

und wo zum ersten Mal die neue substantivische Wende vollzogen ist, die „Abstraktion“ *φρόνησις*, die dann „das Denken“ zum Gegenstand der Philosophie machen konnte.

Immerhin geben die wenigen uns erhaltenen Belege wertvolle Hinweise. Für Heraklit ist die Phronesis der Weg zum „gemeinsamen“ Ziel, d. h. zur Wahrheit, die für alle Menschen verbindlich ist, denn er sagt (fr. 2): „Man soll dem Gemeinsamen folgen. Obwohl aber der Logos gemeinsam ist, leben die Meisten, als hätten sie eine eigene *Phronesis*,“ Danach ist auch fr. 113 zu verstehen: „Gemeinsam ist allen das *φρονεῖν*.“ So nennt er fr. 112 das *σωφρονεῖν* die höchste Tugend und die *sophia* besteht ihm darin, das Wahre zu sagen und zu tun, indem man auf die Natur „hinhört“. Dies „Folgen“ und „Hinhören“ ist das tätige Bemühen um verborgene Wahrheit. Dies Neue macht die Philosophie bewußt⁶³). Von solchem *φρονεῖν* sprechen Parmenides (fr. 16,2) und Empedokles (108,2; 110,10 auch *φρόνησις*); Sokrates und Platon entwickeln es weiter und vollends bei Aristoteles und in der Stoa wird die *Phronesis* zentrales Thema der Selbstinterpretation des Menschen.

The Accent of Adverbs in -θεν: A Historical Analysis

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1. No historical explanation for the anomalous and apparently haphazard accentual pattern of Greek adverbs in -θεν has ever been successfully proposed. In an attempt to explain the accent of those in -όθεν, and similar case forms in -όφι, derived from barytone *o*-stems, Jerzy Kuryłowicz has remarked that “la limitation de l’accent [i.e., the fact that it can stand no farther leftward than the *o*] paraît . . . conditionnée par la voyelle „de composition“ ou „de liaison“ -o-, cf. *κοτυληδον-ό-φι* < *κοτυληδών*, *ἔσχαρ-ό-φι* (pour **ἔσχάρηφι*).”¹) However, this does not explain *οἴκοθεν* and similar forms, nor does it in any case provide more than a general and rather vague idea of the historical developments that might be

⁶³) Weiteres über diesen „Weg“ zur Erkenntnis s. Entd.⁴ 219, zumal Anm. 18 (S. 316).

¹) Jerzy Kuryłowicz, *L’Accentuation des langues indo-européennes*, 2nd ed., Prace Językoznawcze, 17 (Wrocław: Polska Akademia Nauk, 1958), p. 138.

involved. Michel Lejeune, the only scholar who has dealt with the problem in detail²), is of the opinion that "l'accentuation des dérivés en *-θεν* pose un problème, dont la grammaire comparée ne peut fournir la solution."³)

I believe, however, that a careful use of the principles of historical linguistics, traditional and modern, can explain the accentual pattern of these adverbs in terms of their history. In this article I shall present the facts concerning the formation of adverbs in *-θεν* from nominal stems⁴), and I shall offer a historical explanation for those facts. The conclusions I shall reach will be as valid for adverbs in *-τι* and *-σε* as for those in *-θεν*, since all three sets of adverbs exhibit the same accentual pattern. In order to keep my investigation manageable, I shall exclude from consideration all examples of these adverbs occurring in dialects not belonging to the Attic-Ionic group⁵).

2. The formation of adverbs in *-θεν* from nominal stems in the Attic-Ionic dialects can be described by the following informal rules⁶):

1. The suffix is added directly to \bar{a}/η -stems, stems in $-\bar{a}$ exhibiting the stem vowel \bar{a}/η (as in the oblique cases of the singular); the accent conforms to the general accent rules, but no shift of accent not caused by these rules occurs (e.g., *ἰθάκηθεν*).
2. The suffix is added directly to *o*-stems; if the accent does not already fall on the stem vowel *o*, it is shifted to that vowel (e.g., *ποντιόθεν* from *πόντο-*). Exceptions:
 - a) The accent of *οἴκο-*, *ἄλλο-*, and *ἕκαστο-* is not shifted to the stem vowel (though of course it conforms to the general accent rules; e.g., *οἴκοθεν*).

²) Michel Lejeune, *Les Adverbes grecs en -θεν*, Publications de l'Université de Bordeaux, No. 3 (Bordeaux: Delmas, 1939), pp. 60–61.

³) Ibid., p. 60.

⁴) I.e., noun, adjective, and pronoun stems. The suffix *-θεν* is also affixed to adverbs, but these forms present special problems beyond the scope of the present article.

⁵) In fact, the rules for forming these adverbs are rather different in each of the different dialect groups, and each group would have to be dealt with separately.

⁶) See Lejeune, *Adverbes*, pp. 57–61, 93–106. No Attic-Ionic dialect, of course, exhibits all these forms, so the rules given are a composite; but no Attic-Ionic dialect violates these rules, either, except as noted below.

