SYNCHRONIC VARIATION AND HISTORICAL CHANGE
IN THE WEST GREEK DIALECTS

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GRAMMARS OF ANCIENT GREEK DIALECTS (Thumb-Kieckers, Thumb-Scherer, Buck, Lejeune, etc.) mention numerous instances of the geographical diffusion of linguistic features, but they venture only a few impressionistic statements regarding linguistic changes spreading from word to word (= lexical diffusion) and from one linguistic environment to another (= linguistic diffusion). The scholars studying these phenomena in Ancient Greek may create themselves a theoretical framework for this type of study on the basis of numerous recent studies from other languages. Currently, there has been an upsurge of interest in the study of phonological change in progress and its conditioning—suffice it to mention the study of lexical split of short *a* in Philadelphia by Labov (267–308), of multi-conditioned sound change in Spanish by Malkiel (757–779), and especially of phonological change of *a* and *e* to *i* in Classical Latin from a lexical diffusionist point of view by Janson (1977). The last-mentioned problem is a familiar one from all school books of Latin dealing with compounding—whether this particular "raising" occurs or not when a prefix is added to a verb depends on the verb. Thus this change occurs in all the compounds of *rapiō, cadō, capiō*, etc. but in none of the compounds of *trahō, iaceō, natō, aperiō*, etc. There is a third group consisting of verbs which exhibit this change with certain prefixes but do not with other prefixes, e.g., *agō* (*redigō* but *peragō*), *habeō* (*cohibeō* but *post-habeō*), *faciō* (*conficiō* but *calefaciō*). We may describe these facts by stating that this alternation is lexically conditioned—i.e., if *rapiō* receives a prefix, the result is *corripiō*, but if *trahō* does nothing changes in *abstrahō*, and finally we witness the vacillation with *faciō* (*conficiō* but *calefaciō*).

In the present paper I would like to examine the problem of geographical and morpholexical diffusion of the *o*-stem dative plural of -οις to the athematic nouns (and *i*- and *eu*-stems) as documented above all by numerous West Greek dialectal inscriptions from the 3rd and 2nd centuries B.C. The study of morphological change in progress is of course nothing new in historical linguistics even if its theoretical basis has not as yet been satisfactorily laid down. Of the two cardinal theoretical concepts in this area—namely "analogy" and "lexical conditioning"—the former has been partly discredited by its overuse in many traditional treatments. On the other hand, the latter notion does not apear to be adequately exploited in the context of morphological innovation. We will see on the following pages that while the spread of -οις was in progress, the inscriptions present a picture

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of a notorious irregularity—scribes from different social strata were
adopting the ending -οις at different times in different linguistic
environments (i.e., morphological and lexical subsystems). It will be our
task to capture these phenomena geographically and statistically, and see
whether we can find out something about the complicated interaction of
different grammatical, phonological, and nongrammatical (= social and
stylistic) factors.[1] The first task is relatively easy—the geographical
diffusion of the North-West Dat Pl -οις can be established by scanning the
dialect inscriptions from the North West and Peloponnese.

Our evidence comes from the following regions:[2]

Aetolia-Acarnania:

Thermon	after 272 B.C.	Ἀκαρνάνοις ἱππέοις, but also ἱππεῦσι	(Schw. 381)
Aetolian decree (found in Delphi)	250/220 B.C.	τινοις	(GDI 1409)
Aetolian decree (found in Delphi)	179/172 B.C	νικεόντοις	(GDI 1413)

Locris:

Locrian treaty (found in Delphi)	190 B.C.	Ὑπνι[έοις]	(SEG 23.305)
Amphissa	189/167 B.C.	ἀρχόντ[οις] μειόνοις Χαλειέοις	(IG 9.1².3.750) (IG 9.1.333) (IG 9.1.334)
Maidens' inscription	275/240 B.C.	πάντοις -ορκεόντοις (2x) but γονεῦσι	(IG 9.1².3.706)

Phocis (outside of Delphi):[3]

| Stiris | ca 175 B.C. | ἐμμεινά[ν]τοις ἐτέοις τεττάροις | (IG 9.1.32) |

[1]Among older treatments of this problem the following should be mentioned: an old article by
F. Sommer, *IF* 25 (1909) 289–292; *passim* in Thumb-Kieckers 1932; a survey in Schwyzer
(564); and the discussion in Buck (178–179). Full forms for abbreviated references are listed
at the end of the paper.

[2]The following data are drawn in principle from *IG*. Delphian inscriptions are quoted
according to *GDI*; Elean inscriptions according to Schwyzer; other regions and individual
inscriptions as indicated. In compiling this geographical survey I used *IG* and information in
Thumb-Kieckers 1932 (245, 254, 269–270, 292–293, 301–302, 306), Schwyzer (564) and
Lejeune 1940 (129–131).

[3]Delphi will be treated separately below, 307–309.

Phocian decree		νικεόντοις	(*IMagn* 34)
(found in Magnesia)		but Φωκεῦσι	

Aenis and Malis:

Hypata	3rd B.C.	Αἰνιάνοις	(*GDI* 1430)
Lamia	ca 170 B.C.	ἐντυνχανόντοις πάντοις	(*IG* 9.i².66a)

The North-West form -οις appears several times in late Boeotian inscriptions from Orchomenos, Tanagra, Chaironeia, and Chorsiai as a result of the influence of the Aetolian chancellery ("als Folge des aitolischen Einflusses" Thumb-Scherer 35).

Boeotia:

Orchomenos	3rd B.C.	ἤγυς i.e., αἴγοις (=αἰξί)	(*IG* 7.3171)
Tanagra	3rd B.C.	ἰαόντυς μεταφερόντυς	(Schw. 462)
Chaironeia		τῦς γονεύς	(*IG* 7.3348)
Chorsiai		ἐχόντυς	(*IG* 7.2383)

In the excavations in Magnesia there were discovered decrees of the Cephallenians of Same and of the Ithacans. We know from Polybios 6.4.6 that Cephallenia, of which Ithaca was a dependency, was allied with the Aetolians:

Ithaca	before 200 B.C.	πολίοις νομιζόντοις	(*IMagn* 36)
Cephallenia	before 200 B.C.	πολίοις Μαγνήτοις	(*IMagn* 35)

In the Peloponnese the form -οις is documented from the following regions:

Elis:

Olympia		χρεμάτοις	(Schw. 411)
Olympia	3rd or 2nd B.C.	ἀγώνοιρ	(Schw. 425)
Olympia		but Μαντινεῖσι instead of *Μαντιναόις	(Schw. 418)

So far, there is no evidence from Achaea.

