domi's account is for just one Balkan language and only considers one type of language-contact situation, adstratal influence of Greek. Therefore, in what follows, the various explanations that have been proposed for the loss of the infinitive in the Balkans are examined more carefully and a synthesis of these views is arrived at to show how a multiple-causation model might account for this phenomenon.

2. Language-Internal Explanations

Two main types of language-particular tendencies or developments have been held responsible for the loss of the infinitive,⁶ the functional equivalence of some infinitives with finite clauses in some of the languages and phonetic mergers of infinitives with some finite forms due to regular sound change and analogy. There are problems, though, with taking either of these as the sole cause of the infinitive-loss phenomenon.

It has been noted that in some of the earlier stages of the Balkan languages, infinitives in certain constructions alternated with finite clauses, much as is the case with English sentence pairs like I expect (myself) to win / I expect that I will win. Barić (1961), observing such a tendency in late Latin for infinitives in a final sense to be replaced by finite conditional clauses with si, took the Romanian infinitive-replacement developments as a continuation and extension of this Latin tendency. Hesseling (1892), arguing in part on similar grounds for Koine Greek, considered the Greek infinitive-loss process to be a purely Greek-internal development. Such explanations, though, are not overly compelling in and of themselves, for no account is given for why such tendencies should have taken hold as they did in the Balkan

languages--note that in English, the substitutability of infinitives and finite clauses has not led even to a reduction of the productivity of the infinitive--nor for why these tendencies, which are claimed to have been strong forces in the languages, should have taken so long to ultimately assert themselves fully--in Romanian, for example, the infinitive-loss process is still under way.

The other major language-internal explanation fares no better. It is well-known⁷ that in many of the Balkan languages, through various analogical and phonetic changes, infinitives came to be homophonous with 3rd person singular finite verb forms. For example, the ancient Greek infinitive graphein 'to write' and the third person singular active indicative present form graphei 'she writes' by approximately the 10th century were both phonetically [ɣrafi]. These mergers meant that in some constructions, infinitives were liable to be reanalyzed by speakers as being instead finite forms. For Togeby (1962), these mergers were the "real" explanation of the infinitive-loss in each language, and he even makes the interesting observation that in Serbo-Croatian, no merger of the infinitive with a finite form has occurred and in that language, the infinitive is more alive than in other Balkan languages. However, languages can tolerate a fair bit of potentially troublesome homophony, so that any possible reanalysis would not have been necessary outcomes of this homophony in the Balkans. English, for instance, has constructions like They made me leave, where leave is in principle formally ambiguous between a first-person singular finite form and a bare (i.e. to-less) infinitive, but there seems to have been no move towards a Balkan-esque reanalysis to give sentences like They made him leaves/left.

Thus language-particular explanations, while attractive at first glance, do not have enough force to explain the Balkan infinitive-loss in its entirety.

At best, then, they may have been contributing factors, each one being only one of a multiplicity of causes that led to these developments in the Balkan languages. Among the other factors must have been some contact-induced causes, which can now be examined somewhat more carefully.

3. Language-Contact Explanations

The language-contact explanations for the Balkan infinitive-loss cover a wide range of contact situations. One popular hypothesis⁸ holds that a substratum language, perhaps to be identified with Thracian, is responsible for the ultimate speech habits of later peoples moving into the Balkans. This "explanation", though, can be discounted if for no other reason than one of agnosticism -- there simply is not enough information recoverable on any possible prehistoric substratum language to warrant any conclusive judgments as to its potential effects on later-arriving Balkan speakers.

Another important possibility is that of ad- or even super-stratal influence by one language onto the other Balkan languages. The best hypothesis in this regard is that of Sandfeld (1930). Citing the relatively early predominant cultural influence of Greek in the Balkans as well as the apparent south-to-north distribution of the lack of an infinitive described above, Sandfeld concluded that Greek was the ultimate source of this feature in all the Balkan languages. However, the bases for Sandfeld's interpretation can be disputed. For example, Macedonian, a central language in the Balkans, seems to lack an infinitive entirely, just like Greek, while Aroumanian, the Romanian dialect pocket within Greece, has some productive traces of an infinitive. Also, as argued by Reichenkron (1962), the extent of Greek influence throughout the Balkans, especially at the crucial time for the loss of the infinitive, is not as certain as Sandfeld took it to be. Thus, the

best ad-/super-stratal explanation cannot stand by itself as a unitary account of the Balkan infinitive-loss.

