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Greek dialectal evidence for the role of the paradigm in inflectional change

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Abstract Several dialectal variants of the inflectional ending for person, number, tense, and voice in the Modern Greek past imperfective nonactive paradigm are presented here by way of showing the relevance of dialect material for linguistic theory. In this case, the endings underwent reshapings based on other related endings (e.g., 3PL based on 1/2PL), providing a basis for understanding the nature of interactions among different ''cells'' within a paradigm and the constructs that can be employed to model them. As a result, both rules of referral and O–O correspondence relations are shown to have to take sub-word similarities into consideration, and various constraints on such interactions are considered and rejected in favor of a liberal view that allows for any cell to relate to any other cell. Finally, a distinction is motivated, based on cell-to-cell influences, between adventitious and significant syncretism of form.

Keywords Dialect · Inflectional ending · Modern Greek · O–O correspondence · Paradigm · Rule of referral · Syncretism

1 Introduction

Paradigms are a given in most recent theories of morphology. Nonetheless, there are some accounts of word-structure that are still widely cited in the literature, such as Williams (1981), in which the paradigm as a theoretical construct is an epiphenomenon rather than a basic unit of morphological organization. Moreover, questions remain about the internal structure of paradigms and about the nature of relations between and among the forms in a paradigm. Most theorizing about paradigms is done

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on the basis of synchronic data and synchronically focused issues. Yet there is potentially very telling and highly relevant evidence from language change that bears on the existence of paradigms and on their internal structure. One way to get at that evidence from change is by examining different dialects of a language, since, by virtue of the divergences they can show from other dialects and from more standard varieties of their language, dialect differences can offer a window onto change; the basic tenet of the comparative method leads to that conclusion, under the assumption that the dialects sprang from a common source and that where they differ is in the extent of innovations in one or more dialects that others did not take part in. In what follows, I examine and discuss dialectal evidence from Modern Greek, with the goal of bringing to light a persistent and recurring type of change—the reshaping of inflectional endings based on other endings—that provides evidence regarding paradigm-internal connections, as well as those external to the paradigm, and shedding some light too on suitable formal mechanisms for expressing these connections. As such, they also provide evidence for the paradigm as a construct, since the existence of paradigm-internal connections presupposes the existence of a paradigm as a unit of organization for the forms in question.

2 What is a paradigm?

I start with a characterization of the *paradigm* as an organized set of inflectionally related forms, i.e. those that can be construed as containing syntactically relevant and/or syntactically determined morphology. Moreover, these forms can be schematized as a set of ''cells'' (with no claims made about the psychological reality of such ''cells'' per se). Although nothing crucial for my discussion hinges on them, I make two assumptions about these ''cells''. First, the content of the cells can be conceived of as bundles of features, e.g. [1 Person], [+ Plural], etc., that are eventually ''spelled out'' as actual forms. Additionally, I assume that there are relations among cells that need to be expressed somehow (e.g., via redundancy rules over the bundles of features that define each cell, via rules of referral, via OO-correspondence statements, or the like). We can thus understand ''paradigm'' in a narrow sense, as sets of cells that share certain features (such as case, gender, and number features for nouns, or tense, mood, aspect, voice, person, and number features for nouns, but also in a broader sense as involving sets of cells in the various narrowly defined paradigms. I generally mean the narrow sense when I refer here to ''paradigm'', and thus distinguish ''paradigm-internal'' phenomena from ''paradigm-external'' phenomena, though the broad sense allows for overt expression of what prove to be important relationships as well.

3 A common development within and across paradigms and its import

To turn now to the particular set of dialect facts that are revealing about intra-paradigmatic relations, a relevant observation is that an apparently common change involving inflection is for grammatical endings, e.g., case endings in nouns, or

person, number, and/or tense (etc.) endings in verbs, to affect one another and cause the reshaping of one ending based on the form of another. One finds both paradigm-internal developments of this type, e.g., involving different persons within the same tense, that is, different cells within the same (narrowly defined) paradigm, and cross-paradigm developments, e.g. involving the same person across different tenses, that is, the same cell but in different paradigms. Moreover, there is another type of paradigm-external influence that is also very revealing, discussed later.

