ITERATED MODAL MARKING AND POLARITY FOCUS IN ANCIENT GREEK[1]

By David Goldstein
University of Vienna

Abstract

The Ancient Greek particle *an*, which encodes modal and irrealis semantics, canonically occurs once per clause. In the fifth century BCE, however, we find cases where two tokens (or, more rarely, three) co-occur with the same verb. While this phenomenon has long been recognized in the handbooks, it has received only sporadic attention otherwise, and there is currently no adequate description or analysis of the phenomenon. In this paper, I provide the first detailed overview of the construction in the Attic dramatists (Aeschylus, Sophocles, Euripides and Aristophanes) and Herodotos, and argue that it marks polarity focus. I tentatively identify a diachronic source construction as well.

1. Introduction

The Ancient Greek particle *an* is attested from Homer onwards, and encodes (roughly speaking) modal and irrealis semantics (see Goodwin 1897: §§223–6; Smyth 1956: §1765 for an overview; for modality generally, Von Fintel 2006). It co-occurs with a verb in the optative or indicative mood, as we see in the following example from Herodotos (the modal particle is underlined and glossed 'MP'; passages from Herodotos are cited according to the numeration of the Thesaurus Linguae Graecae, tlg.uci; all translations are mine):[2]

(1) houtoː <u>an</u> oːn eieːmen humeteroi apogonoi.   Hdt. 7.150.8
     thus   MP *then would be your*   *descendents*
     'Thus we would then be your descendents.'

Here the *an* co-occurs with the optative verb *eieːmen*, and together they encode the modal meaning 'would be'. The particle *an* also co-occurs with verbs in the indicative mood, in which case they together encode counterfactual modality (as illustrated in example 3 below).

In the fifth century BCE,[3] we find examples in which two tokens of the modal particle occur with a single verb, as in (2):

---

[2] I follow standard abbreviations for the names of authors and their works, with the exception of the dramatists: Aeschylus is abbreviated 'A.', Sophocles 'S.', Euripides 'E.' and Aristophanes 'Ar.'

[3] Before the fifth century BCE, the construction is not well attested. The earlier data are not considered in this paper. On its presence in Homer, see, for example, Hermann (1831: 190) and Kühner and Gerth (1898–1904: vol. I, 248).

(2) all', o: kakiste, pro:ton oupot' <u>an</u>   philon
    but, o villain first   never MP ally
    to barbaron genoit' <u>an</u> Helle:sin genos
    the barbarian would be MP to-Greeks race
    oud' <u>an</u> dunaito.   E. *Hec*. 1199–1201
    nor MP could be
    'No, villain, first, the barbarian race would never be an ally of the Hellenes, nor could
    it be.'

In the first conjunct clause, the adverb *oupot'* 'never' hosts one token of *an*, while the verb *genoit'* hosts a second (the final token of *an* co-occurs with the verb *dunaito* in a separate clause, and thus illustrates canonical singleton use of the particle). Throughout this paper I refer to this phenomenon as MULTIPLE-*AN*.

   It is necessary to say a word about what precisely constitutes multiple-*an*. Sentences like (3) in which two tokens of *an* occur with one surface verb as a result of gapping do not qualify:

(3) e: pou koras   <u>an</u> potamou
    perhaps daughters MP of-river
    par' oidma Leukippidas e: pro   naou
    beside swell of-Leukippos or before temple
    Pallados <u>an</u> labois.
    of-Pallas MP you-could-find   E. *Hel*. 1465–7
    'Perhaps you may find the daughters of Leukippos beside the swell of the river or
    before the temple of Pallas.'

While two tokens of *an* occur with one verb (*labois*), the sentence is biclausal (composed of two disjuncts headed by *e*: 'or'), and the verb of the first has been ellipsed, although its modal particle has not (cf. E. *Bacch*. 1271).[4] I do, however, treat cases in which we find *takh' an* 'perhaps' plus another token of *an* (e.g. S. *OT* 139–40) as legitimate cases of multiple-*an*. (The alternative would be to claim that *takh' an* has become lexicalized, and therefore by itself does not satisfy the co-occurrence requirement of the verb.)

   Below I distinguish between three types of multiple-*an* construction. In cases like (2), which is the most frequent type, multiple-*an* focuses the polarity (or truth value) of the clause. So here the sentence is more accurately rendered into English with nuclear stress (represented with bold face type) on the adverb, namely, '… the barbarian race would **never** be an ally of the Hellenes.' I refer to this as the POLARITY-FOCUS CONSTRUCTION.

   This paper is organized as follows. The remainder of the present section is devoted to a brief review of the literature on multiple-*an*. My own account begins in section 2 with an introduction to focus. Section 3 presents the polarity-focus construction in various utterance contexts. Section 4 presents non-focal multiple-*an* constructions. Section 5 briefly discusses the origin of the multiple-*an* construction. Section 6 summarizes the results of the argument and identifies directions for future research. The following corpora are the empirical basis of this study: the entirety of Herodotos' *Histories* (ca. 185,044 words), and all extant dramas of Aeschylus, Sophocles, Euripides and Aristophanes (ca. 340,160 words).

1.1. *Previous accounts*

The earliest account to my knowledge of multiple-*an* is that of Hermann (1831). He identifies two categories of iteration, which he labels REPEATED-*AN* and GEMINATE-*AN*.

---

[4] I do, however, consider E. *Hipp*. 270 a legitimate case of multiple-*an*.

Repeated-*an* is divided into two classes. In the first, *an* is repeated because it is at too great a distance from its verb. Hermann offers no examples of this class, but I presume that it would correspond to what I call the CLAUSAL-INSERTION CONSTRUCTION (discussed in section 4; see also Wackernagel 1892: 396). In the second class, it appears that *an* is repeated because its modal value extends throughout the entire clause. The description that Hermann (1831: 188) offers is terse and vague, but he does make an explicit comparison with the double-negation patterns of Greek. He offers a handful of examples to illustrate his description, but they are presented with almost no commentary, so it is difficult to see just what he means. His analysis here does, however, seem to overlap with part of my own in the MODAL-PARTICIPLE CONSTRUCTION discussed in subsection 4.1. His comparison with the double-negation patterns of Greek is an important observation, and one that I discuss in section 5 in considering the origin of the multiple-*an* construction. Hermann's (1831: 190–1) second category, geminate-*an*, is clearer. In this type, the first token of *an* is hosted by a complementizer (such as a relative pronoun or conditional marker), and the second occurs elsewhere in the sentence. If I understand Hermann correctly, the scope of the first is limited to the complementizer, with the result that only the second scopes over the clause. As Hermann saw, this is not really a repetition of the particle *an*. To put his account in contemporary terms, sequences of complementizer+*an* had become lexicalized (the most conspicuous case of this phenomenon is the conditional marker *ei*, which developed along the following lines: *ei an > ean > an*; see also Wackernagel 1892: 380–1). *An* is essentially an affix of the complementizer, and thus speakers felt that the clause itself still required a particle. While Hermann's analysis seems right, examples of this type are almost non-existent; Hermann (1831: 191) himself cites only Ar. *Eq.* 1107, which I did not include in my corpus on account of textual issues.

Wackernagel (1892: 399) took a different approach (which both Fraenkel 1964 and Slings 1992 follow) and argued that the doubling of *an* resulted from competing morphosyntactic demands. The first token of *an* is placed after the first word of its clause, thus fulfilling the second-position requirement, while the second is hosted directly by its licensing verb. As intuitive as this account is, it faces problems. For one, as Wackernagel (1892: 402) himself recognized, the first token of *an* is not always in second position. Second, this analysis is unable to handle clauses with more than two tokens of *an* (on which see subsection 3.8).

Other scholars have argued that the repetition of *an* is not triggered simply by morphosyntactic mechanisms, but rather contributes additional meaning to a sentence. Smyth (1956: §1765.b) for instance writes that '[f]or rhetorical emphasis ἄν [= *an*, DMG] is added to give prominence to particular words', and cites the following two examples:

(4) tis   gar toiout' <u>an</u>   ouk <u>an</u>   orgizdoit'   epe: S. *OT* 339–340
    Who for   such   MP   not   MP   would-be-angry words
    kluo:n
    hearing
    'For who would not be angry hearing such words?'

(5) po:s <u>an</u>   ouk <u>an</u>   en dike:i
    how   MP   not   MP   in justice
    thanoimi   <u>an</u>;   S. Fr. 739 Radt
    would-die   MP
    'How should I not justly die?'

Unfortunately he offers no commentary with his translations, and we are left to wonder where exactly the emphasis is supposed to fall, as well as what exactly 'emphasis' is supposed to mean. Weil (1887: 103) offers a similar claim, which is only slightly more explicit:

> It is well known that the particle ἄv [= *an*] is placed by preference after the word to which the writer wishes to call particular attention by emphasis; sometimes it seems to be even unnecessarily repeated, but it serves to draw special attention to several words of the sentence … It will thus be seen that these little words enhance the terms near which they are placed, not by any meaning that is peculiar to them, but solely by the repose of emphasis which they cause.

We need to bear in mind that Weil is writing at a time before Wackernagel published his seminal 1892 article on second-position clitics. As such, Weil sees no problem in suggesting that *an* is placed after a word for emphasis. In my view, such a claim is implausible, as second-position constraints (at least for one of the tokens of *an*) take precedence over any potential semantic considerations (although see Dik 2007: 19–22.)

By far the most sophisticated and explicit (not to mention recent) analysis of the multiple-*an* construction is that of Slings (1992), who takes a different tack from Smyth and Weil. He claims (1992: 102) that iteration is triggered by the syntactic or pragmatic complexity of a clause. Cases of 'syntactic complexity' include sentences that are interrupted by an intervening clause, on either side of which we find a token of *an* (see Slings 1989: 391–2, with references to earlier literature). While I have reservations about the notion of 'complexity' here (for one, Slings offers no adequate definition of the term; more importantly, complexity per se is not relevant: the crucial feature is the interruption of the clause), I do agree in principle with his account. This seems to be the same pattern that Hermann (1831: 188) had already identified, and which I discuss in section 4.