A third language-contact explanation, the convergence model of Civ'jan (1965) and Rozencvejg (1969, 1976), comes closer to providing a coherent account in itself for the Balkan infinitive-loss. In this model, the individual languages are seen to be converging toward a "target" grammatical structure, and thus becoming increasingly more like one another. Central to this convergence model is the fact that communicative needs must be met in a contact situation, so that, if, as in the Balkans, no lingua franca is available, a "mediator" language must be arrived at, which effects a compromise between synthesis (efficient language production) and analysis (efficient language processing). Thus, in a bilingual contact situation, speakers need to alter their sentence patterns (changes in synthesis) to enable hearers to understand more readily (greater ease in analysis). In the case of complementation, finite forms would tend to aid analysis and thus the replacement of infinitives by finite clauses would represent adaptations a speaker would make in the direction of the hearer, and would form the basis for a convergence between the languages in question.

This model, though, suffers from two problems. First, since it is a model of convergence, any divergence becomes inexplicable--thus the secondary revival of the category infinitive in Albanian, a way in which Albanian has diverged from the other Balkan languages with regard to the manifestation of the infinitive-loss process, cannot easily be explained in this model. Second, there is no account of what keeps the languages moving towards the convergence point in the absence of sustained contact. It thus cannot easily explain the fact that both modern literary Romanian and Serbo-Croatian seem

to be developing in the same direction regarding the loss of the infinitive as more "advanced" languages like Greek or Macedonian, even though the need for a "mediator" language is minimal at best.

Thus, language-contact explanations for the loss of the infinitive, just like the language-internal explanations discussed above, cannot account for the full range of facts regarding this Balkan feature.

4. A Multiple Causation Approach

The breakdown of language-internal and language-contact explanations that has been detailed here shows that the suggestion made above that the "truth" in complex linguistic changes often lies somewhere between the extremes of these two positions is probably correct in the case of the Balkan loss of the infinitive. Thus a "composite" explanation, in which the infinitive-loss process is explained through multiple causation, rather than through any single cause, seems appropriate. Such an account is sketched in this section.

First, the pre-existing tendencies for replacing infinitives by functionally-equivalent finite clauses, which have been noted for some of the languages (see above section 2), would have given in early Romanian and late post-Classical Greek at least a slight degree of competition between infinitives and finite forms. This competition would have increased in two ways due to the nature of Balkan society in the 8th to 10th centuries. The advent of contact among the Balkan peoples, for example between Slavs and Greeks in Northern Greece, would have led to some simplification along the lines posited by the convergence model, increasing the frequency of finite complementation. At the same time, though, in the emerging bi- or multi-lingual society, second-language learning, partly of an imperfect nature, may be assumed to have been

going on. Schumann (1979: 56-57) has noted that second-language learners often have a form of pidginized system at first, characterized in part by the use of the "unmarked form of the verb"; thus it can be assumed that at least among "pidginizing" speakers, there would have been a tendency to use a single (unmarked) verbal form in main and subordinate clauses.

These conflicting tendencies, the one leading to wider use of finite forms and the other to wider use of invariant (and thus presumably non-finite) forms, would have given a high degree of "flexibility" to the linguistic systems at this time. Various functionally-equivalent but syntactically and no doubt stylistically distinct types of complementation would have been available under differing sociolinguistic conditions.

The resolution of these conflicting tendencies would have been carried out in each language, with a variety of additional factors potentially responsible. Continued contact in a bilingual situation by Macedonian, Bulgarian, and Albanian speakers with Greek, where the infinitive-loss process was in an advanced state by a relatively early date, would have furthered the generalization of finite complementation. Also, though, language-internal factors such as the phonetic mergers discussed above and subsequent reanalyses of infinitives as finite forms would at the very least have increased the frequency of finite complementation and most likely would have enhanced the spread of finite forms. Moreover, if, through such factors, finite complementation had in fact become quite prevalent, so that there were more and more exception features on the infinitivization rule,⁹ then the process of simplification that occurs in first-language learning could have resulted in finite complementation being reinterpreted as the norm, thus encouraging its spread even further.