A reason for thinking that this is a common sort of development is that a relatively small temporal window within the history of Greek, namely the past 800 years or so (which for Greek, with its 3,500-year history, is a relatively brief period, covering just over 20% of the temporal span of recorded Greek) and a relatively small paradigmatic locus, namely mediopassive (perhaps better known as ''nonactive'') past tense forms in the imperfective aspect, together yield a fairly good number of examples. Extrapolating from that time period and that restricted set of verbal forms to other times and other categories, not to mention other languages, is the basis for the surmise that this is to be considered a relatively common type of change.

As a point of reference, the paradigm for the mediopassive past imperfective (what is traditionally called the ''imperfect'' tense) is given here for Standard Modern Greek, with the verb *lino* 'loosen' as the model (thus, 'I was loosening, you were loosening, etc.); in giving the standard forms so, I do not mean to suggest that they are somehow more basic than the dialectal forms presented below, although, as it happens, some of the forms do appear to be conservative:

(1) Standard Modern Greek Nonactive Past Imperfective

1SG	linomun	1PL	linomaste
2	linosun	2	linosaste
3	linotan	3	linondan

The regional dialects of Greek offer many instances of interesting deviations from the forms in (1). Some examples are given below, drawing largely on Newton (1972) and Minas (1987),[1] where the dialectal instability and variability of these endings across dialects are documented. In each case, the innovative form of the ending is given, a basis for its innovative derivation, and the other ending that played a role in the reshaping. Some specific dialect sources (though not an exhaustive listing) are indicated where available, though all the forms are attested somewhere within the space of the Hellenic-speaking world and some are to be found in the standard language. Moreover, many of the earlier forms, especially where they match the Ancient Greek endings, can be considered to be part of the modern language still, to the extent that they are generally to be found in the archaizing high-style sociolect known as *katharevousa*, a variety of Greek that is

[1] Some of this material is discussed also in Joseph (2004, 2006a); other important relevant sources here include Babiniotis (1972), Newton (1975), and Pantelidis (2008), though I do not necessarily follow them directly and instead apply some of my own interpretations to the data.

now moribund but was used and learned and known by most Greeks throughout the twentieth century.[2] And, some of the older forms are attested regionally as well.

The examples in (2) reflect intra-paradigmatic influences while those in (3) reflect extra-paradigmatically motivated reshapings; there are other variations on these endings, but those given here are representative. Admittedly, they are presented out of their own paradigmatic context, and assumptions are made about the source of the pressures leading to the innovative forms without taking into consideration all of the possibilities that have been proposed in the literature; nonetheless, the pressures cited are all quite plausible and in some instances have support from documentable historical facts. Thus, they can be considered especially telling with regard to questions about the nature of paradigmatic relations.

(2) Intraparadigmatic Influences

a. 1PL ending *–mastan* (e.g., Thrace, Epirus, Lesvos, and as a variant in the standard language): this derives from earlier *-maste* (itself from Ancient Greek *–me(s)tha*, largely by regular sound change), based on the end part of 3PL *–ondan*, thus indirectly reflecting 3PL active *-an*;[3]

b. 2PL *–sastan* (e.g., Epirus, Lesvos, and as a variant in the standard language) like the 1PL form in (a), this is from earlier *–slaste* (from Ancient Greek *-esthe*, in part by regular sound change), also based on the 3PL *-ondan* (though influence from the earlier emerging 1PL form itself is likely);

c. further innovative (beside *–ondan*—see (2a)) dialectal 3PL ending *–ondustan*:[4] this ending derives from another earlier variant *–ondusan* (on which see (3b)) based on the medial *-t-* of the 1PL *-mastan* and 2PL *–sastan*;

d. 2SG ending *–sun* (e.g., Epirus, and in the standard language, as indicated in (1)): this form derives from Ancient Greek *–so*, based on 1SG nonactive *-mun* (itself from Ancient Greek *-mçn* by regular sound change);

e. further innovative 2SG ending *–suna* (e.g. Peloponnesos, and as a variant in the standard language): this derives from *-sun* (in (d)), with *–a* added from the 1SG variant *-muna* (on which see (3c)).