- b) Compounds of indefinite pronominal adverbs formed from the stem *πο-* show recessive accent (e.g., *μήποθεν*), except for *ὀ(π)πόθεν* and its compounds.
- c) The stem vowel of comparatives in *-τερο-* is lengthened to *ω*, and the accent is not shifted to this vowel (which never bears it in other forms derived from these stems; e.g., *ἀμφοτέρωθεν*).
3. The linking vowel *-ο-* is inserted between a stem of any other type and the suffix; this linking vowel is always accented (e.g., *λειμωνόθεν* from *λειμών-*). Exceptions:
- a) *πάντ-* retains the accent on the stem (*πάντοθεν*).
- b) The suffix is added directly to the pronominal stems *ἐμέ-*, *σέ-*, *ἐ-* (e.g., *ἐμέθεν*).
- c) There are a number of epigraphical Eretrian demotics in *-εϋ-θεν* which may or may not be exceptions to this rule; the shape of the stems from which they were formed is not certainly known⁷⁾.

There are a number of formations which these rules do not account for; these are mainly analogical formations based on the nominatives of third declension nouns (e.g., *ἐρεβόθεν*, *ἠῶθεν*) and apparent "crossovers" between the *ο-*stems and the *ᾱ/η-*stems⁸⁾. These forms are irrelevant to the problem at hand, and I shall consequently omit them from consideration. I shall likewise omit to consider the exceptions mentioned under 2(b) above, which obey a different and well-understood set of accent rules⁹⁾; the forms mentioned under 3(b), which are of no accentual interest whatsoever; and those mentioned under 3(c), about which too little is known to permit anything definite to be said. Finally, I should note that although there appear to be a number of further exceptions to rule 2 in the Kretschmer-Locker *Rückläufiges Wörterbuch*¹⁰⁾, inspection of the texts cited for these forms in the Liddell-Scott lexicon¹¹⁾ reveals them to be either dialect forms (see above) or misinterpretations of the entries in the latter lexicon (on which Kretschmer-Locker is based)¹²⁾.

3. Although Lejeune despairs of providing a complete historical explanation for the accentual complexities of these data (see section

⁷⁾ Lejeune, *Adverbes*, pp. 103–104.

⁸⁾ See Lejeune, *Adverbes*, pp. 59, 99–103.

⁹⁾ Namely, the rules for indefinite pronominals.

¹⁰⁾ Paul Kretschmer and Ernst Locker, *Rückläufiges Wörterbuch der griechischen Sprache*, 2nd ed. (Göttingen: Vandenhoeck und Ruprecht, 1963).

¹¹⁾ Henry George Liddell and Robert Scott, *A Greek-English Lexicon*, 9th ed. (Oxford: Oxford University Press, 1948).

¹²⁾ See, e.g., *Σικωνόθε, ἄντροθε, οἶοθι, κήροθεν, ἴποθεν*.

1), he does make a number of suggestions which it may be profitable to review here. He is chiefly concerned with explaining why barytone *o*-stems form adverbs in *-όθεν* instead of *-οθεν*. He speculates that the termination *-όθεν* may have spread as a unit from one or more oxytone *o*-stems (e.g., *οὐρανός* : *οὐρανόθεν*), or from a consonant stem or stems (e.g., *πατήρ* : *πατρόθεν*), or may even have been created by analogy with case forms in *-όφι*; any of these hypotheses would explain the accent shift to some extent, but Lejeune sees no concrete evidence for any of them¹³). He considers the possibility that *-όθεν* spread from pronominal stems (e.g., *πόθεν*, *αὐτόθεν*), and that *ā/η*-stems were not affected because there are no pronominal adverbs in *-āθεν* or *-ηθεν*; but he also notes that *πάντοθεν* and *ἄλλοθεν*, which are derived from pronominal stems, do not show a rightward accent shift (cf. *πάντων*, *ἄλλος*), and further that *τουτόθεν* and a few other pronominal adverbs must themselves be explained by analogy¹⁴). He concludes that “il semble donc que les adverbes issus de pronoms aient pu jouer un certain rôle dans une normalisation, dont les circonstances précises restent dans l’ombre.”¹⁵) Of only one point does he seem reasonably sure: the accent of *οἰκοθεν* and *οἰκοθι*, the only adverbs with an unaccented stem vowel derived from an *o*-stem *noun*, “s’explique sans doute par l’analogie de (*F*)*οἰκαδε*, très usuel chez Homère (75 exemples), alors que (*F*)*οἰκοθεν* et (*F*)*οἰκοθι* qui s’y opposent sont attestés dans les deux poèmes l’un cinq fois, et l’autre quatre.”¹⁶) Yet it is on precisely this point that I feel most strongly compelled to disagree with Lejeune, for the following reason.

