THE SYNTACTIC AND SEMANTIC STATUS OF PREPOSITIONS IN GREEK

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Jacob Wackernagel,² and Eduard Schwyzer,³ the prepositions of Greek were originally "Ortsadverbien" (to use Kühner-Gerth's term, p. 526). These words later developed either into preverbs (forming part of a compound verb) or into prepositions (occurring before and delimiting the meaning of a noun in one of the oblique cases). As adverbs, in the earlier stage postulated by this common view, these words were less tightly constrained as to the position in the sentence or clause they might occupy, and were also less tightly bound semantically either to the verb or to any of the noun forms in the clause than was the case in later stages. Certain constructions involving these words, found extensively (but not exclusively) in Homer, are cited as examples of what syntactic theorists like Schwyzer, Wackernagel, and Kühner-Gerth mean by the "adverbiale Verwendung" (Wackernagel's term, p. 165).

In this paper I propose to examine some of the major uses of the words so cited in these works with a view, first, to defining precisely what it means to call any occurrence of an individual *Ortsadverb* in a given text an "adverb." Then, having studied the relationship between the two types of occurrences (adverb and preverb) on the one hand, and the relationship of both of these to the true prepositions on the other, I will try to clarify the precise meaning of the claim that these words were "ursprünglich Ortsadverbien" (Kühner-Gerth, p. 526, my emphasis). I hope in conclusion to show that none of the available evidence warrants a belief that the earlier syntactic or semantic status of the prepositions was "adverbial" in any sense.

I. INITIAL OBSERVATIONS

The following two passages may be cited as examples of the postulated adverbial stage supposedly reflected in Homer, and of the later preposition and

I wish to thank Professor Eric Hamp for his invaluable comments on an earlier version of this article. He can take credit for the absence of a number of flaws which would still have been present but for his suggestions, although the blame for any that remain is entirely mine.

1. Ausführliche Grammatik der griechischen Sprache, pt. 2: Satzlehre³, vol. 1 (Hannover and Leipzig, 1898). The most pertinent sections are pp. 448-53 and 526-54.

2. Vorlesungen über Syntax mit besonderer Berücksichtigung von Griechisch, Lateinisch und Deutsch, vol. 2 (Basel, 1924). The relevant section is pp. 153-248, esp. 165-67.

3. Griechische Grammatik auf der Grundlage von Karl Brugmanns Griechischer Grammatik, vol. 2: Syntax und syntaktische Stilistik, completed and edited by A. Debrunner (Munich, 1950). The most pertinent section is pp. 417–27.

preverb stage represented by Attic prose:4

(1) 'Ατρείδης δ' ἄρα νῆα θοὴν ἄλαδε προέρυσσεν ἐν δ' ἐρέτας ἔκρινεν ἐείκοσιν, ἐν δ' ἐκατόμβην βῆσε θεῷ, ἀνὰ δὲ Χρυσηίδα καλλιπάρηον εἶσεν ἄγων, ἐν δ' ἀρχὸς ἔβη πολυμῆτις 'Οδυσσεύς

[Hom. Il. 1. 308-311]

(2) καὶ μετὰ ταῦτα οἱ ᾿Αθηναῖοι στρατεύσαντες ἐς Πλάταιαν, σῖτον τε ἐσήγαγον καὶ φρουροὺς ἐγκατέλιπον, τῶν τε ἀνθρώπων τοὺς ἀχρειοτάτους ξὺν γυναιξὶ καὶ παισὶν ἐξεκόμισαν.

[Thuc. 2. 6. 4]

Passage (1) from Homer contains four instances of the construction most consistently cited as an example of the "adverbiale Verwendung." These are the three occurrences of $\dot{\epsilon}\nu$ δ ' and one of $\dot{\alpha}\nu\dot{\alpha}$ $\delta\dot{\epsilon}$. Passage (2) contains three instances of the preverb construction, namely $\dot{\epsilon}\sigma\dot{\eta}\gamma\alpha\gamma\sigma\nu$, $\dot{\epsilon}\gamma\kappa\alpha\tau\dot{\epsilon}\lambda\iota\pi\sigma\nu$, and $\dot{\epsilon}\xi\epsilon\kappa\dot{\rho}\mu\iota\sigma\alpha\nu$. This latter type of construction is also found in Homer, and is in fact a far more common type in Homer than the adverb construction exemplified by (1). However, the construction which occurs four times in passage (1) and frequently throughout the Homeric poems is the primary reference of such terms as "die ursprüngliche Abtrennbarkeit und Selbständigkeit des Präverbiums" (Wackernagel, p. 176) and the "Selbständigkeit [of the Ortsadverb] als Adverb" (Kühner–Gerth, p. 531). The first question, therefore, is: what difference, if any, exists between the supposed adverbs of (1) and the preverbs of (2)?