[2] This is an oversimplification, to be sure, of a complex sociolinguistic situation involving the relationship between *katharevousa* and other forms of Greek. While *katharevousa* no longer (since the middle 1970s) plays any official role in Greek life, the effects of its status as the official high-style form of the language throughout a good part of the twentieth century have been long-lasting.

[3] The -a- of -maste is explained below; the pathway of change here could well have been *-mestha* ⇒ *-mesta* ⇒ *-mestan* ⇒ *-mastan*. The order of the change in vocalism and the change in the final syllable does not crucially affect the claim of involvement of the 3PL form (and ultimately thus the active *-an*).

[4] Minas (1987, p. 49) notes from Locrian the form *–onstan* and from Skopelos *-otstani*, which both can be interpreted as reductions (via unstressed high vowel loss) of *–ondustan*.

Table 1 Ancient Greek/Modern Greek past nonactive endings

Ancient Greek				Modern Greek			
1SG	-mēn	1PL	-me(s)tha	1SG	-mun(a)	1PL	-maste/mastan
2	-so		-esthe	2	-sun(a)	2	-saste/-sastan
3	-to		-onto	3	-tan(e)	3	-ondan/-ondusan/-ondustan

(3) Extra-paradigmatic influences

a. 3PL ending *–ondan* (e.g., in the standard language): this form derives from Ancient Greek *–onto*, based on 3PL *active* past ending *–an*variant (see also (2c));

b. 3PL nonactive past ending *–ondusan* (e.g., Peloponnesos): this derives from Ancient Greek *–onto* based on 3PL active past *-san* (thus like the development in (3a) but with a variant active ending involved);[5]

c. variant 1SG nonactive past imperfective ending *-muna* (e.g. Peloponnesos, and as a variant in the standard language): this is from earlier *-mun* (see (2d) above), with *—a* added from 1SG active past ending *–a*;

d. 3SG ending *-tan(e)* (e.g., Aigina, Peloponnesos, and in the standard language, as indicated in (1)): this derives from earlier *–ton* (e.g. Dodekanesos, based on Ancient Greek *–to*), with *–a-* vocalism and *–e* (taken over from the active, especially the active plural (1PL *-ame*, 2PL *-ate*, 3PL *-an(e)*).

Putting all these changes together, one can see that all of the endings of the past nonactive imperfective show changes in their shape between Ancient Greek and the rich variation of Modern Greek and its dialects, as summed up in Table 1:

These changes, as indicated in (2) and (3), are due to pressures either from other forms within that very paradigm or from other forms occupying the same cell (e.g. 1SG in each case) in the related past active set of forms. As indicated above, I refer to these as paradigm-internal and paradigm-external relations respectively, but it might be argued that they are all part of the same paradigm in a broad sense, specifically the past tense (imperfective) paradigm (with active and nonactive as subparadigms within a superset).

Still, there are clearly some further pressures that emanate from completely outside the verbal paradigm and yet affect the shape of verbal endings. In particular, Greek (and other languages as well) show the effects of related pronouns imposing their form on verbal endings.

[5] The variant ending *-ondisan* (e.g., Peloponnesos, Ionian Islands) has sometimes been taken as the basis for *-ondusan* via a change of unstressed *-i-* to *-u-*; that is certainly possible but it can be considered a more problematic account since the change of *-i-* to *-u-* is regular only in environments involving velars and labials together with sonorant, a context which is not found here. Although *-ondisan* itself requires some explanation (some linguists have looked to influence of the 3PL imperfect of 'be', as noted by Newton 1972), the process of affixing the 3PL past active ending *-san* to other 3PL forms is attested throughout the history of Greek. Thus despite the fact that the putative source *-onto-san is not directly attested, I nonetheless prefer the derivation proposed here for *-ondusan*. See below on how to motivate the change from *-o-* to *-u-*.