To sum up, then, it is claimed that a language-particular factor, a pre-disposition for the substitution of finite clauses for infinitives, was

catalyzed by the simplification processes induced by language-contact, leading to a complex linguistic and sociolinguistic situation which may have been resolved in each language by further contact of an ad- or super-stratal nature, and other, language-internal, developments. No single one of these factors seems to have been strong enough in and of itself to start the process and bring it through to completion, but in combination, they could. Thus, multiple causation seems to give the best scenario for the Balkan infinitive-loss.

One advantage that this multiple-causation account has over other accounts is that in it the loss of the infinitive is not a necessary outcome in any of the languages. This is so because even though the process received its initial impetus through language contact, it was carried on to completion (or non-completion, as the case may be) on a language-particular basis, through language-particular developments. Thus not all of the Balkan languages need to have developed in the same way with regard to this feature, if the language-particular factors were such as to block the infinitive-loss process before it ran to completion. Although convergences among the languages might well be expected in this model, any divergences are not unexpected. The apparent secondary revival of an infinitive (of the types me bâ and për të bërë) in Albanian, therefore, does not pose a problem, for Albanian need not have developed along the lines of Greek or Macedonian, after the initial period of contact started the infinitive-loss process.¹⁰

5. A Parallel Case

This multiple causation model for the Balkan loss of the infinitive, with both contact and language-internal factors playing role and with each language carrying the process through or checking it, on its own, finds a

striking parallel in developments found in the English-based creolizing language of New Guinea, Tok Pisin. Sankoff (1979) discusses a number of grammatical elaborations that started in Tok Pisin before a creolization period, i.e. before there was a community of native speakers of the language. Sankoff notes that the scholars who have studied and documented these elaborations have reached "some consensus...about the source of the changes in Tok Pisin... The authors manage to propose that somehow Tok Pisin is 'going its own way'. By this they mean, mainly, that the structures it is developing are not merely calques from either substrate or superstrate languages" (p. 35). Forces internal to Tok Pisin are causing elaborations of structures which ultimately had their origins in a pidginizing contact situation.

For example, number marking in Tok Pisin, according to Mühlhäusler (1976), has developed gradually and in such a way as to become quite different from its counterpart in English. The marker ol (from English all) has ended up being used redundantly in sentences, marking plural number at several points, e.g.:

sampela ol man ol i save
some-(plural)-man-they-(predicate marker)-know
'Some men know' (Sankoff (1979: 27, ex. 1))

Sankoff concludes from this that "although influence from substrate languages has been shown in the marking of duals and trials, and latterly from English in the optional addition of -s by speakers of anglicized Tok Pisin, the way that number marking has evolved to add redundancy in Tok Pisin is specific to its own history and development" (p. 27, emphasis added/BDJ). In the same way, it is being claimed here, the way in which the infinitive loss process evolved in each Balkan language is "specific to its own history and development".

The fact that Tok Pisin, representing a documentable language-contact situation, presents a parallel to the account given here for the basically

undocumentable Balkan situation, lends credence to the multiple causation model underlying this account. Thus it seems necessary in apparent instances of contact-induced change to consider the possibility of multiple causation, and to look for combinations of internal and external (contact-induced) factors as possible causes, for that may well be where the truth will lie.¹¹

Footnotes

¹The reader is referred to Hock (1975) for full discussion and references.

²See, for example, Sandfeld (1930), although the facts presented there regarding the loss of the infinitive are oversimplified and misleading in part, as pointed out in section 3 below.

³It is well-known that sequentially related items often affect one another, e.g. the initial of Old Church Slavonic desetŭ '10' seems to be responsible for the aberrant d- of devetŭ '9', where n- would be expected on comparative grounds. Similarly, the form of Ancient Greek heptá '7' produced dialect forms such as hoktô and optô for standard Greek oktô '8'.