Arcadia:

Stymphalos	3rd B.C.	τοῖς αἱρεθέντοις [ἄν]δρεσσιν τ(οῖ)ς χρειζόντοις but τοῖς ἄρχουσιν	(*IG* 5.2.357)
Stymphalos	3rd B.C.	τοῖς . . . Ϝαλόντ[ο]ις but το[ῖς . . . περιεστακό]σι πᾶσι (not *πάντοις)	(*IG* 5.2.351)
Tegea	3rd B.C.	εἰσ]αγόντοις	(*IG* 5.2.13)

Laconia:

Sparta	2nd/1st B.C.	πλειόνοις	(*IG* 5.1.11)
Amyclae	2nd/1st B.C.	τοῖς Ἀμυκλαιέοις	(*IG* 5.1.26)
Geronthrae	after 146 B.C.	εἰσαγόντοις, ἐξαγόντοις	(*IG* 5.1.1111)

Messenia:

Messene	ca 240 B.C.	τοῖς Φια]λέοις ταῖς πολέοις	(*IG* 5.2.419)
Thuria	2nd/1st B.C.	τοῖς καταστ...θέντοις	(*IG* 5.1.1380)
Andania	1st B.C.	τοῖς εὐσεβέοις τοῖς ἐπικαταστ...θέντοις ἐγλογευόντοις τοῖς ἐπιμελούντοις δοκιμασιθέντοις ἐμ πάντοις τοῖς πλειόνοις	(*IG* 5.1.1390)

The emergence of Aetolian forms in the Peloponnese can be explained by the fact that some of its parts were under Aetolian domination—most notably the Arcadian cities of Tegea, Mantineia, Orchomenos, and Phigaleia.[4] Note, however, that even Stymphalos which was not under the political power of the Aetolian league shows the Aetolian form in -οις competing with the common Greek -σι (αἱρεθέντοις but ἄρχουσιν, Ϝαλόντοις but περιεστακόσι).

Thus it is not surprising that in Laconia there are no examples of the

[4]The decree of *sympolitia* between Messene and Phigaleia (*GDI* 4645) was executed on the initiative of Aetolians ([ἐπειδὴ παραγενόμενο]ι πρεσβευταὶ καὶ διαλ/[λακταὶ παρὰ τῶν Αἰτω]λῶν . . .).

North-West dative -οις from the 3rd and the 1st centuries (i.e., before and after the period of Aetolian influence). Messenian data do not contain any examples of the dative -σι from the 3rd and the 2nd centuries, but this obviously is due to a coincidence. My statistics for these two regions are tabulated in Chart I.

Chart I. *North-West dative* -οις *vs. Hellenistic*
-σι *in Laconia and Messenia.*

	3rd[a]	2nd[a]	1st[a]	1st[p]
Laconia	0:2	3:11	0:16	
Messenia	2:0	2:0	7:1	1:2

It goes without saying that we do not believe that the whole population of Arcadia or Laconia started using the North West form of Dat Pl λεγόντοις etc. because we find instances of certain formulas in proxeny decrees from Tegea and Geronthrae. Formulas such as εἶμεν δέ α[ὐτοῖς] καὶ ἀτέλειαν καὶ εἰσαγόντοις καὶ ἐ[ξα]γόντοις καὶ πολέμω καὶ ἰράνας (Geronthrae, *GDI* 4350) were simply adopted from the Aetolian documents by the Arcadian and Laconian scribes. Thus they may not even imply that the speech of the local γραμματεύς contained them.

There is a hapax from Crete (Aptera in the western part of the island):

Aptera   2nd B.C.   ἐν τοῖς λιμένοις   (*GDI* 4942)

Finally, numerous documents come from as far as Tauromenion in eastern Sicily:

Tauromenion   ἱερομναμόνοις (25x)   (*GDI* 5221–5228)
                        σιτοφυλάκοις (25x)
                        ἀργυρωμάτοις (6x)
                        τοῖς δυοῖς   (*GDI* Nachträge, 3, p. 1210)
                        ἀνδροῖς
                        τοῖς πωλησάντοις (4x)
                        but σιτωνίοις πᾶσι (8x)

The direct influence of the Aetolian chancellery is less unlikely when it comes to places such as Crete (Aptera). Thumb-Kieckers (301) suggest the historical fact of *symmachia* between Knossos (and other Cretan cities, Kydonia, Eleutherna, and Aptera) and the Aetolian league at the end of the 3rd century B.C. as a possible explanation for the emergence of λιμένοις in *GDI* 4942 from Aptera. This cannot be ruled out but neither can independent creation in Cretan dialects in the 3rd to 2nd century B.C. However, linguistic influence of the Aetolian chancellery is definitely unlikely in the case of the documents from Tauromenion in eastern

Sicily, since there are no historical events linking this place with the Aetolian league. The only conclusion is that we are dealing with independent development in the local dialect.

We may survey our evidence according to major lexical classes—participles, stems in liquids, stems in -i and -eu, s-stems, and consonantal stems—in Chart II.