4. It is a generally accepted maxim of historical linguistics that forms frequently used in normal speech tend most strongly to resist morphological change. It should follow from this that a non-productive paradigm (i.e., a paradigm according to which no new forms can be created) followed by a small minority of the lexemes of a syntactic class, which lexemes are nevertheless frequently used, is likely to be the relic of an old paradigm which was once more widespread and *may* once have been productive. Examples in the languages of the world are fairly numerous and easy to find; one need look no further than the rare English plurals in *-en*, the

¹³) Lejeune, *Adverbes*, p. 61.

¹⁴) *Ibid.*, p. 61.

¹⁵) *Ibid.*, p. 61.

¹⁶) *Ibid.*, p. 57.

French verbs in *-oir*, or the Modern Greek active aorists in *-κα*¹⁷⁾ for relic paradigms which are known to have been widespread and productive in earlier times.

The situation observed in the case of *οἰκοθεν*, *ἄλλοθεν*, and *ἐκάστοθεν* (see section 2, rule 2(a)) is precisely similar. These are the only adverbs in *-θεν* formed from *o*-stems that do not have an accent on the stem vowel, and they constitute a closed set: no new adverbs in *-θεν* showing this accentual pattern can be derived from *o*-stems. But these few adverbs are relatively common forms. The first two (and the related forms *οἰκοθι*, *ἄλλοθι*, *ἄλλοσε*; see section 1) are among the more frequently attested adverbs of this type in Homer. What is more important, all three must have been common in everyday speech simply because of their meanings; people are likely to use words with basic, general meanings like “from home”, “from elsewhere”, and “from each side” more often than words meaning, for example, “from the sea”, “from the plain”, or “from Corinth”¹⁸⁾. According to the principle enunciated above, it is therefore likely that we see in *οἰκοθεν* and its fellows the relic of an old paradigm, which was originally more widespread and which may once have been productive.

¹⁷⁾ These were originally perfects, of course; the perfect fell together with the aorist in mediaeval Greek, and the Modern Greek perfect is a new compound formation.

¹⁸⁾ The ancient Greek grammarian Herodian noticed this semantic peculiarity of adverbs in (unaccented) *-οθεν*, and used it to explain their accentual peculiarities. Cf. scholion A to *Iliad* B 75 (for Herodian’s authorship see Hartmut Erbse, *Beiträge zur Überlieferung der Iliasscholien*, *Zetemata*, 24 [Munich: C. H. Beck, 1960], p. 346): τὰ γὰρ εἰς *θεν* λήγοντα ἐπιρρήματα, ἔχοντα πρὸ τοῦ τέλους τὸ ὄ μόνον . . . παρωξύνετο . . . ταῦτα δὲ προπαρωξύνετο, λέγω δὲ τὸ ἄλλοθεν πάντοθεν οἰκοθεν, καθότι ἀόριστον καὶ κοινήν τόπον σημασίαν ἀναδέχεται. (*Ἐκάστοθεν* is mentioned in scholion A to *Iliad* N 28; for *πάντοθεν* see section 6 below. I am grateful to Professor Erbse for pointing out both these scholia to me.) A similar but less well developed explanation is found in Lentz’s text of Herodian’s *Καθολικὴ προσῳδία* (1, 500, 4–13; cf. Erbse, loc. cit.). These theories, of course, provide no real explanation of the phenomenon; but it should be noted that the semantic pattern that Herodian observed is *exactly* that which we should expect to result from such a development as I propose.

The necessity of taking meaning into account, rather than merely counting instances in the epics, is made clear by consideration of *οὐρανόθεν* “from heaven”. It is the most common adverb in *-θεν* in Homer; but this is because it is often appropriate to the action of the poems, and its frequency in them obviously discloses nothing about its frequency in actual speech.

It is only natural to ask whether there is any way we can determine whether this old paradigm actually *was* productive. From the following considerations we can be certain that it was. If *δαίτηθεν* is formed from *δαίτη-* and *κλισίηθεν* from *κλισίη-* without any shift of accent, we should not be surprised to learn that *οἴκοθεν* is likewise formed from *οἴκο-* without an accent shift. This is because there is *no regular accent rule* that would shift the accent to the penultimate syllable in any of these cases. But this means that the derivation of adverbs in *-όθεν* from barytone *ο*-stems (*ποντόθεν* from *πόντο-*, *Λεσβόθεν* from *Λέσβο-*, *Τλιόθεν* from *Τλιο-*, *ἰππόθεν* from *ἰππο-*, etc.) will involve an additional rule¹⁹), a special rule which does not apply to Greek words or even Greek adverbs in general and in which “*-θεν*” and “*ο*-stems” must be specifically mentioned. We have no evidence that this rule was inherited from Proto-Indo-European; therefore we must assume that it was added to the grammar of Greek at some particular time. We might suggest that it was added when adverbs in *-θεν* first began to be formed from *ο*-stems; but then how will we explain *οἴκοθεν*, *ἄλλοθεν*, and *ἐκάστοθεν*, which, we have argued, must constitute the relic of an older paradigm? Clearly, we must suppose that the rule in question was added to the grammar of Greek at some time when this old paradigm was already in use. Since there is no evidence that the suffix *-θεν* was inherited from Proto-Indo-European²⁰), we must suppose that at some time during the history of Greek (before the adoption of the abovementioned rule) *οἴκοθεν*, *ἄλλοθεν*, and *ἐκάστοθεν* were formed for the first time according to the paradigm which they still follow; and in so saying we have asserted that this paradigm was once productive in Greek.