This influence is most noticeable in the Greek PL nonactive endings mentioned in (2) and (3). In particular, the change in vocalism in the 1/2PL forms, from *-e-* in Ancient Greek *(-me(s)tha/-esthe)* to *-a-* (*-maste/-saste*), cannot be explained by a regular sound change, as there are no parallels to such a change in a parallel context. Nor can it be explained by any sort of morphological pressure from within the paradigm, since an interior *-a-* is not to be found in other endings. Rather, as Ruge (1984) has suggested (see also Joseph 2004a), it is likely that what we see here is the influence of the oblique (genitive/accusative) pronouns *mas/sas* (weak), *emas/esas* (strong). That is, it appears that the vocalism of these pronominal forms impinged upon and ultimately affected the vocalism of these endings. In fact, following Ruge, it can be suggested that the endings came to be analyzed as if they were not just influenced by the form of the pronoun but actually included a pronoun within them (thus: -PRONOUN-*te*, where the pronoun corresponded to the person and number features in the cell and the *-te* (later *-tan*) corresponded to the tense features; the combination would be the indicator of voice). Such a (re)analysis would go together with the change in the vowel such that the ending came to match the pronoun. That would mean that the innovation originated in the 1PL form, for with its *-mVs-* sequence (assuming the *-s-* variant of the ancient form was generalized), it would more overtly be connectable to a pronoun than the 2PL ending would be, with its original *-Vs-* form (versus pronominal *sVs*). It is likely then that the newly analyzed and pronominally influenced 1PL ending was the basis for the reanalysis of the 2PL ending and its ultimate form *-sas…* matching the pronoun, a pathway for the change that accords with the known history of the two forms and their dialectal distribution.[6]

Similarly, and presumably later still to judge from the greater variation surrounding its cell, the 3PL then shifted to follow suit. Based on the Ancient Greek *-onto* ending, the medial *-u-* found in *–ondus(t)an* is hard to motivate in any direct way. While some dialects of Greek show the raising of unstressed *o* to *u*, those dialects are primarily northern, whereas the *-ondus(t)an* form is found in the south (e.g. in the Peloponnesos). This makes it unlikely that the medial vowel of the 3PL is the result of a regular sound change so that some other motivation must be sought. The fact that *-dus-* matches the 3PL genitive/accusative weak pronoun *tus* offers a solution along the lines of that proposed for the 1/2PL endings: pressure from a connection with the pronoun affected the vocalism of the 3PL ending too, with the difference between the *-t-* of the pronoun and the *-d-* of the ending being expected in a post-nasal environment.

Admittedly, Dunkel (2002, pp. 100, 101) suggests that some developments like these[7] may have a syntagmatic basis, especially if, say, a subject pronoun co-occurred with the verb form so that there was a collocational perseveration from

[6] I thank an anonymous referee for this important insight and for comments that helped to clarify both my thinking here and my presentation of an account for the variation.

[7] And, there are others; see Joseph (2004a) for an example from Macedonian by which the 1PL ending *-me* develops into *-ne*, apparently under pressure from the free 1PL pronoun, e.g., nominative *nie*, and Janda (1995) discusses the case of the innovative New Mexico Spanish 1PL ending *–nos* for *–mos* based on the initial consonantism of the 1PL pronoun *nos(otros)*. It is probably just a coincidence that several examples focus on 1PL forms.

pronoun onto ending, but some do not easily allow for such an explanation. Note, for instance, that the Greek examples in (3a) involve nonsubject pronouns, so that there would not be any principled basis for syntagmatic cooccurrence.

With the interpretations that I am advocating here, the influences involving various forms and endings are pervasive in the reshaping of these Greek verbal paradigms. Furthermore, the relevant influences do not fall specifically within the scope of what is traditionally viewed as classic cases of analogy, in that there are no readily formulable proportional (''four-part'') analogies of the type A:B::C:D to be invoked here. Nonetheless, it can be said that these developments all involve analogy, once one construes the notion of ''analogy'' in a broad sense to refer to the influence of one form on another. As such, these influences offer some insight into the types of connections that hold among forms and ultimately allow for some interesting conclusions to be drawn about the nature of intra- and extra-paradigmatic relations and the mechanisms by which those relations might be formally expressed; these are taken up in the next section.

4 Theoretical hay to be reaped from the dialect facts

These developments show that cells in paradigms are connected to one another somehow, since one cell has affected another, leading to a change in the shape of the affected cell. As it happens, there is considerable theoretical ''fallout'' from these developments, and these consequences are explored in this section, focusing on the expression of the relationships involving paradigmatic cells, on the extent of these relationships, and on the nature of syncretism.