Chart II. *Geographical diffusion of the North-West dative plural.*

	participles nt-stems	n and r-stems	i-stems	eu-stems	s-stems	C-stems	πάντοις
Aetolia	+	+(n)		±			
Locris	+	+(n)		±	+		+
Phocis	+	+(r)		−			
Delphi	±	±(r)	±	±	±		±
Aenis	+	+(n)					+
Boeotia	+			+		+(g)	
Ithaca	+		+			+(t)	
Cephallenia			+			+(t)	
Elis		+(n)				+(t)	
Arcadia	±						
Laconia	+	+(n)		+			
Messenia	+	+(n)	+	+	+		+
Crete		+(n)					
Sicily	+	+(n,r)				+(k,t)	−

Only a few conclusions can be made on the basis of this chart. First of all, our evidence is relatively complete only for nt-stems (= participles) and n-stems. The latter stems select only the suffix -οις. The same would be true about the stems in -nt, if we want to ignore an isolated instance of τοῖς ἄρχουσιν from Stymphalos (*IG* 5.2.357) and several instances of -σι in Delphian public inscriptions. However, diffusion of this morphological innovation has to be stated with reference to the lexical category of a quantifier πάντες for Tauromenion in eastern Sicily, where we find πᾶσι versus ἱερομναμόνοις and πωλησάντοις. That is, the spread of the innovative suffix -οις at that particular time was lexically conditioned—the stems in -nt (participles) favored it, but the quantifier πάντες did not. Delphi will be discussed below.

The vacillation between the old -σι and an innovative -οις is particularly interesting with eu-stems in Aetolia, Locris, and Delphi. The vacillation between ἱππέοις and ἱππεῦσι found in the same inscription from Aetolian Thermon (Schw. 381) might be evaluated as symptomatic of the attempt to eliminate unusual allomorphy where thematic /eu/ appears in Nom Sg and

Dat Pl (phonologically, before *s*) and /ẹ/ elsewhere (before vowels). This unusual distinction of themes (-ευ- in Nom Sg and Dat Pl and -ε- elsewhere) is also found in the Attic dialect and it was inherited from it by the Hellenistic Koine. It should be noted that in older stages of the Greek language before the loss of *w* the *eu*- stems displayed only one theme -*ēw*- through the whole paradigm. The shortening of *ēw* to *ew* before *s* was a regular consequence of "Osthoff's Law," giving Nom Sg βασιλεύς and Dat Pl βασιλεῦσι. The loss of /w/, however, produced a situation in which the theme /eu/ found only in two endings conflicted with the theme /ẹ/ found in all the other endings. Phonologically, /eu/ was found before *s* (or finally in the vocative) and /ẹ/ appeared before the vowel of the suffix: -η(ϝ)ος, η(ϝ)ι, etc. However, there was another way of reducing this allomorphy, which was taken by Aeolic dialects. Instead of shortening *ēw* in Dat Pl they inserted an epenthetic *e* between thematic *ēw* and the suffix *si*, giving -*ēwesi* > -*ēes(s)i* (after the loss of *w*). This stage is documented by Classical Lesbian βασιλήεσσι and early Hellenistic Boeotian and Thessalian inscriptions, where ẹ̄ was raised to ẹ̄ (spelled EI): Φιλετηρείεσσι.[5] While the Attic dialect and Hellenistic Koine have the theme /eu/ before *s* in Nom Sg and Dat Pl, Aeolic dialects have the theme /eu/ before *s* only in Nom Sg since the suffix of Dat Pl -εσσι begins with a vowel (an originally epenthetic -*e*- was now felt as a part of the suffix). It is significant that the Boeotian dialect was susceptible to the North-West influence in this respect—the North-West -οις like Aeolic -εσσι is a suffix which begins with a vowel. Hence τῦς γονεύς in *IG* 7.3348₅ (= τοῖς γονέοις) with typical Boeotian mono-phthongization *oi* → *ü*. Summarily:

	Postulated Early	Lesbian	Boeotian (archaic)	Boeotian (3rd c.)
Sg Nom	*-ēw + s	βασίλευς	Πτōϊεύς	γραμματεύς
Gen	-ēw + os	βασίληος	Πτōϊε͂ος	γραμματεῖος
Dat	-ēw + i	βασίληϊ	Πτōϊε͂ϝι(!)	
Acc	-ēw + a	βασίληα		

[5]See Thumb-Scherer (36 and 66) for actually documented Boeotian and Thessalian forms:

		Boeotian	Thessalian
Sg.	Gen.	γραμματεῖος	Κερκινεῖος (Phthiotis)
	Dat.	Φωκεῖι	
	Acc.	ἰαρεῖα	Κερκινεῖα (Phthiotis)
Pl.	Nom.	πρισγεῖες	
	Gen.	θεσπιείων	Μοψείουν
	Dat.	Φιλετηρείεσσι	Αἰολείεσσι
	Acc.	Φωκείας	

Pl Nom	-ēw + es	βασίληες	Ἀνακτοριέες	
Gen	-ēw + ōn	βασιλήων		
Dat	*-ēw + si	βασιλήεσσι	Ἀκραιφιέεσσι	Φιλετηρείεσσι
Acc	-ēw + as	βασίληας		

The ending -εσσι appears not only with -eu stems but also in exactly all the other environments in which the ending -οις appears, i.e., with participles, i- and s-stems, and consonantal stems, and with the quantifier πάντες. Its geographical diffusion resists all attempts to discover a focus. The suffix -εσσι appears in all Aeolic dialects (Boeotian, Thessalian, and Lesbian) and in the North-West ones (Delphian and East Locrian); there is evidence for it from Corcyra, but also from places as distant as Argolis, Cyrenaica, Pamphylia, Elis, and Sicily.[6] This geographical dispersion suggests that we should not be looking for a potential geographical focus, but rather for some principles by which virtually all Ancient Greek dialects tried independently to get rid of the intraparadigmatic allomorphy. If we remind ourselves that this ending appears also in Homer (as an "Aeolism") there can be no doubt that we are dealing with an old morphological innovation. It is not my intention to argue for one of the several "explanations" offered for the emergence of the form -εσσι. Suffice it to say that all of them—explicitly or implicitly—center on the notion of paradigmatic coherence and conceptual analogy. Wacker-nagel—as early as 1903—suggested proportional analogy λύκοι : λύκοισι = θῆρες : θήρεσσι (treating Greek as if it were an agglutinative language) as a source for the suffix -εσσι; Meillet suggested proportional analogy working in syntactic contexts such as θεοὶ θεοῖσι φίλοι, ἄνδρες ἄνδρεσσι as a source (i.e., -οι : -οισι = -ες : X, where X = -εσσι. Similarly Schwyzer (565) suggests the juxtaposition δοιοῖς/δυοῖς ἢ τριοῖς ἔτεσι as the source ("Ausgangspunkt") for δοιοῖς/δυοῖς ἢ τριοῖς ἐτέοις. These and other similar suggestions have recently been surveyed and evaluated by Morpurgo Davies (1976).