It thus appears that there was a period during the history of Greek during which all adverbs in *-θεν* derived from *ο*-stems were derived without any unusual shift of accent, and during which this was the only way in which new adverbs in *-θεν* could be formed from *ο*-stems. This period, however, was prehistoric; in historic Greek the situation is very different. Already in Homer most adverbs in *-θεν* derived from *ο*-stems are subject to an additional rule—the one mentioned above—which (apparently) shifts the

¹⁹) For a thorough explanation and justification of the use of the concept “grammatical rule” in historical linguistics, see Paul Kiparsky, “À propos de l’histoire de l’accentuation grecque”, *Langages*, 8 (1967), 73–93.

²⁰) See Lejeune, *Adverbes*, pp. 251–257, 386–396 for an exhaustive treatment of this question.

accent to the stem vowel *o* if it does not already fall there. The only adverbs of this type which do not follow the rule are *οἰκοθεν*, *ἄλλοθεν*, and *ἐκάστοθεν*; from the point of view of historic Greek they are “exceptions” to the rule, but in reality it is, as we have seen, extremely likely that they are survivals from an earlier period in which the rule did not exist. We must now try to reconstruct how this rule came into existence and how it developed historically.

5. To begin with, it must be emphatically stated that while new phonological rules (“sound shifts”) usually affect all the words of a language more or less equally, new morphological rules seldom do. Morphological rules typically arise within a single morphologically defined part of a single syntactic class of words, and then spread outwards to affect other parts of this same syntactic class. Moreover, this spread is usually slow; the rule spreads to one word at a time, and for each word there is typically a period of uncertainty during which the rule may or may not affect that word. A case in point is the English verb *beseech*. It is not frequently used in normal speech (in fact, it is almost obsolete); the average speaker of English is therefore uncertain how to form its past tense. Historically, of course, the past tense of this verb is *besought*; but one now hears *beseched* as well, and this latter form has begun to find its way into English dictionaries. In terms of grammatical rules, what is happening is that the rule traditionally stated “form the past tense of verbs by adding *-ed*”, the ancestor of which first arose in a particular class of derivative verbs in Proto-Germanic, is slowly spreading in Modern English, one word at a time. It has spread to the lexeme *beseech*, and that lexeme is now in a period of uncertainty during which it is optionally subject to the rule. If this process continues unhindered, we can anticipate that in the future *besought* will become obsolete, and *beseched* will be the normal past tense of *beseech*.

The rule accounting for the formation of adverbs in *-όθεν* from barytone *o*-stems is likewise a morphological rule, because in it the morphological element “*-θεν*” and the morphological class “*o*-stems” must be mentioned (see section 4). We must therefore suppose that its historical development was of the type outlined in the preceding paragraph. It must have arisen in a single morphologically defined part of the syntactic class which includes adverbs in *-θεν*, and it must have spread slowly, word by word, until most adverbs in *-θεν* derived from *o*-stems were subject to it. Only a few forms—*οἰκοθεν*,

ἄλλοθεν, and *ἐκάστοθεν*—resisted this spread; and they were able to resist it only because they were common in everyday speech. Elucidating the history of this rule will consequently mean two things: determining in which group of words it arose, and tracing its spread.

6. Before we can do this, however, we must determine the exact form of the rule with which we are dealing; for its form is likely to have some bearing on the question of where it is most likely to have arisen. And this cannot be done unless we have a general framework of rules for Greek accent within which to work. The system presented in Paul Kiparsky's article "The Inflectional Accent in Indo-European"²¹) seems to me to be the most illuminating, and I shall therefore use it as the basis for my analysis²²).

Kiparsky divides noun and adjective forms into three parts, the root, the stem vowel, and the case suffix. The so-called vowel declensions are composed of nominals exhibiting all three parts, but nominals of the so-called consonant declension (the third declension) lack a stem vowel. Independent of declensional class, nominals are divided into two types, those with an accent inherent on the root and those without such an accent. Inherent root accent appears throughout the paradigms of those nominals that possess it, subject to the general accent rules; in the paradigms of those that do not have this kind of accent, the accent automatically falls on the mora preceding the case suffix in the direct cases (nominative, accusative, and vocative), but on the mora following the root in the oblique cases (genitive and dative). If no stem vowel is present, the rule governing the accent of stems without inherent root accent will cause the accent to fall on the last mora of the root in the direct cases, but on the first mora of the case suffix in the oblique cases; if a stem vowel is present, the rule will cause the accent to fall on some mora of that vowel in all the cases. Looked at from the other direction, this means that nominals which apparently show a fixed accent on the stem vowel actually have no accent of their own at all. The accent on the stem vowel is merely the result of the general rule that assigns accent to otherwise unaccented nominals, and the fact that in these cases the accent looks like a

²¹) *Language*, 49 (1973), 796–805; the following paragraph summarizes the relevant parts of the system therein presented.