As for the second conditioning environment, that of 'pragmatic complexity,' Slings refers (1992: 103) to clauses that contain a 'high information load: the quantity of new information in a sentence, plus the number of words that by their very meaning carry a certain emphasis, like question words and adjectives denoting quantitative intensity ("big," "many," "all").' He illustrates this claim with the following example:

(6) pos <u>an</u> pot' aphikoime:n <u>an</u> euthu   tou Dios   Ar. *Pax* 68
    How MP ever would-get   MP straight-to the Zeus
    'How would I ever get straight to Zeus?'

The question is not a part of a conversation, but rather a report by a slave of what his master Trugaios had asked himself several times. As a result, each element of the clause is 'new', in as much as it bears no links to the preceding discourse. Thus in contrast to the canonical flow of information from known to unknown, (6) according to Slings (1992: 104) is 'one entire Focus'. (It should be pointed out that his definition of focus differs from mine, in that he simply means that all the material of the question is unknown.) He goes on (1992: 104) to suggest that sentences with such a high information load are broken up into more prosodic 'chunks' than they otherwise would: 'the pragmatic complexity would cause the sentence to be cut into at least two parts. It then becomes logical that in each of these parts the modal character of the sentence is marked separately, namely through the repetition of ἄv. What this comes down to actually is that double ἄv is always caused by a caesura in the sentence.'

Prima facie the notion that clauses with a higher information load are broken up into more prosodic chunks, and that greater prosodic chunking in turn demands an iteration of *an*, is both intuitive and plausible. But upon further reflection it faces considerable obstacles. First, it is not clear what degree of 'pragmatic complexity' is required to trigger the iteration of *an*: is causation gradient (that is, a certain threshold of complexity must be met for iteration to take place), or is it binary (in which case it will only occur if all elements are new, as in example (6))? Second, (6) is pragmatically unusual, and it is not clear how exactly one is to generalize Slings's account from this example to more commonplace utterances. Content-wise, we have

to remember that we are dealing with the musings of a man who wants to ascend to heaven on a dung-beetle. And contextually, as already noted, the question is a quotation and thus does not belong to any of the participants in the conversation.

2. Focus

This section sketches briefly the assumptions and concepts of information structure that I adopt in the body of the paper. The theoretical frameworks and terminology used to describe and analyse information structure varies enormously. Here I adopt a basic distinction between PRESUPPOSED (or 'given') and NON-PRESUPPOSED (or 'new') information (see generally Prince 1981; Krifka 2007). Presupposed information is that which has previously been evoked in the discourse; or is part of a speaker's encyclopedic knowledge; or may be present in the physical or cultural context. Non-presupposed information that is asserted I refer to as the FOCUS of the utterance (Beaver and Clark 2008; Toosarvandani 2010). I define an assertion (roughly) as a speech act in which something is claimed to be true; by definition it contains a focus constituent. Assertions are made with utterances.

One way to characterize the contribution of focus is as filling in the variable of a question, as in (7) (subscript 'Foc' is used to mark the focus constituent):

(7) A: What did John do?
     B: He [washed the dishes]$_{Foc}$.

A's question assumes that there is a person named John, that speaker B can identify the John that he has in mind, and that this John did something. In other words:

(7.1) Given: John x, x ε {actions}
        Focus: x = {washed the dishes}

The focus of B's answer specifies what John did, that is, it provides the desired piece of information.

Focus can be further divided into subclasses according to the 'strength' of the focus. Kiss (1998: 245–6) distinguishes between two types of focus, INFORMATIONAL and IDENTIFICATIONAL. While the two differ along several parameters (Kiss 1998: 248), the most general distinction is that the first refers to non-presupposed information, that is, the type illustrated in (7), while the second involves exhaustive identification of the subset of contextually relevant sets to which the predicate actually holds. This distinction is illustrated in the following minimal pair (from Kiss 1998: 247) from Hungarian:

(8) Tegnap este be   mutattam Pétert   Marinak
     Last   night PERF *introduced Peter.ACC Mary.DAT*
     'Last night I introduced Peter to Mary.'

(9) Tegnap este Marinak mutattam be Pétert.
     'It was to Mary that I introduced Peter last night.'

In (8), a case of informational focus, *Marinak* 'Mary' is in post-verbal position and represents merely non-presupposed information, without the suggestion that the speaker introduced Peter only to her last night. By contrast, in (9), a case of identificational focus, *Marinak* precedes the verb *mutattam* and expresses exhaustive identification: among a contextually relevant set of individuals (whatever that might be), the speaker introduced Peter to Mary and no one else last night. (Kiss's distinction between informational and identificational focus

seems to correspond to the distinction between 'weak' and 'strong' focus found in Devine & Stephens 2006.)

Identificational focus has the further ability to evoke a contextually relevant set of alternatives; see Jacobs (1983), Rooth (1985), König (1991: 35). Thus identificationally focused constituents contribute a meaning beyond that of their basic lexical content; that is, rather than simply meaning '*x*', they often mean '*x*, and not {...*y*...},' where {...*y*...} is contextually defined.

2.1. *Polarity focus*

Focus constructions can scope over morphosyntactic constituents of varying size, from the entire clause to specific constituents (see e.g. Givón 1975; Lambrecht 1994: 233–5). The scope of the multiple-*an* construction is by and large restricted to the polarity of the clause, that is, whether it is affirmative or negative (polarity focus is also known as VERUM FOCUS; see further Dik et al. 1980; Höhle 1988; 1992; Lambrecht 1994: 236; Gutzmann and Miro 2011). In English, polarity focus is often signalled with nuclear stress, represented here by boldface type:

(10) He **would** sacrifice himself.

(11) I did **not** wink at her.

As (10) illustrates, in affirmative contexts prosodic prominence falls on the modal auxiliary; in non-modal contexts, this is also the case, as the prominence falls, for example, on the auxiliary verb *do* (e.g. 'he **did** sacrifice himself.') For this reason, polarity focus is sometimes referred to as TAM (= tense-aspect-mood) focus (Thwing and Watters 1987), or auxiliary focus (see e.g. Hyman and Watters 1984). If we think of the Greek modal particle as a modal auxiliary, then the multiple-*an* construction is analogous to what we find in (10), in as much as the additional prominence of the construction falls on the auxiliary element (although via iteration and not pitch).

Polarity focus is not canonically licensed in out-of-the-blue contexts (see Richter 1993), as one could imagine with examples (10) and (11). Indeed, it appears that polarity focus is only licensed when the PREJACENT, the proposition that is being affirmed or denied, is already a part of the COMMON GROUND, that is, it is viewed as presupposed or accommodated information. This means that the prejacent must either be evoked in the discourse, assumed to be part of a speaker's knowledge store, or available from the physical or contextual environment. In the following example, for instance, polarity focus is licensed because Xanthias infers that Dionysos wants him to dress up as Herakles again:

(12) oid'   oida   ton noun. paue paue tou logou.
      I-know I-know the mind. Stop stop the thought.
      ouk an̲   genoime:n He:rakle:s an̲.
      not MP̲ I-would be Herakles   MP̲   Ar. *Ran*. 580–1
      'I know what you're thinking, I do. Give that thought up, (just) give (it) up.
      I **won't** be Herakles again.'

With the remark 'I know what you're thinking,' it is clear that Dionysos' imagined request is shared by both speakers, and thus part of the common ground. The focus on the negative polarity of the clause is accordingly licensed. In discussing the Greek examples below, I make every attempt to identify the prejacent and its source (previously evoked in the discourse, part of the general knowledge store, result of an inference, etc.). I should say now, however, that this is not always clear, and that this issue requires more investigation. Indeed, I have no doubt that it is possible to provide a more restrictive account of the licensing conditions on

multiple-*an*. One feature that makes pragmatic analysis of conversation in Greek drama so challenging (and interesting) is that we are not dealing with normal pragmatic situations: for we have characters who are both speaking to one another, as well as performing for an audience. Thus in addition to the interaction of the characters there is the further dimension of the author communicating indirectly with his audience.

2.2. Iterated-an *as a polarity-focus construction: predictions*

As is well known, parsing the information structure of an ancient language is a delicate endeavour, as one man's topic is often another's focus. Despite the diversity of opinion that can arise in cases like this, the individual reading of a sentence nevertheless remains a crucial component of information-structure analyses. To ameliorate the subjectivity, however, we have to draw on insights from elsewhere. Thus my claim of a polarity-focus construction relies not merely on my assessment of the meaning of individual examples (laid out in detail in the next section), but is also bolstered by the fact that the predictions that this analysis makes are borne out by the observed data. In particular, my analysis makes the following predictions:

(13) *Assertion prediction*
     a. As multiple-*an* focuses the truth value of a proposition, it must occur in assertive utterances. Accordingly it should not occur in adjunct clauses, in as much as they typically contribute 'background information.'

     Focus-restriction prediction
     b. Since multiple-*an* focuses the truth value of the clause, this should exclude any other element in the utterance from being focused (on the assumption that clauses canonically contain one focus constituent). In concrete terms, this means that focusing particles and word-order constructions should be in complementary distribution with multiple-*an*.

These two predictions are of crucial importance in diagnosing the pragmatic contribution of multiple-*an*. For (13a) suggests that its contribution lies somewhere within the domain of focus, while (13b) sets the stage specifically for polarity focus.