[6]The following examples are taken from Schwyzer (564):
Lesbian: ἐόντεσσι, Μακεδόνεσσι, πολίεσσι, βασιλήεσσι, ἐτέεσσι, ἁρμάτεσσι
Thessalian: κατοικέντεσσι (but χρέμασιν)
Boeotian: παραμεινάντεσσι, ἄνδρεσσι, βούεσσι, χαρίτεσσι
Delphian: πάντεσ(σ)ι, ἱερομναμόνεσσι, σαμάτεσσι
East Locrian: πάντεσιν, Κεφαλλάνεσσι, χρημάτεσσι
Corcyra: πολίεσσι, Ἁρμάτεσσι
Sicilian: ὑέεσσι, παίδεσσι
Elean: φυγάδεσσι
Pamphylian: δικαστήρεσσι;
Cyrenaean: Εὐεσπεριδέεσσι
Argolic: Ἐπιτελίδεσσι.
More generally, evidence comes from the following grammatico-lexical categories: participles (= stems in -nt-), quantifier πάντες, r-, n-, i-, eu-, s-, and consonantal (t, d) stems.

I would prefer to look at this problem from the point of view of lexical diffusion on the basis of statistical analysis of the larger corpus of data from a single community in the 3rd and 2nd centuries B.C. The community which appeared most suitable for this type of investigation was Delphi with its numerous inscriptions of both public and private character. The former group is constituted by several hundred amphiktyonic and proxeny decrees (from the 3rd century B.C. to the 2nd century A.D.), the latter by several hundred manumissions (from the 2nd century B.C. to the 2nd century A.D.).[7]

In the past, these documents were studied by Rüsch (1914) from the point of view of phonology and by Lejeune (1940). Lejeune's variationist study emphasizes rightly their importance for the study of a local dialect under two styles—the formulaic and traditional jargon of public decrees, and the more colloquial style of private documents. Especially, the latter documents are deemed to preserve the truest image of the local dialect.[8]

Statistical evidence for the grammatical categories discussed above will be presented in Chart III in the following manner. Under the category of "public" inscriptions will be given examples from amphiktyonic decrees (*GDI* 2506–2536), the treaty with Pellana (Schw. 328ᵃ) and proxeny decrees (*GDI* 2582–2845); under the category of "private" inscriptions examples from manumissions (*GDI* 1684–2342).[9]

[7]My statistics are based on Baunack's edition (1898). Amphiktyonic decrees from the 3rd–2nd century B.C. are numbered *GDI* 2506–2536; proxeny decrees from the 3rd century B.C.–2nd century A.D. *GDI* 2582–2845; and manumissions from the 2nd century B.C.–2nd century A.D. *GDI* 1684-2342.

[8]Lejeune 1940 (6) "l'image la moins infidèle du parler local, tel qu'il est conservé, et transformé, de la fin de la domination étolienne jusqu'à l'empire." Thumb-Kieckers 1932 (261) "Andererseits ist bemerkenswert, dass sich der Dialekt in den Inschriften bis ins 2. Jh. n. Chr. gehalten hat, ohne dass man den Eindruck künstlichen Archaisierens hätte; es mag sein, dass der alte Amtsstil, wie er etwa im 3. Jh. v. Chr. ausgebildet war, z.B. in den Freilassungsurkunden beibehalten wurde, obwohl der gesprochene Dialekt in stärkerem Masse dem Einfluss der Κοινή verfallen sein mochte."

[9]Examples found in public inscriptions from the 3rd century B.C.:
πάντοις *GDI* 2527, 2528 (Amphiktyonic)
πᾶσι *GDI* 2672, 2746, 2756, 2809, 2810, 2811, 2812, 2814 (proxeny), 2525, 2529 (Amphiktyonic)
(participle) -οις *GDI* 2613, 2675, 2733, 2736 (proxeny), 2514 (Amphiktyonic)
(participle) -σι Schwyzer 328ᵃ (2x, treaty with Pellana), *GDI* 2506 (2x, Amphiktyonic)
(*eu*- stems) -οις *GDI* 2514 (Amphiktyonic)
(*eu*- stems) -σι *GDI* 2592, 2841 (proxeny), Schwyzer 328ᵃ (3x, treaty with Pellana), *GDI* 2592 (Amphiktyonic)
(*s*- stems) -σι Schwyzer 328ᵃ (treaty with Pellana)
(stems in liquids) -οις *GDI* 2613, 2624, 2653, 2672, 2736, 2756, 2809, 2810, 2811, 2812, 2814 (proxeny), 2527 (3x), 2528 (4x, Amphiktyonic)
(stems in liquids) -σι *GDI* 2746 (proxeny), 2506 (3x), 2515, 2520, 2524, 2525 (3x), 2527, 2528, 2532 (2x, Amphiktyonic)
(*i*- stems) -σι Schwyzer 328ᵃ (2x).