²²) Alan Sommerstein's analysis (*The Sound Pattern of Ancient Greek*, Publications of the Philological Society, 23 [Oxford: Blackwell, 1973], pp. 122–179) is not as useful, because it allows fewer widely applicable morphological rules.

fixed part of the word is simply an accident caused by the interaction of the rule with the stem vowel²³).

The fact that the accent of *ποιτόθεν* falls on the stem vowel suggests that this word has no inherent root accent. But we know that the stem *πόντο-* normally does have inherent root accent because such an accent is observable in the regular case forms of the word (*πόντος*, *πόντου*, etc.). This suggests that it would be possible to derive *ποιτόθεν* from *πόντο-* by *erasing the inherent root accent* of this stem when we add *-θεν*, and then letting the rule that assigns accent to unaccented nominal forms assign this word an accent on the stem vowel. If this is to work, two conditions must be met. First of all, *-θεν* must belong to the same morphological class as the case suffixes, so that the rule in question will apply to adverbs in *-θεν* as well as to case forms. There can be no reasonable objection to this, since *-θεν* obviously occupies the same place as a case suffix in the word, has a quasi-casual meaning, and in productive use can be affixed only to the same types of stem as can a case suffix²⁴). Secondly, the rule erasing the inherent root accent of the stem must precede in the ordering of the grammar the rule which assigns accent to otherwise unaccented nominals. But it is easy to show that this will happen automatically. The accent-assigning rule operates not on a bare stem, but on an already formed word. Therefore, it must be ordered in the grammar after that point at which the derivation of individual words is completed. But the derivation of words in *-θεν* is not complete until that suffix has been added; and the proposed rule erases the inherent root accent of the stem simultaneously with the addition of this suffix. Hence the erasure will necessarily occur before the accent-assigning rule applies.

With these conditions met, we can state the rule that erases the root accent as follows:

When -θεν is suffixed to an o-stem, any root accent inherent on that stem is erased.

²³) This may seem to be merely a pointless inversion of the statement that the accent is fixed on the stem vowel; but in fact it is preferable to the traditional statement, because it enables us to state a set of accent rules to which all Greek nominals, of whatever declension, are subject. See Kiparsky, "Inflectional Accent", pp. 794–796, 800–803.

²⁴) As noted above, *-θεν* is also affixed to adverbs (*ἐκεῖθεν*, *χαμᾶθεν*, etc.), but this use of *-θεν* is not productive: the list of adverbs in *-θεν* formed from other adverbs is closed, and no new ones can be created.

But in fact this rule is only one part of a more generally applicable rule. Forms in *-φι* derived from *o*-stems also accent the stem vowel; so do forms in *-θεν* and *-φι* derived from consonant stems, in those cases where the linking vowel *-ο-* is inserted between the stem and the suffix (see section 2, rule 3). Thus we have *Ἰλιόφι* from **Ἰλιο-*, *ποντόφι* from *πόντο-*, *δακρυόφι* from *δάκρυ-*²⁵), *κοτυληδονόφι* from *κοτυληδόν-*, *λειμωνόθεν* from *λειμών-*. Moreover, these are the only classes of forms which exhibit the vowel *ο* directly before the endings *-θεν* and *-φι*. On the basis of these data we can therefore formulate the broader rule:

When -θεν or -φι is suffixed to a stem, any root accent inherent on that stem is erased, provided the vowel ο immediately precedes the suffix.

It will be remembered that among the *ο*-stem forms there are three “exceptions” to this rule, actually survivals from a period before the rule existed. There is a similar anomaly among the consonant stems, *πάντοθεν* (stem *πάντ-*). Like *οἰκοθεν*, *ἄλλοθεν*, and *ἐκάστοθεν*, it must have been common in ordinary speech because of its meaning (“from everywhere”); like them it must be a survival from a period before the rule came into play. It thus appears that there was a period in the history of Greek during which adverbs in *-θεν* were derived from *ο*-stems *and* adverbs in *-οθεν* from consonant stems with no erasure of root accent. But that is not all. There are number of forms in *-φι* derived from third declension stems without the linking vowel *-ο-*, namely *ἴφι*, *ναῦφι*, and a number of forms in *-εσφι* (*ᾄχεσφι*, *στήθεσφι*, etc.). This shows that *-φι*, at least, was originally added directly to consonant stems with no linking vowel, a conclusion strongly supported by the evidence of Mycenaean Greek²⁶); we cannot be so sure about *-θεν*, for the only examples of adverbs in *-θεν* derived from similar stems (i.e., semivowel stems and *σ*-stems) either exhibit the linking vowel (e.g., *Διόθεν*) or are analogical formations based on the nominative singular rather than on the basic form of the stem (e.g., *ἡῶθεν*, *ἔρεβόθεν* from *ἡό-*, *ἔρεβες-*, nom. sg. *ἡώς*, *ἔρεβος*). Moreover, none of these forms in *-φι* without the linking vowel is subject to the rule,

²⁵) Or from *δάκρυον*; but the latter has a very restricted distribution in Homer, and may be back-formed from *δάκρυα*. Cf. M. W Haslam in *Glotta* 54.