    Both of these predictions are borne out by the data. Concerning (13a), it has long been known, (see e.g. Wackernagel 1892: 399; Slings 1992: 102), that *an* is not iterated in clauses with a subjunctive verb. Clauses in which singleton *an* and a subjunctive verb co-occur are all adjoined clauses, that is, clauses in which assertion is not possible. This gap, which was previously unmotivated, now falls out naturally from the analysis (and cf. Hyman and Watters 1984: 254–9 for a similar distribution pattern in African languages).

    The second prediction, (13b), is also borne out by the data (thus far at least). What this means is that other grammatical resources for marking focus, namely discourse particles and word-order patterns, are blocked in the presence of multiple-*an*. The most important gap here is the particle *de:*, which is widely believed to be 'emphatic' (see e.g. Smyth 1956: §§2840–7). Multiple-*an* does co-occur with the particle *ge*, which is sometimes described as a focus marker. However, in cases where *ge* and multiple-*an* co-occur, the particle does not mark focus. If anything, it seems to serve as a topic-switching device. In the following example, for instance, Oidipous is railing against Kreon, arguing that he was predestined by the gods to suffer. Regarding the murder of his (i.e. Oidipous') father, Oidipous asks:

(14) po:s an to g' akon pragm' an eikoto:s psegois;
     how $\overline{MP}$ *the* PTCL *unwitting deed* $\overline{MP}$ *legitimately you-could-blame*   S. *OC* 977
     'How **could** you legitimately blame the unwitting deed?'

There appears to be an implicit contrast between *a:kon* 'unwitting' and other types of deeds, with the implicature being 'other kinds of deeds you could legitimately blame, but the inadvertent one you could **not**.' Perhaps another way to capture the sense would be, 'of all deeds, you could **not** blame the unwitting one.' Either way, what we are dealing with is a set-membership construction (on which, see Goldstein 2010: 128–36) and not a focus construction, inasmuch as no part of the phrase *to a:kon pra:gma* instantiates the focus of the clause. This is also how the particle seems to behave in cases where *ge* is hosted by a personal pronoun, for example, S. *OT* 1046; E. *Alc*. 463–5, *Alc*. 474–5. More can be said about the interaction of *ge* and multiple-*an* once more research on the former has been conducted (as it stands there is no adequate, up-to-date analysis of the particle); for further examples of their co-occurrence, see E. *Andr*. 1184–5, *Hipp*. 480–81; Ar. *Ach*. 214–7(?), *Ach*. 307–8, *Ran*. 914–5. (It is perhaps worth noting that *ge* can be iterated (Smyth 1956: §2822), but there are no examples in my corpus of the co-occurrence of iterated *ge* and multiple-*an*.) Multiple-*an* occurs with the following other discourse particles, none of which so far as I can see marks focus in the presence of multiple-*an*: *men*, *ge*, *de*, *de:ta*, *eti*, *e:de:*, *mentoi*, *u:n* and *toi*.

Ancient Greek has a preposing construction, which can instantiate either non-focal (Goldstein 2010: 121–48) or focal (Goldstein 2010: 149–71) elements. As predicted, however, multiple-*an* and focus preposing are mutually exclusive: preposing co-occurs with multiple-*an* infrequently (e.g., S. *Tr*. 742–743; Ar. *Nub*. 1056–7; as well as S. *Ant*. 905–7 and Ar. *Lys*. 510–1?) and in no instance does it instantiate the focus of the utterance.

Further support for a polarity-focus analysis for multiple-*an* comes from its co-occurrence with other polarity-reinforcing devices, which also require the prejacent to be part of the common ground. In negative contexts, multiple-*an* can co-occur with emphatic negatives like *oukhi* (on which see Smyth 1956: §§2754–2758), as well as double negation (see S. *Aj*. 1246–7; Ar. *Nub*. 1250, *Pax* 1223), and negative clefts (S. *Ant*. 1155–7). In positive contexts, we find affirmative particles like *e:* (E. *Hipp*. 480; Ar. *Ran*. 34), *e: mala* (E. *Alc*. 463–5), and *kai gar* (E. *Hel*. 1011–12; Ar. *Thesm*. 197), all of which seem roughly equivalent to 'indeed'. We also find asseverative phrases like *eu tout' isthi* (S. *OT* 1438–9), 'know this well,' and *saph' isth'* (A. *Pers*. 337–8), 'know clearly.' In addition, we may want to include here in this group the particle *toi*, which seems to mean 'you know' or 'after all' (A. *Pers*. 706, discussed below). With the exception of *toi*, I presume that these phrases and particles can be used to reinforce polarity because this feature is not binary but gradient. Affective meaning is probably involved as well, although this topic will not be considered here.

2.3. *A competing account: general focus construction*

The greatest challenge to the account offered here is one that interprets multiple-*an* not specifically as a polarity-focus construction, but rather as one that modifies (or rather, intensifies) the focus of the clause, whatever it may be. (Such lexical items or constructions are said to 'associate with focus'; on which see recently Toosarvandani 2010.) Such an analysis differs considerably from my own, because it would claim that utterances with multiple-*an* permit the focus to fall anywhere in the clause, whereas mine restricts it to the polarity value, with the exception of the examples discussed in subsection 3.1.2, where multiple-*an* does focus an argument of its clause, and not its polarity value. As demonstrated below, such cases only occur under very select conditions, however. So far as I can see, both analyses would require the non-focused material of the proposition to be part of the common ground. Determining where the focus is in any given utterance in the end comes down to careful, philologically-rigorous interpretation of the text.

3. Multiple-*an* as polarity-focus construction

There are two general observations to make before moving on to the data. The first concerns the observation of Gildersleeve (1882: 455) that multiple-*an* occurs 'largely with negatives or equivalents.' My results confirm this: these two environments account for almost 70 percent of the data, while non-interrogative affirmatives account for just over thirty per cent of cases.

To my knowledge, the frequency of the multiple-*an* construction has not been tallied among the dramatists, and I present below the token frequency (Slings 1992: 104 reports average frequency rates per play):

(15) Aeschylus: 6/ca. 36,644 words = 0.00016[5]
Sophocles: 37/ca. 63,937 words = 0.00058[6]
Euripides: 44/ca. 141,183 words = 0.00031[7]
Aristophanes: 37/ca. 103,262 words = 0.0004[8]

We can also look at the frequency of multiple-*an* in comparison to the total number of sentences with *an*:

(16) Aeschylus: 6/ca. 194 = 0.03
Sophocles: 37/ca. 516 = 0.07
Euripides: 44/ca. 803 = 0.05
Aristophanes: 37/ca. 654 = 0.06

It is not clear what we are to glean from these numbers. It seems that there is a jump in the frequency of the construction between Aeschylus and Sophocles, and then a subsequent decline. The problem, however, is that we cannot think of the four authors as ordered in a consecutive back-to-back sequence. For their productions obviously overlapped. Thus we cannot read the frequency rates in (16) as a sequential narrative beginning with Aeschylus and ending with Aristophanes. Textual issues present a further problem and if we could, for instance, trust more passages from Aeschylus and Euripides, the distribution might suddenly appear more uniform.

The subsequent subsections are organized according to utterance type, beginning first with negative assertions (3.1) and directives (3.2); then affirmative assertions (3.3); interrogatives (3.4–3.6) and wishes (3.7); finally, subsection 3.8 briefly considers the phenomenon of triple-*an*.

3.1. *Polarity focus in negative assertions: clausal negation*

Utterances in this class typically counter assert the negative truth value of a proposition in the common ground, and thus are commonly used as correctives. In the following example, the wife of Herakles, Deianeira, describes the contest between her first suitor, the river god Achelous, whom she was deeply afraid of, and Herakles, who defeated the river god to become Deianeira's husband:

---

[5] I have excluded *Supp.* 706–7, *Ag.* 340–1, *Choe.* 841–2, and *Eum.* 857 on textual grounds. There are no cases of multiple-*an* in *Prometheus Bound*. If we include consideration of this play, the size of the Aeschylean corpus would increase to 42,920 words, and we would be dealing with a ratio of 6/234 (= 0.0256).

[6] I have excluded *Phil.* 116.

[7] Excluded from this count are *Al.* 361–2, *Andr.* 351, *IT* 98, *Ion* 76–7, *Hel.* 290–1, *Bacc.* 1271, *Rh.* 309–10.

[8] *Ach.* 709–10 was excluded.

(17) khrono:i d' en hustero:i men, asmene:i de   moi
    time PTCL *in last*   PTCL, *delighted* PTCL *to-me*
    ho kleinos e:lthe Ze:nos Alkme:ne:s te   pais:
    the glorious came of-Zeus of-Alkmene and child
    hos eis ago:na to:i de   sumpeso:n makhe:s
    who into contest with-him falling-in   of battle
    ekluetai me. kai tropon men <u>an</u> pono:n
    saves   me. and manner PTCL <u>MP</u> *contest*
    ouk <u>an</u> dieipoim'. ou gar oid'.   all' hostis e:n
    not <u>MP</u> *recount.   Not for I-know. But   whoever was*
    thako:n atarbe:s   te:s theas, hod' <u>an</u>   legoi.
    Sitting   without-fear the sight,   this <u>MP</u> *would say.*
    ego: gar he:me:n ekpeple:gmene: phobo:i
    I   for sat   struck   with-fear
    me: moi   to kallos algos ekseuroi pote.   S. *Tr.* 18–25
    not to-me the beauty pain bring   in the end
    'But at last, to my joy, the glorious son of Zeus and Alcmena came, and falling into a contest of battle with him saves me. I could **not** recount the manner of the contest. For I don't know, but if there be anyone who sat without fear of the sight, he might give an account of it. But I, as I sat there, was struck with fear, that my beauty should bring me sorrow in the end.'

Deianeira was present at the contest, which gives rise to the expectation that she would be able to describe what happened. But as she says in lines 21 and 22, she cannot. She focuses the negative polarity of the clause with two tokens of *an* because she is aware of the expectation that she will be able to describe the fight.