What is most noteworthy in each of these passages is that a noun in the first line is subsequently construed as the object of each of the adverbs or preverbs in the following clauses. In (1) the noun is $\nu \hat{\eta} \alpha$, and we clearly and unambiguously understand that the rowers will be $\dot{\epsilon} \nu \ \tau \hat{\eta} \ \nu \eta \dot{\iota}$, that the hecatomb will be made to go $\dot{\epsilon} is \ \tau \dot{\eta} \nu \nu \hat{\eta} \alpha$, that Chryseis will be led $\dot{\alpha} \nu \dot{\alpha} \ \tau \dot{\eta} \nu \nu \hat{\eta} \alpha$, and that Odysseus will go along as chief $\dot{\epsilon} \nu \ \tau \hat{\eta} \ \nu \eta \dot{\iota}$. In (2) the food is brought $\dot{\epsilon} s \ \Pi \lambda \dot{\alpha} \tau \alpha \iota \alpha \nu$, the guards are left $\dot{\epsilon} \nu \ \Pi \lambda \alpha \tau \alpha \iota \alpha$, and the useless people are taken

- 4. Every Greek (or English) illustrative sentence in this article is equipped with a number to facilitate cross-references.
- 5. Wackernagel (p. 166) makes an interesting qualification in setting forth his view: "Daneben sind die meisten Präpositionen in älterer Zeit auch als adverbielle Bestimmungen zum ganzen Satze oder zu Satzstücken verwendbar geblieben, zumal wenn durch Partikeln, wie $\delta\epsilon$, $\gamma\epsilon$ gestützt. Bei den Attikern und auch später noch ist in derartiger Verwendung $\pi\rho\delta s$ beliebt z.b. Plato, Rep. I. 320A [328A]: καὶ πρός γε παννυχίδα ποιήσουσιν.... Nicht streng hieher gehört solcher Gebrauch, wo die Präposition zwar auch selbständig steht und entsprechenden Akzent hat, aber Beziehung auf einen bestimmten vorgennanten Nominalbegriff besteht. So z.b. . . . Soph. Ant. 518 . . . " phasis added). Wackernagel has here identified a factor in preverb and adverb usage which is crucial to the argument in this paper. I am seeking to show, in effect, that the phenomenon of a "Beziehung auf einen bestimmten vorgennanten Nominalbegriff" is far more pervasive than the limited recognition given it here by Wackernagel or by Kühner-Gerth in a similar remark in their comment (p. 526) on Hdt. 3. 39: "... ἐν δὲ δὴ καὶ Λεσβίους. .. εἶλε (drunter, d.h. in iis)." As for the passage from Plato, the $\pi\rho$ os $\gamma\epsilon$ can be viewed in much the same light as the $\epsilon\nu$ $\delta\epsilon$ $\epsilon\nu$ $\delta\epsilon$ sequence in passage (1), or the preverbs in (2), since what Plato obviously means is "in addition to another activity," namely the $\lambda \alpha \mu \pi \dot{\alpha} \dot{s} \dot{\alpha} \dot{\phi}$ " $l \pi \pi \omega \nu \tau \hat{\eta} \theta \epsilon \hat{\phi}$, etc., which is described in the preceding lines. It is therefore not entirely clear in what sense $\pi \rho \delta s$ $\gamma \epsilon$ illustrates an "adverbielle Bestimmung...zu Satzstücken" rather than a "Beziehung auf einen . . . vorgennanten Nominalbegriff."
- 6. I should admit at this point that the second preverb in this form is one for which I cannot offer a totally satisfying account; but cf. section VII. The theory of J. Brunel (L'aspect verbal et l'emploi des préverbes en grec [Paris, 1939]) concerning the relationship of preverbs to a special subdivision of the aspects may account for some such cases. Since Brunel's theory is not meant to cover all instances of preverbs, I am not attempting in this paper either to incorporate or to criticize it.

έκ Πλαταίαs. Texts of type (1) provide little justification for postulating a syntactic or semantic function for $\dot{\epsilon}\nu$ and the other Ortsadverbien distinct from the functions of the identical words in texts of type (2). Wackernagel, for example, speaks (p. 166; cf. my n. 5) of "adverbielle Bestimmungen zum ganzen Satze oder zu Satzstücken"; and Kühner-Gerth (p. 531) use the term "adverbiale Bedeutung." Aside from their accidental differences in position, all these words share two very important characteristics. First, they contribute in exactly the same way to our understanding of the events being described. Their grammatical function (Bedeutung) is the same. Second, it is clearly the initial reference to $\nu\hat{\eta}a$ in (1) and Πλάταιαν in (2) which warrants the omission of these same nouns as prepositional objects in the following clauses.

II. SEMANTIC AND SYNTACTIC FUNCTION OF PREPOSITIONS

The place which the obvious and undeniable difference between (1) and (2) should occupy in the description of Greek syntax is a matter which requires some consideration. First, however, we need to consider the relationship between the grammatical description of the Ortsadverbien of passages (1) and (2) and the grammatical description of the true prepositions in phrases like ξὺν γυναιξί and ἐς Πλάταιαν of (2). And for that, we need a semantic and syntactic (i.e., grammatical; see n. 7) description of the prepositions. Their semantic function is to indicate which one of a restricted category of meanings (spatial and temporal relations) is part of the meaning of the sentence at hand. Their syntactic function is to allow one of the nouns in the sentence to be identified as the place or time "at which" some other noun in the sentence is located or the whole clause itself occurs. The prepositions perform this syntactic function in two ways. First, they usually occur before the noun (or noun phrase) in question. Second, each preposition has its own peculiar rules for co-occurrence with one or another of the oblique cases. Other factors also contribute to this function: for example, the nature of the verb (with "be," the located noun is the subject; with "send," it is the object) and the semantic character of the prepositional object (most such nouns are nonpersonal).