Chart III. *North-West Dative Plural -οις vs. Koine -σι in Delphian Inscriptions.*

3rd c. B.C.	participles	*r*-stems	*i*-stems	*eu*-stems	*s*-stems	πάντοις
Public Inscriptions	5:4	18:14	0̸:2	1:6	0̸:1	2:10

2nd c. B.C.	participles	*r*-stems	*i*-stems	*eu*-stems	*s*-stems	πάντοις
Public Inscriptions	7:0̸	28:0̸		1:1		3:25
Private Inscriptions	32:0̸	6:0̸	8:0̸	7:0̸	6:0̸	

It is unfortunate that the comparison between public and private documents in the 3rd century B.C. cannot be made because there are no private documents (manumissions) from that period. The dative in -οις appeared in Delphian public inscriptions in the 4th century (the oldest document is a proxeny decree from 351/0 for an Aetolian, Xenippos, containing the formula ἐμ πᾶσι τοῖς ἀγώνοις "in all the games"). In the 3rd century—

Examples found in public inscriptions from the 2nd century B.C.:
πάντοις GDI 2652, 2677, 2819 (proxeny)
πᾶσι GDI 2610, 2611, 2627, 2644, 2646A, 2662, 2681, 2682, 2683, 2684, 2685, 2686, 2690, 2697, 2723, 2724, 2725, 2726, 2727, 2728, 2737, 2799, 2818, 2820, 2821 (proxeny)
(participle) -οις GDI 2652, 2675, 2677, 2682, 2683, 2737, 2818 (proxeny)
(*eu*- stems) -οις GDI 2660 (proxeny)
(*eu*- stems) -σι GDI 2536 (Amphiktyonic)
(*r-/n*- stems) -οις GDI 2610, 2611, 2627, 2644 (2x), 2646A, 2662, 2677, 2681, 2682, 2683, 2684, 2685, 2686, 2690, 2723, 2724, 2725, 2726, 2727, 2728, 2737, 2799, 2818, 2819, 2820, 2821 (proxeny), 2536 (Amphiktyonic).
Examples found in public inscriptions from the 1st century B.C.:
πάντοις GDI 2687 (2x) (proxeny)
πᾶσι GDI 2729 (proxeny)
(participle) -οις GDI 2687 (proxeny)
(*r-/n*- stems) -οις GDI 2687, 2729 (proxeny).
Examples found in private inscriptions from the 2nd century B.C.:
(participle) -οις GDI 2014, 2034, 2066, 2227, 2229, 2233, 1755, 1803, 1807, 1882, 1918, 2065, In. 1, 1719, 1748, 1752, 1757 (2x), 1767, 1775, 1776, 1778, 1784, 1819, 1829, 1830, 1836, 1890, 1113, 2288, 2274, 2137
(*eu*- stems) -οις GDI 2049, 2072, 1803, 1787, 1877, 1842, 2097
(*s*- stems) -οις GDI 2261, 1832, 1909, 1832, 1754, Po. 8
(*r*- stems) -οις GDI 1858, 1874, 1689, 1694, 1696, 1832
(*i*- stems) -οις GDI 1909, 1754, 1858, 1874, 1689, 1694, 1696, 1780.

under the influence of the Aetolian dialect—the dative in -οις predominates slightly over -σι with the participles (5 examples of -οις vs. 4 examples of -σι) and with the stems in liquids (18 examples of -οις vs. 14 examples of -σι).

The numbers for s-stems (∅:1) and i-stems (∅:2) are not significant. Taken together with numbers for eu-stems (1:6), however, they may perhaps be interpreted in the sense that the lexical diffusion of Aetolian -οις affected these stems later. Indirect evidence for this may be seen in private inscriptions of the 2nd century which do not have a single example of -σι with any one of these stems: the figures for eu-stems are /7:∅/, for s-stems /6:∅/, and for i-stems /8:∅/.

In the 2nd century the lexical diffusion, with the exception of a quantifier (πάντες "all"), appears to have completed its course in both public and private documents. To be sure, this can be claimed only about private inscriptions, since there are two gaps in Chart III and there is an isolated example of -σι with eu-stems. However, in public documents the lexical diffusion of the Aetolian -οις could not erode the form πᾶσι of the quantifier πάντες "all." In the 2nd century B.C. the form πᾶσι competed vigorously with πάντοις as can be seen from the ratio of 3:25 for public inscriptions.[10] While the public inscriptions of the 3rd century B.C. vacillate between λεγόντοις and λέγουσιν (the ratio is 5:4), public inscriptions of the 2nd century B.C. show only the former form with -οις and so do the private inscriptions.[11] Now let us contrast the ratio 39:∅ for λεγόντοις : λέγουσιν (in both public and private inscriptions) with the ratio 3:25 for πάντοις : πᾶσι in public inscriptions. Clearly, we cannot talk about the single morpholexical category of nt-stems vis-à-vis other stems as regards the spread of the suffix -οις. While participles show the complete diffusion of -οις by the 2nd century B.C., the quantifier πάντες sticks stubbornly to the old suffix -σι. In other words, diffusion of the Aetolian -οις is sensitive to this lexical category.

In terms of the environments, we would expect the cluster -nt- in participles to be the most favorable, apical consonants (t, d, tʰ, n, l, r) in consonantal stems to be a less favorable, and vowel i in i-stems to be the least favorable one. Adding the suffix -si to the cluster -nt- entails two rules: cluster simplification and nasal-deletion with concomitant compensatory lengthening (it may be noted that some dialects, e.g., Argolic and Cretan,

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[10]There are no examples of either πᾶσι or πάντοις in manumissions from the 2nd century B.C. In later texts, which are strongly influenced by Hellenistic Koine, there are seven examples of πᾶσι (6: 15, 31, 48, 53, 129, 130, 137). These documents were composed between A.D. 50 and A.D. 130.