    Multiple-*an* is also used to counter propositions that have been directly evoked in the discourse. So in the following exchange, Jason encourages Medea to accept his financial assistance; he also says that he can send *sumbola* (roughly equivalent to letters of introduction) to friends of his abroad who will take care of her:

(18) all', ei ti   boule:i paisin   e: saute:i   phuge:s
    but, if some you-want for-children or for-yourself in-exile
    proso:phele:ma khre:mato:n emo:n labein
    assistance   of-money   of-my to get
    leg', ho:s hetoimos aphthono:i   dounai kheri
    tell. as   ready   with-unstinting to give with-hand
    ksenois   te   pempein sumbol', hoi drasousi s' eu.
    to-friends and to send   tokens,   who will-treat you well.
    kai tauta me: thelousa mo:raneis,   gunai.
    and these not wanting you-are-foolish, woman.
    le:ksasa   d'   orge:s kerdaneis ameinona.
    relinquishing PTCL *anger you-gain better*   E. *Med.* 610–5
    'But if you want to get some of my money for the children and yourself in exile, tell (me), as I am willing to give with unstinting hand, and to send tokens to my friends, who will treat you well. If you reject this, you are a fool, woman: you will fare better if you relinquish your anger.'

    Medea responds by spurning the offer:

(19) out'   an   ksenoisi toisi sois khre: saimeth'   an
      neither $\overline{MP}$ *friends   the   your we-will-make-use-of* $\overline{MP}$
      out'   an   deksaimestha,   me:d' he:min didou.   E. *Med.* 616–7
      neither $\overline{MP}$ *we-would-accept, don't to-us   give*
      'We will **neither** make use of your friends, **nor** accept anything. So don't give it to us.'

The focal strength of her answer responds to the strength of Jason's directive. An interesting feature of her answer is the conjunct negation *out' ... out'*: even though multiple-*an* appears only in the first conjunct, it seems that the negative-polarity focus extends to the second conjunct as well (if only because there seems to be no reason why it would only be restricted to the first), and hence both words appear in boldface in the translation; see also S. *Ant.* 1155–7, *OC* 1528–9; with the negative scoping over an argument, S. *OT* 857–8 and E. *Alc.* 361–2 (although the latter passage is problematic textually), as well as subsection 3.1.2. When the first conjunct contains one token of *an* and the second two, polarity focus is restricted to the second conjunct, as at E. *Andr.* 301–3. Although textbooks typically teach that the meaning of an optative verb with *an* is best captured with a modal auxiliary like 'might,' 'could', or 'would', in (19), it is most felicitously rendered with 'will'; on this possibility (which is in need of further research), see Goodwin (1897: 78), as well as S. *OT* 446; E. *Ion* 529; and A. *Pers.* 706 below. For further examples of this category, see S. *Aj.* 155–6, *Ant.* 680, *Ant.* 884, *OC* 1110–11; E. *Andr.* 77, *Or.* 379; Ar. *Pax* 321, *Lys.* 361, *Ran.* 96–7, *Ran.* 581.

3.1.1. *Negative quantifiers*

Sometimes a clause (or some sub-clausal constituent) is negated not by *ou(k)* but by a negative quantifier such as *oupote* 'never' or *ouden* 'nothing'. Multiple-*an* scopes over such quantifiers just as it did with clausal negation. In the following example, Philoktetes rebuts the claim of Neoptolemus and Odysseus that they have come to the island of Skyros altruistically:

(20) eksoida d'   h:os melei   g'   epei outpot' an   stolon
      I-know PTCL *that it-is-a-concern* PTCL *since never* $\overline{MP}$ *journey*
      epleusat' an   tond' heinek'   andros athliou,
      sailed $\overline{MP}$ *this   on-account-of man   wretched,*
      ei me: ti   kentron theion e:g' humas emou.   S.*Phil.* 1037–8
      if not some goad   divine led you   to-me
      'I know that they care, since you would **never** have made this journey on account of a wretched man, unless some divine goad had led you to me.'

Philoktetes asserts on the contrary that they would not come to his island simply for a wretch like him, but rather they have some other motive.[9]
   The following passage illustrates the use of multiple-*an* with the negative quantifier *ouden* 'nothing'. As Oidipous and his wife Iokasta are trying to unravel the prophecy of the murder of Laios, Iokasta reminds him that Laios was prophesied to die at the hands of her son; since (as she believes) Oidipous is not her son, he cannot be the murderer. Oidipous replies:

---

[9] It should be noted that we find both the sequence *oupot' an* as well as *ouk an pote*; it is not clear what difference in meaning (or usage) distinguishes them.

(21) kalo:s nomizdeis: all' homo:s ton ergate:n
     Well   you-think: *but* *still*   *the peasant*
     pempson tina   stelounta me: de tout' aphe:is.   S. *OT* 860–1
     send   someone will-fetch not this   neglect
     'You are right, but still send someone to fetch the peasant, (and) do not neglect this.'

The directive to his wife that she not neglect the matter presumably implicates the concern that Iokasta would fail to do this. Iokasta accordingly assures him that it will be taken care of:

(22) ouden   gar <u>an</u> praksaim' <u>an</u> ho:n ou soi   philon.   S. *OT* 862
     Nothing for MP *I-would-do* MP *which not to-you dear*.
     'For I would do nothing that you wouldn't like.'

For further examples in this category, see S. *Aj.* 1073–4, *Aj.* 1246–7, *OT* 602, *OC* 1528; E. *Alc.* 72, *Hipp.* 495–6, *Hec.* 1199–201, *Supp.* 855–6 (with *molis*, 'hardly'); Ar. *Nu.* 1056–7, *Vesp.* 927–8.

3.1.2. Constituent negation

In a small number of cases (I count nine in all, with six of them in Aristophanes), when the negator *oude* 'not even' negates an argument of the clause, the focus shifts from the polarity of the proposition to the constituent that *oude* scopes over, as in the following two examples, where the subject is negated (see also A. *Supp.* 771–2; Ar. *Lys.* 1–3, *Plut.* 137–8):

(23)   hotan de   tis   theo:n
                                     when PTCL *someone of-gods*
     blaptei:i dunait'   <u>an</u> oud'   <u>an</u> iskhuo:n phugein.   S. *El.* 696–7
     strikes   would-be-able MP *not-even* MP *strong   escape*
     'When one of the gods strikes, not even (the) strong can escape.'

Here the negation rules out escape even for the most likely candidate, namely *iskhuo:n*, 'the strong'. That the strong would be the most likely to escape has not been previously mentioned in the discourse but rather is an assumed piece of encyclopedic knowledge.

It is also possible to negate other constituents, such as an adverb (Ar. *Ach.* 217) or a direct object, as in the following case (see also A. *Nub.* 1250, *Vesp.* 508–9):

(24) ouk <u>an</u> priaime:n oud'   <u>an</u> iskhados mias.   Ar. *Pax* 1223
     not MP *would-pay* *not-even* MP *fig   one*
     'I wouldn't even give a single fig for them.'

If the following line can be considered genuine (it has been subject to various emendations and Diggle 1981 recently obelized it), then we even have an example in which the *oud'* scopes over the verb phrase:

(25) oud'   <u>an</u> ek sethen <u>an</u> puthoiman' audan;   E. *Ion* 222
     not-even MP *from you*   MP *learn   report*
     'Couldn't we even get a report from you?'

In all nine examples of this category the negative *oud'* is followed by *an*. This token can be either the first (five examples) or second (four examples) token of *an*. There is one example of this reading in which multiple-*an* associates with *oudeis* 'no one':

(26) e:leipsato d' <u>an</u> toumphalou oudeis hypenerthenpais   tot' <u>an</u>, ho:ste
annointed PTCL <u>MP</u> *of-the-navel no-one child below then   MP, with-the-result-that*
tois aidoioisi drosos kai khnous ho:sper meloisin epenthei.   Ar. *Nub*. 977–8
the genitals dew   and down   just-as fruit   blossoms
'And **no** boy used in those days to anoint himself below the navel, with the result
that dew and down blossomed on their genitals, as on fruit.'

A similar pattern with negative disjunction occurs at S. *OT* 857–8 and E. *Alc*. 361–2 (this
latter passage has been subject to emendation, however).

3.2. *Polarity focus in negative directives*

We return to cases in which multiple-*an* focuses the polarity of the clause, and turn toward
directives. In the following example, the shepherd, after capturing two Greeks, tells Iphigenia
to prepare for a sacrifice:

(27)   khernibas   de   kai katargmata
                         lustral-water PTCL *and first-offerings*
ouk <u>an</u> phthanois   <u>an</u> eutrepe: poioumene   E. *IT* 244–5
not MP you-could-anticipate MP ready   making
'(The) lustral water and first offerings,
you could **not** be too quick in getting ready.'

The shepherd's directive is not encoded with a typical imperative verb form, but rather with
the phrase *ouk phthanois an*, which *LSJ* s.v. IV.2 describes as expressing 'a strong exhortation
or urgent command.'[10] The shepherd appears to use polarity focus here to affirm the truth of
his report. When he first enters, he describes his news as *kainos* (l. 239), 'strange': the
focus structure in his utterance is essentially a way of saying 'I'm serious: get everything ready
now.'

 An alternative analysis, which I find less plausible, is that the shepherd believes that
Iphigenia will (for some reason) delay in getting ready, and thus uses polarity focus in an
attempt to forestall this prospect. In support of this idea, one could cite the fact that Iphigenia
is not quick to take up his directive. Rather than go and prepare the sacrifice, she asks the
shepherd for details about the men he captured. Lastly, as for the preposing of the object
noun phrase, this seems to be triggered by the phrase *prosphagma kai thuterion*, 'an offering
and sacrifice', in line 243; there is a part-whole relationship between this phrase and the object
in line 244 (for set relationships and preposing in Greek, see Goldstein 2010: 128–36). This is
not a well-represented category: in addition to (27), there are only two further examples,
E. *Tro*. 456–7 and Ar. *Eccl*. 118.