²⁶) Michel Lejeune, “La Désinence *-φι* en mycénien”, *Mémoires de philologie mycénienne* VIII (Paris: Centre National de la Recherche Scientifique, 1958), pp. 163–167 (= *BSL*, 52 [1956], 192–196).

whereas all the forms exhibiting the linking vowel and all the *o*-stem forms *are* subject to it. This is probably accidental, for the four stems that proved to be exceptions to the rule in the formation of adverbs in *-θεν* happen not to exhibit any forms in *-φι*; but it at least appears possible from the evidence of the attested *φι*-forms that there is some connection between the accent-erasing rule and the linking vowel *-o-*. We must keep this in mind in trying to elucidate the history of the rule.

7. One obvious way to explain the apparent connection between the rule and the linking vowel would be to suggest that the rule first appeared among the *o*-stems. If this were the case, the resulting terminations *-όθεν* and *-όφι* might have spread as units to the consonant stems (cf. Lejeune's suggestion mentioned above, section 3). But *πάντοθεν* cannot be explained by this hypothesis; moreover, it is difficult to see why an accent-erasing rule (or an accent-shifting one, for that matter) should have arisen in a class of stems in which (excepting a few recessive vocatives, and, of course, the forms in question) the accent is fixed throughout the paradigm, subject to the general accent rules. However attractive the idea may have seemed at first, we must conclude that it is both inadequate and unnatural.

A little further investigation reveals that there is another possible source for the linking vowel. Consider first that the stem *παντ-* occurs as the first member of compounds in two forms, *παν-* and *παντο-*; the first form is the only one occurring in the Homeric epics, the second making its first appearances in the Hymns and in Aeschylus. A similar situation prevails in the case of the stem *μέλαν-*: the bare stem occurs as the first member of most of the relevant Homeric compounds; the form *μελανο-* occurs in Homer only in *μελανόχροος*, and does not appear again before the time of Euripides and Aristophanes. What we observe in both these cases is the insertion of a linking vowel, always *-o-*, between the two members of a compound; in each case this procedure is rare or non-existent in the earliest documents, and becomes commoner in later ones. This insertion of a linking vowel has nothing to do with declensional types; the intercalation of some vowel between the two parts of a compound is an obvious way of avoiding awkward combinations of consonants, and the vowel *o* is chosen simply because it is the regular thematic vowel²⁷). The same process was

²⁷) Cf. Latin *-i-* < **-e-* (or possibly **-o-*).

used considerably earlier to separate certain derivational suffixes from consonant stems; already in Homer we find that most adjectives in *-εις* (< **-Fεντς*) formed from consonant stems end in *-ό-εις* (e.g., *νιφόεις*, *αίματόεις*, *ἀστερόεις*), whereas no linking vowel appears before the cognate suffix *-vant/mant-* in Sanskrit and Hittite²⁸). That *-φι* underwent the same sort of development has been amply demonstrated from Mycenaean evidence by Michel Lejeune²⁹), and the same explanation will obviously do equally well for *-θεν*³⁰). The appearance of the linking vowel *-ο-* before *-θεν* and *-φι* has nothing to do, then, with the *ο-* stems; it is best seen as part of a more general process by which consonants belonging to different morphemes are kept from coming into contact. This conclusion, incidentally, also partly explains why there is no *-ο-* between *σ-* stems and *-φι*: there is no need to break up a normal Greek consonant cluster like *σφ*, and the attempt to interpose an *-ο-* would cause difficulties because of the loss of intervocalic *σ* and the subsequent contraction of vowels.

Once the origin of the linking vowel has been accounted for in this fashion, there is nothing to prevent us from suggesting that the accent-erasing rule originated among the consonant stems; in fact we can make a good case for this hypothesis. Consonant stems are at best a marginally productive class in Ancient Greek; while this fact would not lead us to expect that individual members of this class would be unusually susceptible to morphological change, it would create the expectation that the class as a whole and on the average would be more likely to undergo such change than the *ο-* stems or the *ᾱ/η-* stems. This expectation is amply justified by Modern Greek, in which consonant stems have largely been eliminated from the spoken language, while vowel stems have greatly extended their range. In the forms we are investigating, this general susceptibility to change is compounded by the fact that *-θεν* and *-φι* declined steadily in productivity and use throughout historic times (in fact, *-φι* had ceased entirely to be productive by the classical period). We therefore have every reason to suspect that the accent-erasing rule arose among the consonant stem forms in *-θεν* and/or *-φι*.