This description of prepositions coincides with the description of adverbs and preverbs in section I. Any objective analysis of passages (1) and (2) must begin with the statement that we know (and more importantly, Homer's listeners and Thucydides' readers knew) both which thing or place was involved and what form of the noun would have occurred had ellipsis not intervened. We can also assume that the noun, had it occurred, would have occupied the normal position following the preposition. In describing the syntax of either Homer or Thucydides, therefore, the primary function of the *Ortsadverbien* is the same as the function of prepositions. The adverb and preverb structures are logically and descriptively secondary or "derived." It

^{7.} The way in which the terms "semantic function" and "syntactic function" are used throughout this paper will be clear from the explicit discussion of this matter in section II. One point which should be mentioned here, however, is that I use "grammatical function" as the inclusive term to refer to both the semantic and syntactic functions.

should be emphasized that this statement is meant as a synchronic statement of the grammar of Greek in each of two periods. The diachronic situation will be considered presently.

III. THE GRAMMAR OF HOMER AND THE GRAMMAR OF THUCYDIDES

Homer uses the structure preposition $+\delta \ell$ (and other putatively adverbial structures) much more frequently than do Thucydides and the other writers of Attic prose. The differences between Homer's text and grammar and the text and grammar of these later writers must now be considered. Two possibilities suggest themselves—each compatible with the position just taken, that in both passage (1) and passage (2) the grammatical function of the adverbs and preverbs is identical to that of prepositions.

In the process of constructing a passage like (1) or (2), the Greek writer was confronted by two choices. First of all, once he had decided not to repeat the noun $(\nu \hat{\eta} a, \Pi \lambda \acute{a} \tau a \iota a \nu)$ every time it was the object of a preposition, he had next to decide whether to leave the preposition where it was, producing in Greek what would be the equivalent of (3) in English:

(3) Harry opened his briefcase, took some papers out, put the book in, and then closed it.

The italicized forms in (3) occupy precisely the same place in the word order which they would occupy if their object were not omitted, as in:

- (4) Harry took some papers out of his briefcase.
- (5) Harry put the book in his briefcase.

This option of doing nothing with the preposition was apparently available to Greek writers only in a much more limited way than it is to writers of English.⁸ The Greek writer normally chose to change the position of the preposition. Exercising that option, he could attach the preposition to the verb form, producing the equivalent of the English:

(6) Harry opened his briefcase, took out some papers, put in the book, and then closed it.

Or he could promote the preposition to the initial position in the sentence, followed by $\mu \dot{\epsilon} \nu$, $\delta \dot{\epsilon}$, or some other such particle. This alternative would produce a structure whose rough equivalent in English is:

(7) Harry opened his briefcase; out of it he took some papers; in it he put the book; then he closed it.

Since the latter construction ($\dot{\epsilon}\nu$ $\delta\dot{\epsilon}$, etc.) is not impossible in Attic prose, the descriptive linguist himself must draw inferences. One alternative is to regard the rule governing the choice between preverb and adverb structures as identical in the grammars of Homer and Thucydides. In this view, the greater frequency of the adverb structure in Homer would be a feature of Homer's style. The other alternative is to regard the rule governing this choice as placing greater restrictions on the adverb structure in the grammar of Attic than in the grammar of Homer. Thus Kühner–Gerth observe (p. 526) that

^{8.} It is conceivable that some of the structures normally referred to as tmesis may in fact prove to be analogous to these English forms.

in prose the adverb structure (preposition $+\delta \hat{\epsilon}$) is found at the beginning of clauses, where it is emphatic, a property which is also possessed by the italicized forms in (7); whereas in Homer the adverb structure is "ganz natürlich und kunstlos und in dem Wesen der Sprache seiner Zeit begründet" (p. 530).

I will not attempt here to argue that one of these alternatives is the better one. What should be emphasized, however, is that even the second alternative, admitting as it does the difference between the grammar of Homer and the grammar of Thucydides, nonetheless leaves intact the functional unity of the prepositions, preverbs, and adverbs which I have set forth in sections I and II. Furthermore, since the adverb structure (preposition $+\delta \dot{\epsilon}$) is, at least in prose, emphatic, it would seem correct to view the adverb structure not only as logically derivable from the preposition structure in the same degree as the preverb structure, but also as secondary to—or more heavily marked and constrained in a functional sense than—the preverb structure. The claim that is central to this paper, namely that the adverb structure is not primary in any sense, is thus reinforced.