3.3. *Polarity focus in affirmative assertions*

As with its negative counterpart described above, multiple-*an* clauses in affirmative
environments focus the positive polarity of the clause,[11] and are also commonly used as
correctives. So in the following example, Oidipous asks Kreon for a favour (line 1434), and
Kreon in turn asks what he wants, to which Oidipous answers:

---

[10] I leave aside here the pragmatic question of whether this is a direct or indirect speech act.
[11] Polarity focus can also be marked in Greek by preposing the verb: see Goldstein (2010: 143–4) for a brief
description and further bibliography.

(28) ripson me ge:s ek te:sd' hoson takhisth',   hopou
     Throw me land of this   so-much quickest, to-where
     thne:to:n phanoumai me:denos prose:goros.   S. *OT* 1436–7
     of-mortals I-will-appear no-one   greeting
     'Throw me out of this land as quickly as possible, to where I will be met by no mortal
     greeting me.'

   Kreon declares in response:

(29) edras' an   –eu tout' isth– an   ei me: tou theou
     I-did   MP well this know   MP, if not the god
     pro:tist' ekhre:izdon ekmathein ti   prakteon.   S. *OT* 1438–9
     first   I-needed   learn   what to-be-done
     'I **would** have done (so)–make no mistake–except I needed first to learn from my
     god what had to be done.'

Multiple-*an* affirms the fact that Kreon would have thrown him out, were it not for the
injunction of his god (Apollo). The clause thus answers the question, 'are you willing to throw
me out?', as opposed to, for example, 'what would you have done?' A small but important
piece of evidence for the polarity-focus function comes from the phrase *eu tout' isthi*, 'know
this well', as it reflects Kreon's high level of confidence in his assertion. The following example
is very similar, and in fact also includes a high-confidence phrase (this time *saph' isth'*):

(30) ple:thous men an   saph' isth' hekati   barbaro:n
     amount   PTCL MP clearly know on-account-of barbarian
     nausin an   krate:sai.   A. *Pers.* 337–8
     ships   MP win
     'Know clearly that, going by numbers alone, the barbarian **would** have won with
     his ships.'

The Persian queen Atossa has asked a messenger how many ships the Athenians had (334–6)
that gave them the courage to engage the Persians; for she assumes that the Persians have a
much larger fleet. The iteration of *an* serves to affirm the truth of this assumption: for if
numbers alone were all that mattered, the Persians would indeed have won. He goes on to
tally the respective number of ships on the Greek and Persian sides, and then says that it was
divine providence that enabled the Greek victory.
   Multiple-*an* can also be used to confirm a previous proposition, as in the following
example, in which the chorus pleads with Ajax to be reasonable:

(31) Aias, ekhein s' an   oikton ho:s kago phreni
     Ajax, to-have you MP pity   as   too-I in-heart
     theloim' an. ainoie:s   gar an ta te:sd' epe:.   S. *Aj.* 525–6
     I-would-like MP. You-would-approve for MP the her   words
     'Ajax, I **would** [or really would] like you to have pity in your heart, as I also do.
     For you would approve her words.'

Before this point, the chorus have repeatedly urged him to yield and be more reasonable (cf.
361–2, 71, 483–4), and (31) reiterates this request. The iteration of *an* here may also invoke the
implicature that the chorus does not think Ajax will actually conform his behaviour to their
desire. That is, 'I *really do* wish you would have pity in your heart (but I know that you
probably will not).' For further examples of multiple-*an* in non-exclamative bouletic
modality, see E. *Ion* 625–8; Ar. *Vesp.* 510–11.

In the last example, the iteration of *an* focuses the polarity value of the proposition, but with a different intention to what we have thus far seen. Rather than affirm or counter a proposition, it serves to remind an interlocutor of the truth of a proposition:

(32) klaumato:n le:ksasa to:nde kai goo:n   saphes ti   moi
     crying   ceasing this   and lamentation clear   something to-me
     lekson. anthro:peia d' <u>an</u> toi pe:mat' <u>an</u> tukhoi brotois.   A. *Pers.* 705–6
     tell.   human   PTCL MP PTCL suffering MP befall mortals.
     'Cease from this crying and lamentation and tell me something clear. Human suffering **will** after all befall mortals.'

The ghost of Dareios addresses this remark to his widow Atossa. He is reminding her (I presume that *toi* here signals his belief that she is aware of this truth, and thus functions not unlike the German particle *ja*) that human suffering is an inevitable part of life in an attempt to stop her crying and to convince her to tell him what happened to the Persians (for a similar argument, cf. S. *Aj.* 377).

This category is also interesting for what we do not find. For there appear to be no cases in which multiple-*an* is used to make a low-probability proposition, as we find in English when the modal verb *might* is pitch-accented, as in 'You **might** be able to find some there.' If this absence is real, it may fall out from the fact that the optative itself is not used in this sense, and therefore the focused sense is not attested either. For further examples of this category, see S. *OT* 139–40, *OT* 1053; E. *Alc.* 464–5, *Alc.* 474–5, *Alc.* 646–7, *Heraclid.* 415, *Hipp.* 270, *Hipp.* 480, *Andr.* 302–3, *Andr.* 1184, *Hec.* 359–60, *Hec.* 742, *Ion* 529, *Ion* 1273–4, *Hel.* 76–7, *Hel.* 948–9, *Hel.* 1298–300, *Phoen.* 1017–18; Ar., *Thesm.* 196, *Thesm.* 830–1, *Ran.* 34.

3.3.1. *Apparent cases of verb or argument focus in affirmative clauses*

There are examples in which it is difficult to identify precisely the scope of the focus. I introduce here two such examples, which, while I believe they are cases of polarity focus, nevertheless do seem to admit other readings. In the following exchange, Agamemnon asks Hekuba why she is delaying and has not come to him to bury her daughter. She is not sure what to do, and asks herself a couple of questions. She considers throwing herself at Agamemnon's knees:

(33) Hec. duste:n', emaute:n gar lego: legousa se,
          wretched, myself   for I-say saying you,
          Hekabe:, ti   draso:;   potera prospeso: gonu
          Hekuba, what shall-I-do? Either I-throw-myself knee
          Agamemnonos toud' e: phero: sige:i   kaka
          of-Agamemnon this or I-bear in-silence sorrows
     Ag. ti   moi   proso:po:i no:ton egklinasa son
          Why to-me to-face   back   turning   your
          dure:i,   to prakhthen d' ou legeis; tis esth' hode;   E. *Hec.* 736–40
          you-weep, the happened PTCL not say? who is   this
     Hec. 'Wretched (one)! For in naming you I name myself; Hekuba, what shall I do? Throw myself here at Agamemnon's knees, or bear my sorrows in silence?'
     Ag. 'Why do you turn your back towards me and weep, refusing to say what has happened? Who is this?'

Hekuba does not answer Agamemnon's question; instead, she addresses herself again:

(34) all', ei me doule:n polemian th' he:goumenos
    but if me slave enemy and considering
    gonato:n apo:sait', algos <u>an</u> prostheimeth'. <u>an</u>   E. *Hec.* 741–2
    from-knees push, pain MP we-would-add MP
    'But if (he [= Agamemnon]) should count me as a slave and an enemy and push me
    away from his knees, I would add to (my) pain.'

The ambiguity lies in whether the polarity (i.e. *would* would be interpreted '**would**') or the verb is focused (i.e. *add* would be interpreted as '**add**'). Under the first reading, Hekuba would be confirming the fact that if Agamemnon were to think of her as a slave and an enemy, her situation would definitely deteriorate (whereas under other contingencies, she is not sure). Under the second reading, the verb would be focused and mean essentially 'add (and not reduce).' My inclination is toward the first reading, but it is difficult to rule out the second.

The basis of my judgment is what I take to be the prejacent. Hekuba realizes that she is in a wretched state (736–7) and is deliberating between two courses of action, namely to supplicate Agamemnon or to remain silent. We have to infer that the intent of her actions is not to make her situation worse. This inference I presume runs something like, 'I wouldn't want to do anything that would add to my pain.' As she reveals in the passage above, if Agamemnon considers her a slave and enemy then she will add to her misery, that is, the very thing she is trying to avoid would occur. And multiple-*an* is used to confirm (or emphasize) this realization. Under the second reading, we have to imagine a prejacent with some other value besides *add*, for example, 'I want to reduce my pain.' A scenario in which Agamemnon considers her a slave and an enemy has the opposite effect, and multiple-*an* would in this case mean, 'I would only **add** to my pain (and not reduce it).' While this interpretation is entirely plausible, my interpretation of Hekuba's intention is that she intends not to reduce her pain (that is not what is at issue in the discourse), but rather simply not to make it worse.

3.4. *Rhetorical questions*

I use the term RHETORICAL QUESTION to designate morphosyntactic interrogatives that function pragmatically as assertions (and, as such, are indirect speech acts: see Sadock 1971 and Searle 1975). As they are assertions, they neither seek information nor elicit an answer (Van Rooy 2003 has argued that rhetorical questions are in fact information-seeking, but I leave this analysis aside; the Greek examples in this category do not receive answers, although they may receive responses). It is of course possible to ask a rhetorical question with singleton-*an* (e.g. S. *Aj.* 430–1). The difference lies in the following two properties. First, the prejacent of the question is part of the common ground; this is not necessarily a feature of rhetorical questions with singleton-*an*. Second, rhetorical questions with multiple-*an* are often used to highlight differences of belief between the speaker and his interlocutor (but not always, e.g. Ar. *Av.* 1147). The following dialogue between Oidipous and Tiresias again illustrates these properties. The king has been trying to get the prophet to reveal who killed King Laios, but when he is not immediately forthcoming with the answers, Oidipous becomes frustrated and angry:

(35) Oed. ouk, o kako:n kakiste, kai gar an petrou
       not, o of-evil most-evil, and for MP of-stone
       phusin su g' organeias, eksereis pote,
       nature you PTCL would-enrage, will-you-speak-out ever,
       all' ho:d' ategktos kateleute:tos phane:i;
       but thus untouchable and-interminable you-will-appear?