4.1 Formal mechanisms for expressing inter-cell connections

The changes documented here suggest that paradigmatic cells can and do form connections between and among themselves, so it is fair to ask what the appropriate formal mechanism for expressing such intra-paradigmatic connections is. There are a few possibilities to consider.

Rules of referral (cf. Zwicky 1985; Stump 1993), by which the content of one cell is filled in by referral to the content of another, *might* be useful here, but they are generally for forms that are exactly identical, that is, in cases of paradigmatic cell syncretism. In the case at hand of the endings in (2) and (3), the forms end up only partially similar. From a purely synchronic standpoint, the resulting partial similarities within the paradigms might be taken as evidence for rules of referral that focus on features and partial identity rather than complete identity (as indeed Stump argues for, saying, e.g., that ''not all syncretisms are whole-word syncretisms'' (Stump 1993, p. 477)), so that the dialect evidence would be a further basis for this adjustment to the theoretical apparatus of such rules. From a diachronic perspective, however, which is crucial here since the dialect facts are the result of changes actively engaged in by speakers, it is not clear that rules of referral offer much insight. That is, rules of referral are useful after the fact, for expressing resulting syncretisms, but in advance of the change, working from starting points such as those in Table 1, it is not clear that there

would be any connections to be expressed. Rather, there are potential connections, but it does not seem that there needs to be a formal mechanism waiting in the wings in case such connections are forged by speakers. In other words, it is doubtful that rules of referral, if employed in a shadow sort of way in the paradigm in Table 1, could be predictive of what was to happen, of which forms would come to be similar. It is worth noting that the predictions of Williams (1981) about syncretism in the Latin noun paradigm based on his division of Latin's four (*sic*) cases into two classes met with little success, as argued by Joseph and Wallace (1984).

A second possibility for the formal expression of these linkages between cells in a paradigm is OO-correspondence relations. As Kager (1999, p. 215) describes them, they offer a formal mechanism for stating connections among forms, in the following way:

A 'base' in an OO-correspondence relation must be

(a) 'compositionally related to the affixed word in a morphological and a semantic sense';

(b) 'a free form, i.e. a word'.

Thus, presumably, the analogy involved in a development like early Modern English past tense *holp* to the currently used form *helped*, based on the present tense form *help*, would be successfully modeled by Kager's O–O correspondence relation, constrained in the indicated way.

However, based on the connections seen in (2) and (3), such correspondence relations must be of a different sort from at least Kager's conception of them, and any other that envisions whole-word status as being crucial for participation in such a relation. The reason for this is that the relations seen here are from affix to affix (recall the quote from Stump (1993) given above about syncretism at less than the whole-word level). Thus, a broader view of what elements can figure in such correspondence relations is needed if this mechanism is to be employed.

The sort of constructs needed to express the relationships among the endings here might instead be the *meta-redundancy rules* or *meta-templates,* and the *constellations* they define, that Janda (1982) and Janda and Joseph (1986, 1989, 1992a) and Joseph and Janda (1988) have argued are needed to capture certain aspects of German umlaut, Sanskrit reduplication, and Greek negation. Although space constraints do not permit a full discussion and formalization of these notions here, briefly it can be noted that these constructs are invoked in cases in which words show systematic partial similarities of form that are too significant to ignore but too partial to permit collapsing into a single morpheme or morphological rule. With Sanskrit reduplication, for instance, all reduplicative verbal forms share certain characteristics (e.g., reduplicating only the *t* of an #*st*- root but only the *s* of an #*sn*- root) but differ on others (e.g., prefixal vs. infixal status, overall template-shape, and vocalic or consonantal prespecification of the reduplicative piece).

In the case at hand here, in the Greek verbal endings, there are distinct similarities in the forms that the endings take, but at the same time there are no easily isolable elements that carry meaning in such a way as to allow for the identification

of individual morphemes that make up a complex form like *-mastan.* There is, for instance, no readily identifiable single marker for plural to be extracted out of *-mastan*/*-sastan*/*-ondusan*. Indeed, Janda and Joseph (1992b) presented just such a constellational account of the Greek nonactive endings.