IV. HISTORICAL DEVELOPMENT OF PREPOSITIONS

The primary purpose of the discussion so far has been to call into question the validity of the view that "die prinzipiell altertümlichste Verwendung der Präpositionen ist die adverbiale . . ." (Wackernagel, p. 165). This view subsumes two separate but related claims. The first, just examined, is that the adverb structures have a separate function, grammatically, from the preverb and preposition structures. The second is that there was a stage in the development of the Indo-European languages during which the predominant use of these forms was the adverbial one. I now propose to examine more closely the postulated process of historical development by which adverbs became preverbs or prepositions.

Kühner-Gerth (p. 449) set forth the following view of the relationship between the cases and the prepositions:

In der uranfänglichen Entwickelung der Sprache mögen die Kasus genügt haben, die angegebenen Verhältnisse des Raumes, der Zeit u. s. w., wenn auch auf unvollkommene und mangelhafte Weise zu bezeichnen. Sobald aber der menschliche Geist tiefer in die Beziehungsverhältnisse der Dinge einzudringen anfing, musste notwendig das Bedürfnis erwachen, die mannigfaltigen Beziehungen des Raumes, der Zeit, der Kausalität und der Art und Weise mit Hilfe besonderer Wörter bestimmter und schärfer auszudrücken. Hierzu dienten die Adverbien, die sodann im weiteren Verlaufe grossenteils zu Präpositionen verblassten.

This statement is amplified with reference to three separate stages that are to be identified in the postulated development of prepositions. The first stage is represented by such structures as $\beta a i \nu \epsilon i \nu \epsilon i \nu \epsilon$ ("he goes from the

9. It may seem that this admission of special function for such structures contradicts the basic claim that the prepositions have a single function (section II). But emphasis achieved through movement of elements, which is in question here, is not a function of the prepositions qua prepositions, but rather of any constituent of a clause that happens to undergo movement to the front of the clause. Hence the emphatic function should not be made a part of the description of the prepositions themselves, but should be reserved for the description of the general syntactic structure of continuous Greek texts.

ship"), where the "ablative" form indicates the relationship in question, without the aid of a preposition. To the second stage Kühner–Gerth assign such structures as $\beta ai\nu \epsilon \iota \nu \epsilon \omega s \ \tilde{a}\pi o$, where $\tilde{a}\pi o$ does not govern the "ablative" but rather "stellt nur das durch den Kasus ausgedrückte Verhältnis anschaulicher als ein Raumverhältnis, aber zugleich auch logisch bestimmter dar" (p. 450). The third stage is reached with the occurrence of structures like either $\dot{a}\pi o\beta ai\nu \epsilon \iota \nu \epsilon \omega s$ or $\beta ai\nu \epsilon \iota \ \dot{a}\pi \dot{o}\ \nu \epsilon \dot{\omega} s$. In this third stage, the case endings are described as having lost some or all of the semantic force which enabled them to function independently in the first stage. The prepositions are now an "unentbehrliche Stütze" (p. 450) for the case form, and the case form manifests "eine gewissen Abhängigkeit von der Präposition."

In the extended quotation from Kühner-Gerth just given, the first sentence appears to describe the situation exemplified by the first stage of development: β aivei veώs. If this sentence means what it seems to, then a stage of Indo-European is being postulated when either (a) the Ortsadverbien did not exist, so that the wide range of distinctions signaled by these forms could not be employed by a speaker of that stage of the language; or (b) these Ortsadverbien did form part of the language, but were not used with any frequency—which is to say that the speakers of that stage of the language had less interest in, or less need to communicate, the distinctions involved.

From considerations of both plausibility and evidence, there is good reason to doubt the validity of such a formulation. It may well have appeared plausible to Kühner, Gerth, Wackernagel, and Schwyzer, given their theoretical and descriptive orientation. Without unfairly criticizing them for not being ahead of their times, it is entirely appropriate to observe that linguistic theorists today would hardly take the same view. As for the more crucial matter of evidence, there is none. The earliest Greek texts, those of Homer, are relevant only to the second stage, if then; but I argue throughout this paper that these texts refute the views under consideration. Aside from the Homeric evidence, there is only Sanskrit, whose contribution is characterized by oracular ambiguity at best. 11

10. In terms of the substance of their views, what is most striking is not so much the assumption that the "uranfängliche Entwickelung der Sprache" spoken of by Kühner-Gerth had the characteristics they attribute to it, but the assumption that this stage occurred at a time when it could actually have represented part of the development of Indo-European. Extensive studies of all types of languages, both in primitive and in civilized cultures, have necessitated considerable adjustments in perspective. So have paleontologists' discoveries, which have pushed man's origins, and presumably the origins of his languages, back farther and farther in time. Methodologically, it is the priority given to the diachronic perspective ("What were the prepositions originally?") almost without attention to the synchronic ("What are the prepositions at such-and-such a time?") which renders the ideas unconvincing.