Tir. orge:n emempso: te:n eme:n, te:n se:n d' homou
anger you-blame the mine, the your PTCL *at-hand*
naiousan   ou kateides,   all' eme psegeis.
dwelling-inside not you-perceive, but me   you-blame.

Oed. tis   gar toiaut' <u>an</u> ouk <u>an</u> orgizdoit'   epe: kluo:n;   S. *OT* 334–9
who for such   MP not MP would-get-angry words hearing

Oed. 'Will you never, evil of the most evil–indeed you would enrage a stone–speak
out, but instead appear untouchable and interminable?

Tir. You blame my anger, but do not perceive your own dwelling at hand: no, you
blame me.

Oed. For who would **not** be angry hearing such words?'

With his question, Oidipous asserts that there is no one who would not become angry. In line
with the fact that this interrogative is not pragmatically an information-seeking question,
Tiresias offers no answer, but instead moves on to another topic.

In the following question, the King Danaos makes it clear that he believes the forced
marriage of the Danaids to their Egyptian cousins is not right:

(36) po:s d'   <u>an</u>   gamo:n akousan akontos para
how PTCL *MP groom   unwilling unwilling from*
hagnos genoit'   <u>an</u>;   A. *Supp*. 227–8
pure   could-be MP
'How **could** a groom be pure, seizing an unwilling (bride) from an unwilling (father)?'

In uttering this question, Danaos makes it clear that he considers the injustice of the
Egyptians a foregone conclusion. Crucially, he presents this view not simply as his own, but
rather as one that he thinks everyone is bound to hold; the implicature of his question is that
there is no one who could think such a groom pure. For further examples of this type, see S.
El. 558–9, *El*. 1103, *OT* 772–3, *Tr*. 742–3, *OC* 391, *OC* 977; E. *Alc*. 96–7, *Andr*. 350–1 (?),
Supp. 447, *El*. 534, *Tro*. 961; Ar. *Ach*. 307, *Eq*. 17–18.

3.5. Biased questions

The questions in this category are distinguished from those of the previous by the fact that
they are pragmatically real. That is, they seem to seek information and elicit answers. I say
'seem' here because I have identified very few examples of this category and none of them are
actually answered, as they are embedded in long speeches. Even if we accept that the questions
are answerable, they are not neutral. That is, the speaker is already committed to a particular
answer (see further Huddleston and Pullum 2002: 1989). In the following example, Hekuba
responds to Helen's claim that the goddess Aphrodite (called Cypris here) came with Paris to
Menelaus' house. She rebuts this claim with a question:

(37) Kuprin d'   eleksas   –tauta gar gelo:s   polus–
Cypris PTCL *you-said –this   for laughter much–*
Elthein emo:i ksun paidi Meneleo: domous.
Came   my   with son   of-Menelaus house.
Ouk <u>an</u> menous' <u>an</u>   he:sukhos s' en ourano:i
not   MP waiting   MP quietly you   in heaven
autais Amuklais e:gagen pros Ilion;   E. *Tro*. 983–6
herself Amyclae   brought to   Ilium
'Next you have said–what well may make men jeer–that Cypris came with my son to
the house of Menelaus. Could she [=Cypris] **not** have stayed quietly in heaven and
brought you along with Amyclae to Ilium?'

The question counters Helen's claim and affirms that yes, in fact, Cypris could have stayed in heaven. It would seem possible for Helen herself to respond by countering this claim, but this does not actually happen. For further examples of this type, see S. *OT* 828–9 and *OC* 780.

3.6. *Presupposition-doubting questions*

To this last interrogative category belong questions that do seek information and expect an answer. It differs from the previous two categories, however, in that the speaker is not committed to the truth of the underlying proposition of the question. What that means is that the speaker is not sure if there is an answer to the question posed. These questions thus arise in contexts of doubt, as in the following exchange between Ajax and his wife Tekmessa. Ajax asks that Tekmessa do his bidding, and she assures him (l. 529) that she will do whatever he asks of her. Ajax asks her (l. 530) to bring him his son, and Tekmessa explains that he is not with her (she will soon tell Ajax that he is with their servants) because she feared for his safety (l. 531), a decision that Ajax approves (l. 536). Tekmessa then asks:

(38) ti   de:t' <u>an</u> ho:s ek to:nd' <u>an</u>   opheloimi   se;   S. *Aj.* 537
    How   then   MP   as from these   MP   might-I-help you
    'How then **might** I help you, with things as they are?'

  Ajax treats this as an information-seeking question, because he answers:

(39) dos moi proseipein auton emphane: t'   idein.   S. *Aj.* 538
    let me address   him   face-to-face and see
    'Let me talk to him and see him face-to-face.'

The iterated *an* in Tekmessa's question evokes the fact that one potential answer to the question has been eliminated. That is, if we treat all of Ajax' possible requests as a set {… *x*…}, then the auxiliary focus in Tekmessa's question asks what she can do to help, with the presupposition that she cannot bring him their child, namely, that set-value is now excluded. Auxiliary focus here does two things for Tekmessa. One, it expresses a willingness to help: she will do anything Ajax requests. Two, it excludes the possibility of Tekmessa bringing Ajax their child. It is possible that she relies on this pragmatic manoeuvre because she would prefer that their son not actually see Ajax at the moment. Thus multiple-*an* allows her to project an attitude of compliance while attempting to sidestep Ajax's request. For further examples of this category see S. *Phil.* 222–3; E. *Alc.* 942–3, *IT* 98 (if sound) and 1020; and Ar. *Pax* 68, *Av.* 127, *Lys.* 147–8 and 191.

3.7. *Wishes and exclamatives*

Multiple-*an* also occurs in wishes that the speaker considers incapable of fulfilment. So in the following exchange between Orestes and Iphigenia when he is about to be sacrificed, he wishes that his own sister would lay out his body (see also E. *Herc.* 487–9):

(40) Or. po:s <u>an</u>   m' adelphe:s kheir peristeileien <u>an</u>;
      how   MP me of-sister   hand lay out   MP
    El. mataion eukhe:n, o talas,   hostis pot' ei,
      in-vain   prayer, o unhappy, who   ever you-are,
      eukso:.   E. *IT* 627–9
      you-prayed
    Or. 'Would that my sister's hand might lay out my body!
    El. You have prayed in vain, unhappy (one), whoever you are.'

The development into a wish construction appears to result from the cancellation of the underlying presupposition of the question (as opposed to simply a doubt, as we had with the questions in the previous section). That is, in (40) the presuppostion underlying the wish is that Orestes' sister could not in fact lay out his body.

In the following example, from one of Medea's most famous speeches, she says that she would prefer battle to childbirth:

(41) legousi   d'   he:mas ho:s akindunon   bion
     they-say PTCL *us*   *that* *without-danger* *life*
     zdo:men kat' oikous, hoi de   marnantai dori,
     we-live *at*   *they* PTCL *fight*   *with-spear*,
     kako:s   phronountes. ho:s tris   <u>an</u> par' aspida
     wrongly *thinking.*   *how* *three-times* $\overline{MP}$ *by*   *shield*
     ste:nai theloim' <u>an</u> mallon e: tekein   hapaks.   E. *Med.* 248–51
     to-stand *would-like* $\overline{MP}$ *more* *than* *to-give-birth* *once*
     'Men say that we live a life free from danger at home while they fight with the spear. They are misguided. How I **would** prefer to stand three times by the shield than to give birth once!'

As Medea's answer attests, the social perception is that women's lives are safe and comfortable, while those of men, dangerous. She counters this by saying that she would much rather engage in male activity (i.e. battle) than female activity (i.e. childbirth). The iteration of *an* thus emphasizes the truth of her desire in face of an assumed countervailing belief. Elsewhere multiple-*an* is used to affirm a wish (Ar. *Av.* 829–31, *Ran.* 572–3) or a directive (Ar. *Lys.* 252–3).

3.8. Triple-an

There are cases where three tokens of *an* occur with one verb. In my corpus, there is only one example of this phenomenon; I have included here a further example from the fragments of Sophocles. Both examples follow the focal patterns that were laid out above for clauses with two tokens of *an*:

(42) po:s <u>an</u>   ouk <u>an</u>   en dike:i
     how $\overline{MP}$ *not* $\overline{MP}$ *in* *justice*
     thanoimi <u>an</u>;   S. *Fr.* 739 Radt
     would-die $\overline{MP}$
     'How should I **not** justly die?'

(43) ma te:n anassan, ouk <u>an</u> en g'   emois domois
     by the *goddess*, *not* $\overline{MP}$ *in* PTCL *my*   *house*
     blepous' <u>an</u> augas tam' ekarpout' <u>an</u> lekhe:.   E. *Andr.* 934–5
     looking $\overline{MP}$ *light* *the-my* *would-enjoy* $\overline{MP}$ *bed*
     'By the goddess, she would **not** enjoy my bed in my house and look upon the light.'

It is not clear what sort of contribution the third token of *an* makes. A further strengthening (as if a third degree) of the focal strength does not seem plausible. Judging by the content of (42) and the fact that (43) is a threat, I am inclined to think that the third token is triggered in cases of extremely affective contexts, but this is far from secure. Some insight may be gained by comparison with the English phenomenon of lexical cloning (e.g. *she is sick, sick, sick*).