Constellations are recognized after the fact of a connection being made, so in that sense make no attempt at predictive power, but they are flexible enough, in that they are defined by speaker actions that overtly reveal that a connection is made; that is, the constellation as such does not exist until speakers actively do something that indicates a linkage between and among forms. The act of extending the *-t-* of *-mastan*/*-sastan* into the 3PL to give *-ondustan* would thus place another ''star'' in the constellation of related and similar but uncollapsible forms. The reader is referred to Janda and Joseph (1992b) for further details on the notion of constellation and its application to the case of Greek verbal endings, but the key point here is that the dialectal data from the endings helped to motivate this theoretical construct.

4.2 Constraints on inter-cell connections

Once one recognizes that it is linkages among the cells that form the basis for the resulting partial similarities, another question that emerges is whether it is the case that any cell in a paradigm can be connected with any other cell (or cells). That is, are there constraints on these linkages? These dialect facts, augmented with some data from other languages, suggest a negative answer here: in principle it seems that any linkage is possible, and attempts to constrain the set of possible interconnections among cells in a paradigm are thus doomed from the start.

There is relatively little literature on this question, but there are some remarks that focus on syncretism that are relevant here under the view that these changes in endings represent a type of partial syncretism. In particular, Burzio (2005) posits ''morphological neighborhoods'' as a basis for syncretism, and Tantalou and Burzio (2005; Sect. 2.2) say explicitly that ''Cross-linguistically, syncretism obeys two main generalizations. One is that it tends to affect neighboring cells''.

The notion of ''neighboring'' is not made clear, though intuitively it would seem to mean that the cells are adjacent in some sense. That ''sense'', however, surely cannot be physical adjacency, since the schematic layout of a paradigm, with the familiar (in the west) array of first/second/third person lined up vertically in that order, is really largely arbitrary.[8] It may well refer to ''cognitive adjacency'', but even if so, one has to recognize that the ''neighborhood'' can be rather large. In particular, at least as far as the Greek endings (2) and (3) are concerned, they show linkages that are both same-person but cross-number (e.g., 3SG ↔ 3PL, in (3d)) and same-number but cross-person (e.g., 1SG ↔ 2SG, in (2de)). Additionally, there are cases of linkages across forms that are differently inflected for voice (e.g., nonactive ↔ active, in (3ab)), and possibly others, e.g., 3PL ↔ 1PL (in (2a), as well as the pronoun-on-ending effects discussed at the end of Sect. 3, where the adjacency is in

[8] By comparison, the Sanskrit grammatical tradition in India treats ''ego'' (Western 1st person) as the third listed form, and the Western 3rd person as the first.

terms of shared person features, in what might be viewed as ''functional adjacency''.

Further, when the relevant data set is extended to other languages, other possible linkages within a paradigm can be discerned. Romanian, for instance, in its present tense 2nd, 3rd, and (most of) 4th conjugations, shows 1SG ↔ 3PL linkage — full syncretism in fact – as in *eu/ei văd* 'I/they see', *eu/ei merg* 'I/they go', *eu/ei zidesc* 'I/they build', and even some irregular verbs, especially *sînt* 'I am'/'they are'. And, Romanian present-tense stem extensions (as elsewhere in Romance) occur in SG forms and the 3PL, thus revealing a link among this grouping of forms (e.g., 1/2/3SG/3PL *zid-esc/zid-eşt-i-/zid-eşt-e/zid-esc* versus 1/2PL *zid-im/zid-i ţi* 'build'). German shows present tense paradigms in which vowel changes are restricted to the 2/3SG forms as opposed to others, e.g., *ich sehe* 'I see'/*wir sehen* 'we see' but *du siehst* 'you see'/*er sieht* 'he sees'. Finally, in the perfect tense, Classical Sanskrit shows a linkage as far as the ending is concerned[9] between 1SG and 3SG, with both having *–a* for most verbs and *–au* for roots in *–ā* (e.g., *pa-pād-a* 'I/he have/has fallen' from √pad-, *ja-jñ-au* 'I/he have/has known' from √jñā-).