11. The ambiguity is illustrated by the conflict between two remarks. The first is Kühner-Gerth, p. 449, n. 2: "Ygl. Grassmann in Kuhns Ztschrft. 23,560: 'Im Sanskrit kann man oft 10 bis 20 Seiten lesen, ohne irgend einer Präposition mit einem von ihr regierten Kasus zu begegnen.' "The second is W. D. Whitney, Sanskrit Grammar (Cambridge, Mass., 1889; repr. 1964), who gives on p. 396 a list of "verbal prefixes" (i.e., preverbs), including cognates of many of the Greek prepositions (e.g., apa, api, upa, para, prati), then observes (p. 403) that these forms were more common in the earlier stages of the language as prepositions than they were later on. Thus, even though Sanskrit appears conservative in its case system because it maintains the largest number of morphologically discrete case forms of any IE language, it may by the classical period have moved even more rapidly than Greek toward the situation exemplified by modern Greek, where the preposition, unaugmented by further morphological extensions, is restricted to preverb position. Grassmann's observation may refer, therefore, to evidence later than Homer rather than earlier.

At the second stage, the placement of the Ortsadverb in the position after the noun in all the examples offered by Kühner-Gerth¹² is the clearest indication of how these forms are viewed. This posterior and comparatively free positioning of the Ortsadverb relative to the case form (to which it was just now beginning to be attracted as "eine unentbehrliche Stütze" in the face of the weakened case ending) is presumably taken as evidence that, in sentences formed during the second stage, the Ortsadverb still retained a significant degree of independence from the case form and the verb form. Here we are dealing more directly with a question of evidence, because Homer may plausibly be regarded as a speaker of second-stage Greek. A detailed examination of the facts concerning Homeric usage of the forms in question is thus in order.

V. STATISTICS FROM HOMER

The facts to be presented here concern approximately one-eighth of the Homeric corpus, that is, a total of six books.¹⁴ In these texts, the words in question (henceforth referred to simply as prepositions) occur in the following ways:

- A. True prepositional phrases. These include the relatively rare instances of anastrophe, where the preposition directly follows its object noun, as in
 - (8) ήδ' όσσοι κραναήν 'Ιθάκην κάτα κοιρανέουσι [Od. 1. 247].
- B. Prepositions becoming preverbs. These include instances which are clearly analogous to those in the Thucydides text (2), in that the deleted object noun may be readily identified:
 - (9) τls τ' ἄρ σφωε θεων ἔριδι ξυνέηκε [sc. ξυν ἀλλήλοισι] [Il. 1. $8]^{15}$
 - (10) αὐτὰρ ἐγὼ σῖτον καὶ ὕδωρ καὶ οἶνον ἐρυθρὸν / ἐνθήσω [sc. ἐν τῆ σχεδίη] [Od. 5. 165-66];
- 12. In addition to βαίνει νεώς ἄπο, two others are offered (p. 450): $\tilde{\eta}$ λθε δώματα πρός and εὖδε Γαργάρω ἄνα.
- 13. Kühner-Gerth (p. 450) remark, "Hieraus ergiebt sich, dass der mit der Präposition verbundene Kasus nicht von vorn herein von der Präposition regiert wird, wie man zu sagen pflegt; wäre dies der Fall, so müsste eine Präposition stets nur mit einen und demselben Kasus verbunden werden, während es doch Präposition giebt, die mit zwei oder drei Kasus verbunden werden." Apparently, that the Ortsadverb does not govern a single case form is another justification for this second stage. But is there any a priori reason why, from the very beginning, a preposition like $\pi \alpha \rho \dot{\alpha}$, for example, could not have naturally occurred with three cases, each having its separate meaning in full force: π αρὰ αὐτόν ("to his side"), π αρὰ αὐτοῦ ("from his side"), π αρὰ αὐτῷ ("by his side")? Kühner-Gerth's premise seems to me unwarranted; and the existence of three-case prepositions should be viewed more as evidence for special semantic restrictions on (at least) the ablative-genitive and the dative in Greek than as any indication of the process by which such prepositional structures emerged. I would suggest in passing that Indo-European could perfectly well have had a simple three-case system (nominative, genitive, accusative) originally, together with a full range of prepositions, and that the development of the subsidiary cases could have been a later phenomenon. In this view, παρὰ αὐτόν would have started out as a generalized structure, and the other two forms would have appeared later to divide up its "coverage of the semantic field."
- 14. The books are Il. 1, 4, and 7 and Od. 1, 5, and 9. The facts concerning these texts are presented as part of my dissertation, "The Case Pattern of Ancient Greek: A Theoretical Study of the Verbs, Preposition/Preverbs and Case Endings" (Ph.D. diss., State University of New York at Buffalo, 1974 = Ann Arbor: University Microfilms, 1975).
- 15. In examples like (9) and (10), the forms in brackets identify the deleted object noun and call attention to what the phrase would have looked like had the deletion not occurred. In (11) and (12) the underlined forms are the preposition (i.e., preverb) and the noun elsewhere in the clause which is to be identified as its object noun.

instances where the object noun is still present and the preverb structure occurs anyway:

- (11) . . . δε Χρύσην άμφιβέβηκας / Κίλλαν τε ζαθέην [Il. 1. 37-38]
- (12) ιέμενος και κάπνον άποθρώσκοντα νοησαι / ής γαίης [Od. 1. 58-59];

and instances where the context does not make possible identification of any candidate for the deleted object noun:

- (13) 'Ήρη, μὴ δὴ πάντας έμοὺς ἐπιέλπεο μύθους / εἰδήσειν [Il. 1. 545-46]
- (14) . . . ἤ τ' ἐκπεράα μέγα λαῖτμα [Od. 9. 323].