4. Non-focal multiple-*an*

The functional profile of multiple-*an* in Herodotos differs in two crucial ways from that of verse. First, in this context multiple-*an* is not a focal construction. Second, each token of the *an* is individually motivated, while in drama, as we have seen, they function as a unit to mark polarity focus. In Herodotos, multiple-*an* is triggered in one of the following two scenarios (for a fuller treatment, see Goldstein 2010: 172–98):

Modal-participle construction
(44) The particle *an* occurs in (second position in) both a clause-initial participial phrase and a finite clause: the participial phrase is interpreted as a discrete predicate (that is, distinct from that of the finite verb) and bears modal semantics.

Clausal-insertion construction
(45) The modality of the clause is interrupted, and *an* appears on either side of the interrupting element (cf. Smyth 1956 §1765.a).

Event-internal and -external Repetition
(46) Multiple-*an* occurs in propositions with habitual readings and appears to be used to encode event- internal and event-external repetition.

In the modal-participle construction, the second token of *an* contributes to the meaning of the sentence, in as much as it encodes modal or irrealis semantics in the participial phrase. In the clausal-insertion construction, by contrast, it appears that the second token of the particle contributes no meaning, and is instead used to reestablish the modal character of the sentence.

4.1. The modal-participle construction

The following example illustrates the modal-participle construction:

(47) e: tauta an epathon,   e: pro   tou horo:ntes an kai
     Either these MP they-suffered, or before this seeing   MP even the
     tous allous Helle:nas me:dizdontas   homologie:i an
     other   Greeks   joining-the-Persian-side agreement   MP
     ekhre:santo pros Xerkse:n.   Hdt. 7.139.15–16
     they-made   with Kserkses.
     'Either they would have suffered these things or if–before this–they had seen that
     even the other Greeks were joining the Persian side they would have made an
     agreement with Kserkses.'

The participial phrase *tou horontes an kai tous allous Helle:nas me:dizdontas* contains its own predicate and bears irrealis semantics, and the only way to achieve this combination is with a token of *an* in both the participial phrase and the finite clause. With only one token of *an* in the sentence, there are two possibilities. The first is that it occurs in the participial phrase (and not in the finite clause), in which case the participial phrase bears irrealis semantics but is not interpreted as a separate predicate (in other words, it modifies the verb phrase and not the whole clause). The second is that it is placed in the finite clause (and not in the participial phrase), in which case the participial phrase is interpreted as having its own predicate (as a result, it modifies the whole clause and not the verb phrase), but no longer bears irrealis semantics. This pattern is also found in verse, as in the following example (see also A. *Cho.* 345–53; E. *Tro.* 1243–5):

(48) labo:n <u>an</u>   egkhos toude tous ksanthous plokous
     seizing MP spear   his   the   golden   locks
     kathe:imato:s'   <u>an</u>, ho:st' Atlantiko:n peran
     spatter-with-blood, so   that   Atlas   beyond
     pheugein horo:n   an deiliai   toumon doru.   E. *Herc*. 233–5
     flee   boundary MP cowardice the-my   spear
     'I would have seized my spear and spattered those golden locks of his with blood, so
     that he would now be fleeing my spear in cowardice beyond the bounds of Atlas.'

The participial phrase *labo:n enkhos* contains a distinct, irrealis predicate, and as such receives
its own token of *an*, just like the prose example above. It is possible that E. *Hel*. 1011–1012
and Ar. *Lys*. 510–511 also belong to this category.

    The following example differs from (48) in that the participial phrase has a habitual, and
not an irrealis, reading:

(49) mamman d' <u>an</u>   aite:santos he:kon   soi   phero:n <u>an</u>   arton.
     mamma MP PTCL *asking   I-arrived for-you bearing MP bread*   Ar. *Nub*. 1383
     'Whenever you asked for 'mamma,' I came with bread.'

This is the only example of this kind in my corpus.

4.2. The clausal-insertion construction

The following example illustrates the clausal-insertion construction:

(50) despota, oud'   <u>an</u> auton ego:ge   dokeo: ton theon houto: <u>an</u>
     master, not-even MP himself I-at-least think   the god   so   MP
     kalo:s balein.   Hdt. 3.35.17
     well   strike
     'Master, I at least think that not even god himself could strike (it) so well.'

The sentence is comprised of the matrix clause *ego:ge dokeo:*, which does not bear modal
semantics, and the embedded clause *oud' <u>an</u> auton ... ton theon houto: an kalo:s balein*, which
does. Remarkably, the matrix clause occurs within the embedded clause, and as a result shifts
the modality of the clause, which is then re-established with a second token of *an*.

    This pattern also occurs in the dramatists, as in the following example (see also A. *Pers*.
429–30; S. *Aj*. 1058–9, *Ant*. 69–70, *Ant*. 466–8, *Ant*. 905–7 (with preposing?), *El*. 333–4, *El*. 439–
41, *OT* 261–2, *OT* 504–6; E. *Cyc*. 220–1, *Supp*. 417–18; Ar. *Ach*. 214–17, *Pax* 908–9, *Av*. 1592–3,
Thesm. 440–2):

(51) alke:i   de s'   ouk <u>an</u>, he:i su doksazdeis iso:s,
     with-strength PTCL *you not MP, as you suppose   perhaps*
     so:saim'   <u>an</u>.   E. *Or*. 711–12
     could-save MP
     'With strength I could **not**, as you perhaps suppose, save you.'

The first token of *an* occurs after the negative, and the second is hosted by the verb *so:saim'*,
which occurs just after the parenthetic clause. What is interesting is that all of the clausal-
insertion cases could also be categorized into one of the focus categories from section 3. For
the speaker says explicitly that he thinks his interlocutor may believe the proposition that he
negates. By my count, there are 16 such examples. One of them occurs in a question, fifteen in
statements, eight of which are negative. What is more remarkable is that the interposing

element itself is in 11 instances the 'antecedent' of a conditional (whether it is a finite clause or a participial phrase, although it is far more often the former). Thus there appears to be a special relationship between interposing and conditional antecedents. It should also be noted that this construction is more frequent in verse than in prose, and that this may result from the higher affective quality of utterances in drama.

4.3. Event-internal and -external repetition

In this final class, which is represented by only two examples from Aristophanes, multiple-*an* occurs in clauses with habitual aspect:

(52) kho:poth' ho kokkuks eipoi 'kokku,' tot' <u>an</u> hoi Phoinikes   hapantes
     and-when the cuckoo   said 'cuckoo,' then MP the Phoenicians all
     tous purous <u>an</u> kai tas krithas en tois pediois etherizdon.   Ar. *Av.* 505–6
     the wheat MP and the barley in the fields   reap.
     'Whenever cuckoo called out "cuckoo", then all the Phoenicians would reap wheat and barley in the fields.'

(53)   ho de   khoros g'   e:reiden hormathous <u>an</u>
                 The PTCL chorus PTCL thrust   strings   MP
     melo:n ephekse:s tettaras ksunekho:s <u>an</u>, hoi d' esigo:n.   Ar. *Ran.* 914–15
     of-songs in-a-row   four   continuous MP, they PTCL were-silent
     'And then the chorus would boom four strings of lyric in a row non-stop, but they [= the actors] were quiet.'

It would be possible to get a habitual reading with only one token of *an*, so it is not entirely clear what motivates the iteration in these examples. One possibility is that the doubling of *an* is used to mark both internal and external repetition. In (52) there is not only a repetition of the event of reaping (event-external), but each event of reaping also involves an internal structure, both in the action of reaping itself as well as the number of reapers. Likewise in (53) there is not only a repetition of the choral singing, but within each event the singing was repeated. With only two examples, this proposal must be for the moment tentative. It would not be surprising for iterated morphology to encode pluractional semantics, however. Alternatively, there may be a comparison to be drawn here with the double Intensive of Yurok, which Wood and Garrett (2001: 123) tentatively characterize as 'a type of event happens repeatedly over multiple periods of observation in which it might happen.'

4.4. Why is the polarity-focus construction limited to poetry?

This question is somewhat premature (although see Wackernagel 1892: 402; Slings 1992: 104), as my investigation has been limited to Herodotos and I acknowledge that work remains to be done on multiple-*an* in Attic prose. It is nonetheless remarkable that the polarity-focus construction is completely absent in Herodotos. If it turns out that this absence exists across other prose authors, then I would suggest that its use is motivated by metrical constraints. One of the ways to mark (positive) polarity focus is by verb-fronting (see e.g. Holland 1980). Given the prosodic demands of the meter, the poets may have wanted another way in which to encode this meaning that did not rely solely on word order. On the other hand, if the absence is limited to Herodotos, then it is likely that we are dealing here with a piece of dialectal syntax. Whichever one of these happens to be the case, multiple-*an* raises a larger question about the encoding of information structure in Greek, which is: to what extent was

pitch used? On the one hand, it seems hard to imagine that this was not part of the Greek speaker's resources for marking information structure. On the other hand, given the word-order possibilities and rich particle lexicon of the language, one wonders if there was perhaps no (or little) need for this device.

5. MULTIPLE-*AN*: ORIGINS

As far as the development of multiple-*an* is concerned, two possibilities seem plausible. The first is to claim that the construction is not all that conventionalized, and that reduplication is a resource that speakers generally have available to them for emphasizing truth values. Such an analysis would be in line with the view of Sapir (1921: 79): 'Nothing is more natural than the prevalence of reduplication, in other words, the repetition of all or part of the radical element. The process is generally employed, with self-evident symbolism, to indicate such concepts as distribution, plurality, repetition, customary activity, increase of size, added intensity, continuance.'[12] It is entirely possible that the development of multiple-*an* lies entirely within the scope of this impulse, that is, some general knowledge about what meanings speakers expect repeated elements to have. One could perhaps compare examples of iteration (or even lexical cloning) from English, where it is certainly possible, but not all that productive (and thus one would be hard-pressed, I think, to speak of a conventionalized construction). Even if this line of thinking is in the main correct, it is not in itself an adequate analysis: for it does not tell us why the construction arose at the time that it did (and not in, say, the Homeric period).