[11]If, however, only proxeny decrees are counted the ratio is 4:∅; i.e., evidence for general Hellenistic λέγουσιν comes from amphiktyonic decrees.

stopped at the cluster simplification):

	légont+si
Cluster Simplification	légonsi
n-deletion +	
Compensatory Lengthening	légǭsi

Addition of *-si* to labial or velar consonants does not present any problem—the result is a cluster *-ps-* or *-ks-*. However, apical consonants (dental stops and nasals and liquids) have to be elided before *s*:

	lampád+si	hēgemón+si
Apical C-deletion	lampási	hēgemósi

Adding *-si* to vocalic stems does not entail any phonotactic rules. In the former two cases there arises allomorphy /légont/ ∼ /légǭ/, /lampád / ∼ /lampá/, /hēgemón/ ∼ / hēgemó/, etc. This allomorphy can be obviated—or, the operation of the above rules blocked—if the ending beginning with a vowel is added. The two "remedies" offered by Aeolic and North-West Greek dialects did exactly that—the older Aeolic innovation inserted an epenthetic *-e-* before *-si* and the North-West Greek resorted to borrowing the suffix with vocalic onset from thematic nouns. It is worth mentioning that yet another West Greek dialect solved this problem in a similar fashion. Heraclean (essentially a South Italian variety of Laconian) developed forms with an epenthetic *-a-* by the end of the 4th century B.C.: πρασσόντασσι, ὑπαρχόντασσι, ποιόντασσι (*IG* 14.645).[12]

The common morphotonemic corollary of these independent developments was a neat distribution of allomorphs in the plural paradigm: /légont/ in Nom and Acc (i.e., direct cases) with accent on the root vs. /legónt/ in Gen and Dat (i.e., indirect cases) with accent on the postradical syllable:

	Stress on radical syllable	*Stress on postradical syllable*
Nom	λέγοντες	
Gen		λεγόντων
Dat		λεγόντεσσι (Aeolic), λεγόντοις (North-West),
		λεγόντασσι (Heraclean)
Acc	λέγοντας	

[12]Heraclean participles seem to have borrowed their suffix *-ασσι* from the *verbum existentiae* ἔντασσι. This form in its turn can be explained from ἐντ- (ἔντες = Attic ὄντες) plus +*ασσι. Historically, PIE *sn̥t + si should develop through *satsi* (cf. Sanskrit locative *satsu*) to *assi*. This form was found indistinctive, or rather the paradigm (*éntes, éntōn, ássi, éntas*) exhibited an unusual allomorphy *ent* ∼ *as*, and the dialect innovated by extending the formative *-nt-* to the Dat. Pl. This solution is found already in Schwyzer (567).

The result of this process is thus identical with the strategy used for sorting the direct vs. indirect case forms of monosyllabic nouns. Here in both numbers the accentual mobility (accent on root in Nom, Acc vs. accent on postradical syllable in Gen, Dat) enhances the morphological contrast between direct and indirect cases.[13] It may be noted that the extension of -οις to the quantifier πάντες does not result in accentual mobility—another reason, perhaps, for the tenacity of πᾶσι . On the other hand, its extension to λέγοντες does. Thus even paradigmatic pressure of the pattern *direct : indirect case = radical syllable accented : postradical syllable accented* could contribute to the diffusion of -οις with participles.

Linguistic diffusion, i.e., the diffusion from one phonological environment to another, has been studied mostly for phonology. There are some good examples in Ancient Greek phonology. For instance the frication of voiced stops in Egyptian Koine can be studied along these lines if we examine carefully the data collected by Gignac (1976) and Teodorsson (1977). Teodorsson (253) presents evidence for rather an early rephonologization of $g > \gamma$ in Ptolemaic times between 250 and 150 B.C. (according to Gignac this process started later, in the 1st century A.D.). However, its spread to other linguistic environments was definitely slow—the rephonologization of the voiced labial stop $b > \beta$ was accomplished in Greco-Roman times during the 1st to 3rd centuries A.D. and that of $d > ð$ even later in Byzantine times starting in the 4th century A.D. See Gignac (70–76, 178).

It is more difficult to find some evidence for the spread of frication in the case of aspirates. We may assume that Hellenistic Koine could have developed fricative allophones [f], [θ], [x] of aspirate phonemes /pʰ/, /tʰ/, /kʰ/ in certain environments such as clusters /pʰtʰ/ and /kʰtʰ/, and after a sibilant /s/. Especially, the environment after the only voiceless fricative Ancient Greek possessed could be the most favorable one for the frication

$$s\begin{Bmatrix} p^h \\ t^h \\ k^h \end{Bmatrix} \rightarrow s\begin{Bmatrix} f \\ \theta \\ x \end{Bmatrix}$$

[13]It is fairly well known that the strategy of accentual mobility in sorting direct and indirect cases was inherited from PIE times as the agreement with the situation in Vedic Sanskrit may demonstrate. Here, however, monosyllabic nouns show this behaviour only in the singular:
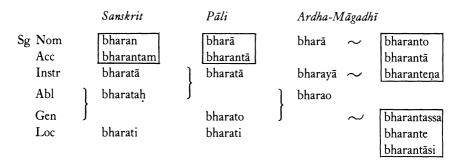
Sg. Nom	pāt	Pl. pā́das
Acc	pā́dam	padás (!)
Instr	padā́	padbhís
Gen	padás	padā́m
etc.		etc.

The North-West Greek dialects extend this strategy from the singular to the plural. My theory of radical-postradical accentual alternation rivals that of Kiparsky. For details see Bubeník, *Phonological Interpretation* 167–169.

before the process moved to another environment, most notably before vowels.

Inscriptional evidence for the frication can only be indirect, since there was no grapheme for a voiceless interdental fricative [θ], so far as this sound only occurred as an allophone of an aspirate /tʰ/. However, the spellings with double σσ found in Late Elean (4th to 2nd century B.C.) can be interpreted as showing the fricative value of the second sound, since the phonic value of the grapheme Σ was the closest one to the interdental fricative [θ].[14]

Linguistic diffusion on the level of morphology, i.e., the gradual spread of certain grammatical formatives from one morphological environment to another, can best be studied in languages possessing rich nominal or verbal morphology. As a paradigm example we may mention the evolution of the present participle from Old to Middle Aryan (the former represented by Sanskrit, the latter by Pāli and Ardha-Māgadhī). While Ancient Greek or Latin show consistently the typical participial formative -ont- (Greek) or -ent- (Latin) through the whole singular or plural paradigm, Sanskrit preserved a more original state of matters. The formative -ant- appears only in Nom and Acc Sg and Nom Pl, whereas the rest of the paradigm displays the formative -at- (< ṇt). As is well-known, the reason for this distribution is the recession of the accent to the ending, as still observable with certain verbs in Vedic (e.g., adánt-am, Acc Sg "eating" versus adat-ā́, Instr Sg < *edónt-m̥ versus *edṇt-ó). These original ablaut relationships are still well preserved in the singular subparadigm in Pāli, but Ardha-Māgadhī shows an almost complete spread of the formative -ant- in the singular (with the exception of the dative). The following chart may exemplify this diffusion:

	Sanskrit	*Pāli*	*Ardha-Māgadhī*	
Sg Nom	bharan	bharā	bharā ～	bharanto
Acc	bharantam	bharantā		bharantā
Instr	bharatā	bharatā	bharayā ～	bharanteṇa
Abl	bharataḥ		bharao	
Gen		bharato	～	bharantassa
Loc	bharati	bharati		bharante
				bharantāsi

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[14]A counter-hypothesis might be a complete assimilation in the manner of articulation: stʰ → ss, which may be ruled out on the basis of other data from Elean and West Greek dialects showing a dissimilation in the matter of articulation: stʰ → st, since these two processes would be counter-acting. See Bubeník, *Phonological Interpretation* 106–107 for details.

Plural forms show the gradual diffusion of the formative -ant- even more conspicuously. In Sanskrit it appears only in the nominative, in Pāli it spreads to the accusative, instrumental-ablative, and locative, and in Ardha-Māgadhī the diffusion is completed by affecting the remaining genitive:

	Sanskrit	Pāli	Ardha-Māgadhī
Pl Nom	bharantaḥ	bharanto	bharanto
Acc	bharataḥ	bharanto	bharante
Instr	bharadbhiḥ	bharantehi	bharantehī
Abl	bharadbhyaḥ	bharantehi	bharantehīto
Gem	bharatām	bharatā	bharantāṇā
Loc	bharatsu	bharantesu	bharantesū

It is an entirely legitimate question to ask why the diffusion of the formative -ant- stopped short of appearing in the Abl Sg in Ardha-Māgadhī (*bharanto) or Gen Pl in Pāli (*bharantā). The reason seems to be a homonymic clash with Nom Sg in Ardha-Māgadhī and with Acc Sg in Pāli.[15]

Evidence for the linguistic diffusion on the level of morphology in Ancient Greek can be construed on the basis of statistical analysis of the West Greek and Koine forms of *i*-stems. In the West Greek dialects in prehellenistic times the normal type of declension is that with thematic vowel *i* throughout. On the other hand, the Attic-Ionic dialect (and Hellenistic Koine) has the vowel *i* only in Nom and Acc Sg (and Voc).

West Greek		Koine (Attic-Ionic)	
πόλις	πόλιες	πόλις	πόλεις
πόλιος	πόλιων	πόλεως	πόλεων
πόλῑ	πόλισι	πόλει	πόλεσι
πόλιν	πόλῑς (Argolic)	πόλιν	πόλεις
	πόλινς (Cretan)		
	πόλιας		

We have to keep in mind that in Attic-Ionic /ē/ was raised to *ī* in the 4th century B.C. This historical change is of considerable importance for our further discussion. To avoid the common confusion regarding the

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[15]At the present, I cannot answer the question of how the speakers of Ardha-Māgadhī accomodated in their subconscious minds the more distinct innovative forms in -*nt*- with historical relics (such as Nom Sg *bharā* vs. *bharanto*, Instr Sg *bharayā* vs. *bharanteṇa*). Deeper sociolinguistically oriented research might reveal some non-grammatical patterns (such as education or age of the writer, etc.).

phonemic value of ει (see Allen 68–69) let us phonemicize the Classical Attic-Ionic forms (i.e., before the raising $\bar{e}$ → $\bar{\iota}$ took place) and the Hellenistic forms:

Classical Attic-Ionic		Hellenistic Koine	
/pólis/	/pólēs/	/pólis/	/pólīs/
/póleōs/	/póleōn/	/póleōs/	/póleōn/
/pólę̄/	/pólesi/	/pólī/	/pólesi/
/pólin/	/pólēs/	/pólin/	/pólīs/

Contrasted with the West Greek paradigm, the Hellenistic paradigm is more complex in its distribution of allomorphs of the stem: /pólis/ ~ /póle/. In the singular subparadigm /póle/ appears in Gen Sg, in the plural in both indirect cases (Gen and Dat). It is of interest to note that Hellenistic Dat Sg πόλει /pólī/ is now homophonous with West Greek πόλι /pólī/. This might explain why the Hellenistic form πόλει is the first to make its appearance in West Greek dialectal inscriptions (cf. Buck 91). In Gen Sg there appeared a compromise form between dialectal πόλιος and Attic πόλεως, namely πόλεος which has the thematic vowel of Attic but the dialectal suffix -ος. Some scribes switch from their native πόλεος to Hellenistic πόλεως, e.g.

IG 5.1.1111 (Geronthrae, 2nd[a])	πόλεος (2x) vs. διαλάμψεως (1x)	
IG 5.1.1226 (Tainaron, 2nd/1st[a])	πόλεος (4x) vs. πόλεως	(1x)
IG 5.1.1498 (? , 2nd[a])	πόλεος (2x) vs. πόλεως	(3x)

Another consequence of the coexistence of these two systems in the speech of bidialectal speakers would be the choice they had between the more prestigious Attic-Ionic system with the /i/ ~ /e/ alternation in post-radical syllable and their native system with /i/ through the whole paradigm. Thus the Messenian scribe of IG 5.2.419 in the 3rd century B.C. had thematic vowel i in Dat Sg πόλει but e in Dat Pl πολέοις (2x). The scribe of the Andania inscription (IG 5.1.1390) vacillates between thematic i and e in the following manner: πόλιος (4x), ἰδιώτιες (1x), καταλύσει (1x), παναγύρει (2x) vs. πόλεος (3x). As far as Gen Sg is concerned we know from Modern Greek (Katharevousa) that the form with thematic e ultimately won. And indeed our statistics for πόλιος vs. πόλεος / πόλεως from the last pre-Christian centuries already indicate this trend:

	3rd[a]	2nd[a]	1st[a]	late
Laconian		8:10	∅:16	
Messenian	∅:2	1:∅	8:14	
Cretan[16]	3:1	35:34		1:3

[16]Cretan statistics are adopted from Kieckers (89–90).