These latter types constitute unclear or indeterminate cases which further investigation may resolve (cf. especially section VI).

Under this same category may be mentioned perhaps the most striking cases which Homer provides. In texts like

- (15) έξαγαγόντες / ἄκριτον ἐκ πεδίου [ΙΙ. 7. 435–36]
- (16) ἐν δ' ὑπέρας τε κάλους τε πόδας τ' ἐνέδησεν ἐν αὐτ $\hat{\eta}$ [Od.~5.~260],

not only is the object noun still present in the face of the preverb structure, but so is the preposition itself, in its normal position before that noun. 16 Sentence (16) represents the ne plus ultra, since it shows $\dot{\epsilon}\nu + \delta\dot{\epsilon}$, the preverb in $\dot{\epsilon}\nu\dot{\epsilon}\delta\eta\sigma\epsilon\nu$, and the true prepositional phrase $\dot{\epsilon}\nu$ a $\dot{\nu}\tau\hat{\eta}$.

- C. The construction preposition $+\delta \epsilon$. In addition to clear examples of object deletion, already exemplified sufficiently by the examples in (1), there are cases parallel to (11) and (12), with the object still present:
 - (17) έκ δ' ἔθορε κληρος κυνέης [ΙΙ. 7. 182]
 - (18) ὑπὸ δὲ θρηνυς ποσὶν ἢεν [Od. 1. 131],

as well as indeterminate cases:

- (19) κάδ δὲ κεν εὐχωλὴν Πριάμω καὶ Τρωσὶ λίποιμεν / ᾿Αργείην Ἑλένην [Il.~4.~173-74]
- (20) άμφὶ δ' ἐταῖροι / μειλιχίοις ἐπέεσσιν ἐρήτυον ἄλλοθεν ἄλλος [Od. 9. 492-93].
- D. The preposition alone. The preposition is free of any accompanying form (whether object noun, verb form, or $\delta \epsilon$), as in Kühner-Gerth's second stage. Once again, there are clear cases of object deletion:
 - (21) χώρησαν δ' ὑπό τε πρόμαχοι καὶ φαίδιμος "Εκτωρ [sc. ὑπὸ 'Οδυσσῆος] [Il. 4. 505]
 - (22) νύμφη δ' έτίθει πάρα πασαν έδωδήν [sc. παρα 'Οδυσσηι] [Od. 5. 196];

cases with the object present:

- (23) & μη πάρα γείτονες ἄλλοι [Od. 5. 489]17
- (24) οὐ γὰρ Κυκλώπεσσι νέες πάρα μιλτοπάρηοι [Od. 9. 125];

and indeterminate cases:

- (25) . . . ὑπό κεν ταλασίφρονά περ δέος εἶλεν [ΙΙ. 4. 421]
- (26) οι κατά βους Ύπερίονος Ἡελίοιο / ήσθιον [Od. 1. 8-9].

^{16.} The other examples of this type in those texts for which statistics are provided here are: II. 4. 156, 7. 336-37 (=[15]), and 7. 438.

^{17.} If the negative particle is ignored, there is a possibility that this text should be counted as an instance of a true preposition with anastrophe. In fact, at the outset of a clause, it is quite usual to find the preposition and its object separated by the particle.

Table 1 sets forth the frequency of each of these categories in the six books under examination. Table 2 shows the distribution into subcategories (object deleted, object present, and unclear) of categories B, C, and D (category A has no subcategories). Many interesting statistical observations could be made on the basis of these raw figures. The following are the ones which pertain most directly to the argument of this paper.

About the 1040 items in category A there can be no mistake. These items are clearly and literally prepositional and represent 53% of all the occurrences of these forms in these texts (1040 of 1967).

In table 2, the column labeled "object deleted" for B, C, and D is also a fairly straightforward matter. In these items, representing 25% of the total (484 of 1967), the prepositional function is clearly present in exactly the same way as with the preverb and adverb forms of (1) and (2). That is to say, we may presume that, but for the accident of object deletion, these forms would have fallen into category A. Thus the forms have the grammatical function of prepositions in 78% (i.e., 53% + 25%) of all their occurrences in the corpus at hand. This figure clearly supports the argument that the *Ortsadverbien* are prepositions, and the further argument that other structures must be considered logically and descriptively secondary to the prepositions (cf. sections II and III).