Better still, there is a likely source for the terminations *-όθεν* and *-όφι* among the consonant stems. All monosyllabic consonant

²⁸) Lejeune, "La Désinence *-φι*", pp. 163–164.

²⁹) Ibid., p. 164.

³⁰) Lejeune (ibid., p. 164) apparently assumes as much.

stems, and several polysyllabic stems in *-ρ*, have no inherent root accent. They bear the accent on the mora preceding the case suffix in the direct cases, and on that following the root in the oblique cases, according to the general rule noted above. Since in most forms of these words there is nothing between the root and the suffix, the accent usually falls on one or the other of these components of the word. But in a form which has a linking vowel inserted between root and suffix, the general accent-assigning rule dictates that the accent must fall on some mora of that linking vowel, whether the form is direct or oblique. We would therefore expect to find *πατρόθεν* derived from *πατερ-* (acc. sg. *πατέρα*), *παρόφι* from the same stem³¹), *Διόθεν* from *Δι-* (acc. sg. *Δία*), and so on.

On the surface these words appear to show an accent shift between the direct cases and the forms in *-θεν* and *-φι*. This is, of course, only an accidental result of the accent-assigning rules, and to treat it as fundamental would be a misinterpretation of the linguistic facts. But such misinterpretations (or rather reinterpretations) are frequently made by the speakers of a language themselves (cf. substandard English *drowned*, or the popular element *-burger*); each reinterpretation amounts to the rewriting of a rule in the grammar, and so reinterpretations cause linguistic change³²). I believe that this is what occurred in the case in question: the speakers of Greek, at some point in their history, came to regard the (regular) accent on the linking vowel before *-θεν* and *-φι* as the result of a special accent-shifting rule. They were able to reinterpret in this way the more easily because the class of stems after which the accented linking vowel appeared was small and unproductive. Once this new rule had become established in their grammar, it began to affect also forms in *-θεν* and *-φι* derived from stems which had inherent root accent, and in which the linking vowel had originally been unaccented; *λειμωνόθεν* was formed from *λειμών-*, *δακρυόφι* from *δάκρυ-*, and so on. The gradual spread of the rule continued, until it affected not only *θεν-* and *φι-* forms derived from consonant stems but most of those derived from *ο-* stems as well. Later generations, however, learning these forms from their elders, would not

³¹) The only relevant example in *-φι*. See A. Morpurgo Davies, "Epigraphical *-φι*", *Glotta*, 47 (1970), 46–54.

³²) Reinterpretations in the lexicon are commonly referred to as "folk etymologies"; morphological reinterpretations have received less attention, but are no less common or important.

necessarily have continued to interpret them as the result of an accent-shifting rule. They would have tried to integrate the rule accounting for the forms in question into the already existing sequence of grammatical rules as neatly and economically as possible, and if this meant completely reformulating the rule they would have done so³³). The only satisfactory way to integrate an accent-shifting rule of this type into the grammar of Greek is by reformulating it as an accent-erasing rule (see section 6)³⁴); it is therefore overwhelmingly likely that this is exactly what the speakers of Greek did. This amounts, of course, to another reinterpretation of the forms in question. Exactly when this reinterpretation occurred is of no importance to our study; but it must have occurred as soon as the accent-shifting rule had spread to a sufficient number of lexemes to make it grammatically uneconomical to continue to employ it in its original form. This accounts for the origin of the accent-erasing rule; it also explains the connection between the linking vowel *-o-* and the rule.

8. This theory contains at least one point that would initially strike almost any Hellenist as improbable. It seems highly unnatural that a pattern characteristic of the unproductive consonant stems should have spread to the numerous and productive *o*-stems; one would normally expect a spread in the opposite direction. In fact, the development I have proposed need not have been unnatural at all, for the following reason. It is well known that the Indo-European ancestor of Greek *-φι* was not affixed to *o*-stems

³³) See Robert King, *Historical Linguistics and Generative Grammar* (Englewood Cliffs, N. J.: Prentice-Hall, 1969), pp. 64–87.

³⁴) Two other analyses have been proposed, but neither is satisfactory. Alan Sommerstein (*Sound Pattern*, p. 132, n. 175) suggests that the internal boundary of, e.g., *ἡπειρόθεν* (from *ἡπειρο-*) be considered identical with the boundary found after augments and prepositional prefixes; such a boundary would prevent the accent from falling more than one syllable to its left. Unfortunately, we cannot do this with, e.g., *δαίτηθεν*; and to have *-θεν* preceded by one sort of boundary after one class of stems and by another sort after another class is obviously unsatisfactory. Paul Kiparsky ("Inflectional Accent", p. 805) apparently suggests that, e.g., *Κόρινθος* (which forms *Κορινθόθεν*) has no inherent root accent, and has the accent on the first syllable in the nominative because it belongs to a small class of inherently unaccented nouns which have recessive accent in the direct cases (ibid., pp. 803–804). But we should then expect a genitive **Κορινθοῦ*; in reality it is *Κορινθου*, and similarly in all such cases. Therefore these words must have inherent root accent; and that necessitates the accent-erasing rule.