⁴One can wonder also if there has been some influence from the written language through the standard abbreviations for the months as Jan. and Feb., which, when combined with the pseudo-morpheme -uary, would give Jan-uary and Feb-uary; also contributing in this regard may be the fact that with the exception of June, July and Sept. (for September), all the month abbreviations have three letters.

⁵The fact that this change has so many "conspiring" contributory factors may explain why it has gained currency while a similar dissimilation evident in child speech of library to library has not.

⁶One type of language-internal "explanation" can be dismissed immediately, namely accounts such as that of Jannaris (1968: 568-569) on Greek, which holds that the infinitive, with its "lack of precision" did not mesh with the "genius" of the Greek language, and so was given up. Such an account is completely without explanatory value, for it lacks any independent criteria

by which the "genius" of a language may be determined.

⁷See Togeby (1962) for details.

⁸See, for example, Gabinsky (1967) for a recent attempt to revive this explanation.

⁹Or, equivalently, the exception features would accumulate on the rule for the distribution of infinitives and finite complements, if infinitives are not derived from underlying finite verbs by an infinitivization rule.

¹⁰The fact that Albanian seems to show no merger of possible infinitival forms with finite forms may be significant in this regard, although so little is known about the forms which were replaced by these secondary infinitival forms that any claims are mere speculation.

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References

- Barić, H. (1961) "La perte de l'infinifif dans des langues balkaniques",
Godišnjak Balkanološki Institut (Naučno Društvo NR Bosne i Hercegovine),
Kniga II, 1-11.
- Bloch, Jules (1934) L'indo-aryen du veda aux temps modernes. Paris: Adrien-
Maisonneuve.
- Burrow, Thomas (1955) The Sanskrit Language. London: Faber & Faber.
- Domi, M. (1975) "Considérations sur les traits communs ou parallèles de
l'albanais avec les autres langues balkaniques et sur leur étude",
Studia Albanica XII, 1.81-91.
- Fallmerayer, J. (1945) Fragmente aus dem Orient, Stuttgart-Tübingen.
- Gabinsky, M. (1967) Vozniknovenie infinitiva kak vtoričnyi balkanski
jazakovo process. Na materiale albanskogo jazyka, Leningrad.
- Hesseling, D.-C. (1892) "Essai historique sur l'infinifif grec", in J.
Psicharis, ed., Études de Philologie NéoGrecque, Paris, pp. 1-43.
- Hill, K. (1979) The Genesis of Language (The First Michigan Colloquium),
Ann Arbor: Karoma Publishers, Inc.
- Hock, H. (1975) "Substratum Influence on (Rig-Vedic) Sanskrit?", Studies
in the Linguistic Sciences (University of Illinois), 5.76-125.
- Jannaris, A. (1968) An Historical Greek Grammar, Hildesheim.
- Kuiper, F. B. J. (1967) "The Genesis of a Linguistic Area", Indo-Iranian
Journal 10.81-101.
- Miklosich, F. (1869) "Die Slavischen Elemente im Neugriechischen",
Sitzungsberichte der Philosophisch-historischen Classe der kaiserliche
Akademie der Wissenschaften, 63.529-566.
- Mühlhäusler, Peter (1976) "The Category of Number in New Guinea Pidgin",
Linguistic Communications 13.21-37.

- Reichenkron, G. (1962) "Der Typus der Balkansprachen", Zeitschrift für Balkanologie 1.91-122.
- Rozencvejg, V. (1969) "Infinitivnye konstrukcii i balkanske jazykovye kontakty", Slavia 38. 189-209.
- Rozencvejg, V. (1976) Linguistic Interference and Convergent Change.
The Hague: Mouton (Janua Linguarum, Series Maior, 99).
- Sandfeld, Kr. (1930) Linguistique balkanique. Problèmes et résultats.
Paris: Librairie ancienne H. Champion.
- Sankoff, G. (1979) "The Genesis of a Language", in K. Hill (1979), pp. 23-47.
- Schumann, J. (1979) "The Genesis of a Second Language", in K. Hill (1979), pp. 48-61.
- Togebly, K. (1962). "L'infinitif dans les langues balkaniques", Romance Philology 15.221-233.