Buck (91) suggests that the spread of Attic forms within a grammatical system of *i*-stems was gradual:

> In general, the Attic datives -ει and -εσι, are the first to be adopted, next the nom.-acc. pl. -εις, and lastly the gen. sg. -εως. Thus in the later inscriptions of many dialects it is common to find gen. sg. -ιος, but dat. sg. -ει.

As mentioned above, in Hellenistic times the phonemic value of digraph EI was /ī/. This means that we have to understand the above statement only as pertaining to written *not* to spoken forms of Greek. Someone whose speech contained the form /polī/ had the choice of writing in either way—πόλι (= the old spelling) and πόλει (= the innovative Hellenistic spelling). The new way of spelling /ī/ was by digraph EI not by simple I any more. Only if it can be proven that with the spelling EI the scribes were attempting to capture the classical pronunciation /ē/ would Buck's statement be referring to the spoken language and the coexistence of πόλει and πόλιος in later inscriptions be indicative of the internal diffusion of Attic forms starting from Dat Sg.

The way in which variability can best be represented in linguistic theory is still a contentious issue. Chambers and Trudgill (149) propose that variables be arranged on a scalogram, a matrix which presents an implicational array:

	(X)	(Y)
Lect 1	πόλῑ	πόλιος
Lect 2	πόλει	πόλιος
Lect 3	πόλει	πόλεως

That is, for the two variables (X) πόλῑ and (Y) πόλιος which occurred side by side in Laconian it follows that πόλῑ implies πόλιος, but not vice versa. I.e., some speakers of Laconian in the 2nd century B.C. had both dialectal forms, Dat Sg πόλῑ and Gen Sg πόλιος, or dialectal Gen Sg πόλιος and Koine Dat Sg πόλει /polē/, but none had dialectal Dat Sg πόλῑ and Koine Gen Sg πόλεως. Numerous documents demonstrate that the speaker who had πόλῑ also had πόλιος, but not vice versa. For instance, a public (proxeny) decree from Epidauros Limera from the 2nd century B.C. (*IG* 5.1.962) has 3x πόλει and (unpredictably) 4x πόλιος; on the other hand, a public (proxeny) decree from Geronthrae from the 2nd century B.C. (*IG* 5.1.1111) has 2x πόλῑ and (predictably) πόλιος and κρίσιος.

This article has been intended as a methodological pilot study into the feasibility of introducing a framework of contemporary sociolinguistics into an area of a dead language. Spatial variation in Ancient Greek has been treated for more than a century by a number of eminent scholars (J.

Wackernagel, A. Thumb, E. Kieckers, E. Schwyzer, A. Meillet, A. Scherer, M. Lejeune, C. D. Buck, and others). Their main interest lay in a systematic presentation of phonological and morphological features of individual regional dialects in time and space. There has always been a concern about the spatial diffusion of dialectal forms (location of isoglosses, attempts to define a focus of the innovation, transition zones and relic areas, etc.). Given their historical orientation Ancient Greek dialectologists were also interested in investigating the routes of linguistic innovations and in discussing problems such as the relative age of two variants, their historical origins, etc. The careful perusal of these works will reveal that Ancient Greek dialectology had always a potent built-in sociolinguistic dimension. Many of these ideas were presented only impressionistically, without support from exact statistical sources, and without any precision and explicitness.

It was one of the aims of this paper to formulate these ideas explicitly by means of current linguistic terminology. Contemporary dialectologists and sociolinguists would maintain that the spatial diffusion of linguistic innovations often constitutes only a kind of reflection of three other types of diffusion: from one word to another word (lexical diffusion); from one linguistic environment to another (linguistic diffusion); and from one social group to another (sociolinguistic diffusion).

While the contemporary research dealing with linguistic diffusion concentrated on the level of phonology (i.e., the diffusion from one phonological environment to another) my paper dealt with a linguistic diffusion on the level of morphology (i.e., the gradual spread of "Aetolian" Dat Pl -οις from one morphological environment to another). It was argued that paradigmatic strategies such as the removal of intraparadigmatic allomorphy and paradigmatic iconicity represented a major motivation for the innovation. Similar cases have rarely been discussed by contemporary sociolinguistics. Thus it is exactly here, I believe, that the scholars dealing with classical inflected languages, possessing rich nominal and verbal morphology, have a special contribution to make to contemporary theoretical framework of diachronic sociolinguistics.

Manumissions from Delphi display a number of phonological and morphological features which are not found (or are less frequent) in contemporary (and older) proxeny and civic decrees. Since the former category of documents was written in a less formal style than that of public documents, we may assume that these particular features might have been even more common in the spoken language. To Lejeune's study (1940) belongs the merit of asking a number of important questions regarding their social distribution. He concluded tentatively that certain phenomena (such as Dat Sg of o-stems in -οι, thematic plural μάρτυροι 3rd Pl Optative in -οιν) could have belonged to the speech of lower social classes in Aetolia and

Western Locris. It would be premature for me to claim that the extension of thematic Dat Pl in -οις to athematic nouns and participles was spearheaded or propagated by the lower social classes, but I hope to return to this problem in my forthcoming large-scale work on the total corpus of Hellenistic inscriptions in the framework of the social history of Hellenistic and Roman Greece. At this point we have to be satisfied with the finding that the spread of "Aetolian" -οις in Delphi was a gradual phenomenon controlled by various morpholexical classes, which—with the exception of a quantifier πάντες—appears to have completed its course in both public and private documents by the 2nd century B.C.

Summing up, I believe that this paper demonstrates the necessity of injecting fresh strength into the body of Ancient Greek dialectology from modern linguistics and that it goes some way towards establishing a necessary common basis for both linguists and philologists to begin developing more sophisticated methods than have hitherto been available for describing variation and change in Ancient Greek.

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