in the parent language; this situation can still be observed in the declensional systems of Sanskrit and Lithuanian. Lejeune has shown that the same situation very nearly prevailed in Mycenaean Greek as well. Mycenaean forms in $-pi$ (= $-phi$) derived from o -stems are much less common than one would expect from the frequency of o -stems in general³⁵); Lejeune concludes that "tout se passe comme si $-phi$ était une désinence, au départ, proprement athématique, dont l'extension à la seconde déclinaison . . . en serait encore à ses débuts."³⁶) The Mycenaean evidence represents a stage of the language during which the use of $-phi$ with o -stems was still ill-established, and perhaps only marginally grammatical; it would not be at all unnatural for forms in such a state of flux to be influenced by another paradigm in which analogous forms are better established. In this case the influencing paradigm was that of the consonant stems, which involved the accent-shifting/erasing rule; and it was thus that the rule came to affect o -stems as well.

This accounts for the spread of the rule in connection with $-phi$; it will be noted that it does not do the same for $-theta$. The suffix $-theta$ is not an inheritance from Proto-Indo-European (see section 4, note 20), and there is very little evidence for its existence in Mycenaean Greek; various Mycenaean words have been interpreted as forms in $-theta$, but none of these is really certain³⁷). We thus know next to nothing about the early distribution of $-theta$, and we certainly cannot claim that, like $-phi$, it was not initially used with o -stems. We must explain the spread of our rule to forms in $-theta$ derived from o -stems in some other way. In fact, the best explanation is simple and direct. Once the rule had become established among forms in $-theta$ derived from consonant stems and forms in $-phi$ derived from consonant and o -stems, the combined pressure of these groups could easily have caused its spread to o -stem $theta$ -forms. At any rate, that is the most likely explanation available until we have more data on the early development of $-theta$.

³⁵) Lejeune, "La Désinence $-phi$ ", p. 167.

³⁶) Ibid., p. 167.

³⁷) See P. H. Iliovski, "The Adverbial Suffix $-theta$ in Mycenaean", *Živa Antika*, 9 (1959), 105–128. Emmett L. Bennett, Jr., and A. Morpurgo Davies have expressed similar opinions in personal communications to me. I would like to thank Professor Bennett for valuable bibliographical information on this subject, and Professor Davies for a very illuminating summary of the problem.

9. The historical development proposed above may be summarized as follows. At first *-θεν* and *-φι* were added directly to all sorts of stems without any unusual accent shift. Eventually a linking vowel, *-ο-*, came to be inserted between some consonant stems and the suffixes. In some forms the linking vowel was regularly accented, because the stem had no inherent root accent; but this regular accent came to be reinterpreted as the result of a special accent-shifting rule. This rule slowly spread to the other *θεν-* and *φι-* forms derived from consonant stems; then to *φι-* forms derived from *ο-* stems, since this group was unstable; and finally to *θεν-* forms derived from *ο-* stems. In the end only a few forms, which were common in everyday speech—*οἴκοθεν*, *ἄλλοθεν*, *ἐκάστοθεν*, *πάντοθεν*—resisted the spread of the rule. At some time during its spread, the accent-shifting rule was reinterpreted as an accent-erasing one, in order to better integrate it into the grammar of the language.

Two other groups of nominal forms in *-θεν* remain to be dealt with: those derived from *ā/η-* stems (section 2, rule 1) and those derived from stems in *-τερο-* (rule 2(c)). The former exhibit no peculiarities, and can be presumed to have survived unchanged from the time when they were first created. The latter are peculiar in that they show the stem vowel lengthened to *ω* (e.g., *ἀμφοτέρωθεν*). A similar lengthening occurs *before* the element *-τερο-* in the formation of comparatives from *ο-* stem adjectives with short penultimate syllables (e.g., *πιστότερος* from *πιστο-*, but *νεώτερος* from *νέο-*); apparently both these lengthening processes are conditioned by the presence of the element *-τερο-*, but why this should be remains obscure³⁸). Forms in *-θεν* derived from comparatives show no shift or erasure of accent, and this may mean that the type is a very old one; it may also be significant that the likeliest of the proposed Mycenaean *θεν-* forms is *apoterote* (= *ἀμφοτέρωθεν*)³⁹). At the moment, however, it is difficult to draw any firm conclusions from these data, and the problem of the type exemplified by *ἀμφοτέρωθεν* must be left unsolved.

³⁸) Apollonius Dyscolus suggests that these adverbs end in *-ωθεν* because they are derived from adverbs in *-ως* which are in turn derived from stems in *-τερο-* (*Περὶ ἐπιρρημάτων*, Schneider's text 188, 9–18). If we accept this hypothesis, however, we must explain why such a process is used for all stems in *-τερο-* but for no other *ο-* stems; Apollonius' idea thus brings us no closer to a solution of the problem.

³⁹) Davies, personal communication.