These secondary structures are represented by the column labeled "object present" in table 2 (cf. examples [11], [12], etc.). These items represent 13% of the total (267 of 1967). They represent 20% of all the object-present cases (267 + 1040). My contention is that only if the figures were reversed (that is, only if there were 267 items under A and 1040 items in the object-present column of B, C, and D) would Kühner–Gerth's second stage have any em-

Total A + B + C + D

TABLE 1

TA	$\mathbf{B}\mathbf{L}$	Æ	2

1967

	Total	Object deleted	Object present	Unclear
B C D	807 76 44	397 59 28	246 14 7	164 3 9
Total B + C + D	927	484	267	176

pirical validity. As things stand, I find that the categories B, C, and D under the rubric "object present" must be described, with reference to the primary prepositional function, as derived and secondary structures. Unless further evidence unexpectedly emerges, moreover, there is no reason to suspect that there ever was a stage of the Greek language when instances of the derived and secondary structures would have represented more than 13% of all forms and 20% of all object-present forms as they do here.

One further matter of interest on which table 2 sheds some statistical light is the degree of freedom of movement possessed by the prepositions, aside from deeper questions of grammatical function. The view put forth in section III, that structures like those of (1)—namely the items tabulated as C and D—are more tightly constrained and more heavily weighted in a functional sense, is strongly supported by the fact that categories C (76) and D (44) account for only 13% of the items in B + C + D (927). Of even greater interest is the fact that the corresponding figure for the object-present column is even lower—it is 8% (C [14] + D [7] of 267). We would expect, given what Kühner–Gerth say about the second stage, that whether the object was present or deleted should make little, if any, difference to the distribution of prepositions in categories C and D. In fact, however, in the object-deleted column, C (59) and D (28) represent 18% of the total (484)—more than twice the percentage of C and D in the object-present column.

VI. SUMMARY OF RULES FOR PREPOSITIONS

The following five rules summarize in an orderly way what has been said up to this point. Although they could be set forth in a much more formal theoretical setting, ¹⁸ I want especially to emphasize their descriptive relationship to the facts of the Homeric language, and to most other ancient Greek as well.

- a. Lexical rules. Each preposition will be governed by a statement setting forth the specific meaning of relations of time or space which it contributes to sentences in which it occurs. The statement also describes the specific types of noun phrases with which the preposition may be associated. No preposition occurs except in association with some noun phrase.
- b. Noun-phrase-deletion rule. This rule describes the conditions under which any noun phrase (not just objects of prepositions) is deleted. The most common condition is identity with another noun phrase in the same clause or an earlier clause in the text.
- c. Topicalization rule. This is the generic rule which copies all types of constituents into the prominent clause-initial position, usually followed by a particle. It may apply either to a full prepositional phrase or to one from which the noun phrase has been deleted by rule b.
- d. Preverb-formation rule. This rule attaches a copy of a preposition to the verb form of the clause. It is virtually obligatory when rule b deletes the object noun and rule c does not apply. It is optional under virtually all other

^{18.} As I have done in my dissertation, "The Case Pattern of Ancient Greek," through application of the theory of syntax known as "transformational-generative" theory.

circumstances, although it is subject to constraints in certain situations which are as yet not clearly defined.

e. Preposition-deletion rule. This rule deletes the original preposition. It normally operates after application of rule b, followed by application of either rule c or rule d. After application of rule c + rule d, it is optional, though it is not ignored with great frequency.

Two features of these rules call for explicit comment. One is the flexibility provided by the various options to apply or not apply a given rule under various conditions. Although these options are needed to preserve descriptive adequacy, their looseness also suggests that much further work needs to be done to make the conditions which permit, require, and block application of each rule more precise. In fact, such further insight probably must precede any attempt to formalize this system rigorously.

The other feature is that rule c and rule d are copying rules. Rather than simply have these rules "move" the prepositions, I have them produce a second instance of the preposition at the required point in the sentence. These copying rules necessitate rule e to get rid of excess occurrences under most circumstances, but such copying rules seem to me to be the best way to describe the process by which a text like (15) or (16) could arise.

The following incomplete list indicates how these rules operate on some of the examples used as illustrations in the article.

- (1) Rule a for each preposition; rules b, c, and e for all but the first prepositional phrase.
- (2), (9), and (10) Rule a for each preposition; rules b, d, and e for all but the first clause.
- (11) and (12) Rule a for each preposition; rule d (optionally since rule b did not apply), and rule e.
- (15) and (16) Rule a for each preposition; rule c (for [16] only), and rule d (both c and d optionally since rule b did not apply). Rule e is optionally passed over, leaving the original prepositions in place.
- (17) and (18) Rule a for each preposition; rules c and e.
- (21) and (22) Rule a for each preposition; rule b; optional bypassing of all other rules set forth here, leaving the prepositions in place, as in (3) in section III.