Thus, putting all of these together, even if one adheres to a ''neighborhood'' effect, it seems that just about any pair of forms can constitute a neighborhood, so that there may in fact be no constraints on syncretism and on the kinds of linkages that can lead to changes in inflectional endings. This would make sense if at least some syncretisms and partial similarities are entirely adventitious (e.g., the result of sound changes that, in keeping with Neogrammarian principles, would not differentiate between affected ''targets'' based on any grammatical properties they might have or express. The relevance of this observation for syncretism is explored in the next section.

4.3 Adventitious versus significant syncretism

As just noted, some syncretisms can be purely adventitious, that is, nothing more than the result of some change that accidentally merges one once-distinct form with another. Put in other words, it may well be that not all syncretisms are linguistically significant. But how can one tell the difference between adventitious convergence and truly significant linkage? Baerman (2004) addresses this question, with reference to ''systematic versus accidental'' syncretism, looking primarily at synchronic evidence. However, as with other phenomena involving the paradigm chronicled here, diachronic evidence can also be quite revealing. In particular, shared diachronic developments can show syncretism to be the significant type of linkage, and the absence of such shared innovative behavior can suggest an accidental character to the convergence. This can be made clear by considering some examples from Greek and Romanian.[10]

[9] The root vocalism may differ in length between 1SG and 3SG, though for Classical Sanskrit that is not always the case.

[10] The Greek example expands on a footnote in Baerman (204, 810, n. 3), in which he based his comment on information about Greek that I had provided him with.

The Ancient Greek 1SG thematic past ending *–on* was syncretic with the 3PL in the same paradigm, also appearing as *–on*. Based on what is known about the history of each ending, it is clear that the convergence here should be adventitious, since the 1SG derives from **-o-m* while the 3PL is from **-o-nt*, both by regular sound change. This accidental nature to the convergence is confirmed by the fact that an innovation affecting one does not automatically carry over to the other; in particular, the 1SG was replaced eventually by *–a*, but the 3PL ended up as *–an* (also *–ane*).

In Romanian, by contrast, where, as noted above, some conjugations also show a 1SG/3PL linkage, the convergence is different in kind, and diachronic evidence demonstrates that. In particular, this linkage allowed for an innovative 1SG present form of 'be' to arise, based on the 3PL form; that is, based on the fact that the 1SG and 3PL are syncretic in (certain) Romanian present tense classes, the 3PL form could innovatively spread into the 1SG, giving *sînt* and presumably replacing a form more directly from the Latin 1SG form *sum (*still preserved perhaps in the fast-speech (enclitic) 1SG form *–s*).

5 Conclusions

There is, to be sure, more theoretical hay to be reaped from the facts of Greek dialectal verb endings, some of which I have discussed elsewhere. For instance, in Joseph (2004b, p. 58) and Joseph (2006b), it is argued that these facts help to clarify the status of claims made within the framework of ''grammaticalization studies'' having to do with putative unidirectionality in grammatical change. And, in Joseph (2008), implications for morpheme ordering are explored, based on the occurrence in some dialects (e.g., Peloponnesos) of a 3PL ending *–osande*; in this ending, the nonactive marker *-(n)de* has been added onto, i.e., outside of, the 3PL active ending –osan, and thus voice and person morphemes in the opposite order from that seen in endings like *-ondus(t)an*, where the etymological nonactive *-ond(u)-* piece occurs inside of the etymological 3PL active *-san-* piece.

Even more insights surely will emerge from further careful consideration of this data, beyond what is offered here. Nonetheless, the inferences drawn here should suffice to show the value of paying close attention to dialectal data in understanding the forces involved in paradigmatic change.

To end on a somewhat more grandiose note, since these dialect forms, as noted at the outset, give a window onto the historical development of verbal endings in Greek, they show that diachrony is relevant to our understanding of synchronic systems. This is understandably so if one takes a ''dynamic'' view of synchrony and diachrony whereby diachrony is not a separate ''place'' that resides somewhere distinct from synchrony but rather is simply the progression through successive synchronic states (as discussed in Janda and Joseph 2003, for instance). In that sense, there is *only* synchrony for speakers, and diachrony is really just for linguists.

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