VII. ADDITIONAL REMARKS

I have thus far not examined certain important and frequently occurring types of Greek clauses in which the deletion of the prepositional object is not due precisely to those conditions obtaining in passages (1) and (2). The very brief consideration which I give them here is not intended as a fully adequate treatment. It will serve, however, to indicate that many instances of preverbs which are not obviously parallel to those of (1) and (2) do in fact fall within the scope of rule b. Perhaps the most important subsidiary type of preverb-structure (one which may be even more common than the type cited in [1] and [2]) is one in which the object noun of the preposition appears previously, not in a separate clause, but as the subject of the same

clause. I am thinking of sentences which are analogous to the English expressions:

- (27) Put your hat on (i.e., [you] put your hat on [yourself, you]).
- (28) The box has the toys in (i.e., the toys are in the box).19

A very good set of examples of this type, involving the verb $i\eta\mu\iota$, can be found in Homer:

- (29) . . . Ποσειδάων δὲ μεθήσει / δν χόλον [Od. 1. 77-78]
- (30) . . . πηδάλιον δὲ / ἐκ χειρῶν προέηκε [Od. 5. 315-16]
- (31) άλλα κακώς άφίει [sc. άγλαα αποινα] [Il. 1. 379].

The preverb $\mu\epsilon\tau\dot{\alpha}$ in (29) indicates where Poseidon is going to put his anger (behind him); in (30) $\pi\rho\dot{\alpha}$ is where Odysseus lets the rudder go (in front of him); and in (31), which actually represents the most common type of subject-related preverb, 20 $\dot{\alpha}\pi\dot{\alpha}$ simply means away from Agamemnon, who is the subject (note the contrast with $\delta\dot{\epsilon}\chi\theta\alpha\iota$ in Il. 1. 377).

A second type of preverb structure is exemplified by sentences like:

- (32) Go down to the post office and buy some stamps.
- (33) John came along just as I was starting the fire.
- (34) νῦν δ' ὧδε ξὺν νηὶ κατήλυθον ήδ' ἐτάροισι [Od. 1. 182]
- (35) πρίν γε τὸν ές Τροίην ἀναβήμεναι [Od. 1. 210].

I have purposely chosen English examples with down and along to go with Greek texts containing κατά and ἀνά. These prepositions, combining as they do the concepts of extended space and direction ("up the street," "along the river," κατὰ τὴν ὁδόν, etc.), dominate in this second category of preverb structure. Here there is no question of the object noun appearing somewhere else in the context (either in the same clause or in a different one). What seems to be happening is that, especially in descriptions of movement,²¹ a reference to the route which connects the source (ablative) with the goal (usually accusative) is almost always part of the semantic structure. For some reason, whether because speakers are inherently less concerned with identifying that particular location, or because in many cases it is a somewhat vague concept (being in a sense pure extension with no other identifiable or relevant qualities), no noun is actually used to refer to it, and only the preposition occurs. Since these prepositions (ἀνά, κατά, and διά) are specifically extensive as part of their semantic function, the presence of the object noun is not absolutely necessary, at least as far as the basic notion is concerned. And, since no noun is present, it is virtually assured that the preposition will

^{19.} This is an example which I have encountered only from speakers of British dialects. Americans would be more likely to say, "The box has the toys in it."

^{20.} $\[a\pi b \]$ with verbs like $\[\delta l \delta \omega \mu l, \] \[\omega \theta \delta \omega l, \] \[\beta d \lambda \lambda \omega l, \] \[\pi \delta u l, \] \[$

^{21.} But "static" verbs can show this quality as well. $\kappa\epsilon\hat{\iota}\mu\alpha\iota$, which clearly expresses the concept of extension, often has $\delta\nu\dot{\alpha}$, $\kappa\alpha\tau\dot{\alpha}$, or $\delta\iota\dot{\alpha}$ (which also expresses extension) as a preverb. $\delta\nu\dot{\alpha}$, $\kappa\alpha\tau\dot{\alpha}$, and $\delta\iota\dot{\alpha}$ represent 11 of 18 preverbs (61%) with $\kappa\epsilon\hat{\iota}\mu\alpha\iota$, though they are only 22.5% of preverbs generally, in my data.

wind up as a preverb by application of rules d and e. One striking illustration of the pattern involved here is that $\dot{a}\nu\dot{a}$ in the data on which I rely²² occurs 240 times as a preverb but only 22 times as a preposition.²³ It should be noted, finally, that there appears to be an inherent connection between the concept of extension and that of direction, since direction ("up" versus "down") can only be judged with reference to the relationship between at least two points, while extension always involves some sort of line (i.e., in mathematical terms the distance between two points).

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^{22.} I.e., from all the texts mentioned in n. 20.

^{23.} $\kappa \alpha \tau \dot{\alpha}$ represents a slightly different situation. In the data from all the texts studied it occurs as a preposition 260 times; as a preverb, 312 times. What has not generally been noticed about $\kappa \alpha \tau \dot{\alpha}$, though, is that virtually all of its prepositional occurrences mean simply "along" (with what can be termed "neutralization" of the opposition between "up" and "down"). In this sense $\kappa \alpha \tau \dot{\alpha}$ thus represents the preposition function for both itself and $\dot{\alpha} \nu \dot{\alpha}$. Only in the preverb structure does one encounter the full distinction (as in $\dot{\eta} \dot{\epsilon} \lambda \omega \rho \dot{\alpha} \nu \alpha \delta b \nu \tau \alpha$, $\kappa \alpha \tau \alpha \delta b \nu \tau \alpha$ frequently in Homer).