An alternative is to locate multiple-*an* within a source construction. And here the most likely candidate is the clausal-insertion construction described above. Under such an analysis, multiple-*an* essentially arises via hypocorrection of an example like the following:

(54) allo:s te   po:s   <u>an</u>,   me: diortheuo:n logous
     Besides and   how   <u>MP</u>,   if not judging   words
     ortho:s,   dunait' <u>an</u>   de:mos euthunein   polin;   E. *Supp*. 417–18
     correctly,   could   <u>MP</u>   people direct   state
     'Besides, how would the people, if it cannot judge words correctly, be able rightly to direct the state?'

The multiple-*an* construction would arise in the failure of speakers to perceive the interposed clause as the trigger for the iteration of *an* (hence a hypocorrection). The trigger was instead reanalysed as the semantic/pragmatic value of such clauses. While this analysis is more satisfying than the first (and to my mind, more likely), it is not without its challenges. First, one would have to present a pragmatic profile of sentences with interposed clauses like that in (54) and then show how this does (and perhaps does not) line up with the dossier for multiple-*an* presented in section 3. And even if this can be successfully carried out, this analysis will face the same question as the first: namely, why did the construction arise (or at least become significantly more frequent) in the fifth century and not earlier? Another way of posing this question is: *why* did the reanalysis take place? Any answer to these questions will have to involve the apparent preference for this construction in tragedy (which was discussed above in subsection 4.3).

I mention a third possibility only for the sake of thoroughness. It is possible that a reanalysis, similar to the one suggested in the previous paragraph, occurred within a different sentence frame. Rather than the interposing context, it could have come from a double-negation context

---

[12] Iteration is used to mark polarity focus in Oevdalian, although there it is the subject that is doubled (Rosenkvist 2007: 10). Verbal reduplication is used to mark focus in Fongbe cleft constructions (Kwa, spoken in Benin and Togo; Lefebvre and Brousseau 2002: 153, ex. 44; 503–32), as well as in European Portuguese (see Martins 2006; 2007).

(on which see, Smyth 1956 §2761), as in the following example (cf. S. *Ant.* 905–7, *Aj.* 1246–7, and *Ar. Nub.* 1250):

(55) ouk <u>an</u> priaime:n oud'   <u>an</u> iskhados mias.   Ar. *Pax* 1223
      not <u>MP</u> *would- buy not-even* <u>MP</u> *fig   one*
      'I wouldn't even give a single fig for them.'

It is conceivable that there was a perceived association between the negative and *an*, which would have been responsible for first triggering the association; and then over time this conditioning factor was not learned, and multiple-*an* then came to have independent status as a construction. While the semantics of such double-negation clauses look like a good starting point, the problem is one of frequency. This is the only example of this type in my corpus. If this construction really was so infrequent, it is difficult to see how the reanalysis could have taken place. The previous analysis has much more to recommend it in this aspect. Both of these analyses raise an issue that is somewhat problematic, namely that of determining just how conventional multiple-*an* really is.

6. SUMMING UP

I have argued that multiple-*an* is a focus construction, and used predominately for polarity focus. While this study has provided the first adequate overview of this phenomenon, and has made significant strides to understanding the meaning of the construction, many questions remain to be answered. For one, there is undoubtedly more to be discovered at a fine-grained pragmatic level as to the properties of this construction. In particular, more attention to the nature of the prejacent should enable a more precise understanding of what status such propositions need to have before they can be subject to polarity focus. Second, we can in some cases use the multiple-*an* construction as a key into the encyclopedic and cultural knowledge of Greek speakers, by examining cases in which they negate prejacents that they assume to be generally known (as with Medea's declaration in example (42)). Finally, we still lack a satisfactory understanding of how word order and discourse particles mark information structure in Ancient Greek, and the analysis presented here should eventually be built into a much larger portrait. Further research into this construction will no doubt call refinements and amendments to the account presented here. Whatever those may be, what I believe will still remain the central feature of multiple-*an* is its status as a focus construction (even if it turns out that not all examples instantiate this function).

Institut für Sprachwissenschaft
der Universität Wien
1090, Vienna
Austria
Email: david.goldstein@univie.ac.at

REFERENCES

BEAVER, DAVID I. & CLARK, BRADY, 2008. *Sense and Sensitivity: How Focus Determines Meaning*, Malden,MA/ Oxford: Blackwell.
DEVINE, ANDREW & STEPHENS, LAURENCE D., 2006. *Latin Word Order. Structured Meaning and Information*, Oxford: Oxford University Press.
DIGGLE, JAMES, 1981. *Euripidis Fabulae, tomus II*, Oxford: Clarendon Press.
DIK, HELMA, 2007. *Word Order in Greek Tragic Dialogue*, Oxford: Oxford University Press.
DIK, SIMON C., HOFFMANN, MARIA E., DE LONG, R. JAN, SIE, ING DJIANG, STROOMER, HARRY & DEVRIES, LOURENS, 1980. 'On the typology of focus phenomena', *Leids Taalkundig Bulletin GLOT* 3: 41–74.

FRAENKEL, EDUARD, 1964. 'Kolon und satz, II: Beobachtungen zur gliederung des antiken Satzes', in *Kleine Beiträge zur klassischen Philologie*, vol. 1., Rome: Edizioni di Storia E Letteratura, 93–130. [Originally published in Nachrichten der Göttinger Gesellschaft der Wissenschaften, Phil.- hist. Klasse 1933, 319–54.]

GILDERSLEEVE, BASIL L., 1882. 'Studies in Pindaric syntax', *American Journal of Philology* 12, 434–55.

GIVÓN, TALMY, 1975. 'Focus and the scope of assertion: some Bantu evidence', *Studies in African Linguistics* 6, 185–205.

GOLDSTEIN, DAVID M., 2010. *Wackernagel's Law in Fifth-Century Greek*, Ph.D. thesis, University of California, Berkeley.

GOODWIN, WILLIAM W., 1897. *Syntax of the Moods and Tenses of the Greek Verb*, Boston, MA: Ginn and Co.

GUTZMANN, DANIEL & MIRÓ, ELENA C., 2011. 'The dimensions of verum', *Empirical Issue in Syntax and Semantics* 8, 143–66.

HERMANN, GOTTFRIED, 1831. *Opuscula*, vol. 4, Leipzig: Ernest Fleischer.

HOLLAND, GARY B., 1980. *Problems of Word Order Change in Selected Indo-European Languages*, Ph.D. Dissertation, University of California, Berkeley.

HÖHLE, TILMAN, 1988. 'Vorwort und nachwort zu verum-fokus', *Sprache und Pragmatik* 5, 1–7.

HÖHLE, TILMAN, 1992. 'Üvber Verum-fokus im Deutschen,' in Joachim Jacobs, (ed.), *Informationsstruktur und Grammatik* (Linguistische Berichte, Sonderband 4), Opladen: Westdeutscher Verlag, 112–41.

HORN, LAURENCE R., 1993. 'Economy and redundancy in a dualistic model of natural language', in S. Shore & M. Vilkuna (eds.), *SKY 1993: Yearbook of the Linguistic Association of Finland*, 31–72.

HUDDLESTON, RODNEY & GEOFFREY, PULLUM, 2002. *The Cambridge Grammar of the English Language*, Cambridge: Cambridge University Press.

HYMAN, LARRY M. & WATTERS, JOHN R., 1984. 'Auxiliary Focus', *Studies in African Linguistics* 15, 233–73.

JACOBS, JOACHIM, 1983. *Fokus und Skalen. Zur Syntax und Semantik der Gradpartikeln im Deutschen*, Tübingen: Niemeyer.

KISS, KATALIN É., 1998. 'Identificational focus versus information focus', *Language* 74, 245–73.

KÖNIG, EKKEHARD, 1991. *The Meaning of Focus Particles: A Comparative Perspective*, London: Routledge.

KRIFKA, M., 2007. 'Basic notions of Information Structure', in C. Féry, G. Fanselow & M. Krifka (eds.), *Working Papers of the SFB632, Interdisciplinary Studies on Information Structure (ISIS) 6*, Potsdam: Universitätsverlag Potsdam, 13–56.

KÜHNER, RAPHAEL & BERNHARD, GERTH, 1898–1904. *Ausfürliche Grammatik der griechischen Sprache*, 3rd ed, Hanover and Leipzig: Hahnsche.

LAMBRECHT, KNUD, 1994. *Information Structure and Sentence Form: Topic, Focus, and the Mental Representations of Discourse Referents*, Cambridge: Cambridge University Press.

LEFEBVRE, CLAIRE & BROUSSEAU, ANNE-MARIE, 2002. *A Grammar of Fongbe*, Berlin: Mouton de Gruyter.

MARTINS, ANA MARIA, 2006. 'Emphatic Affirmation and Polarity: Contrasting European Portuguese with Brazilian Portuguese, Spanish, Catalan and Galician', in Jenny Doetjes & Paz Gonzalez (eds.), *Romance Languages and Linguistic Theory 2004*, Amsterdam & Philadelphia: John Benjamins, 197–223.

MARTINS, ANA MARIA, 2007. 'Emphatic verb reduplication in European Portuguese', *European Dialect Syntax Project*. Papers presented at Workshop on Syntactic Doubling, Amsterdam, March 2006. Available online at: http://www.meertens.knaw.nl/projecten/edisyn/Online_proceedings/Paper_Martins.pdf.

PRINCE, ELLEN, 1981. 'Toward a taxonomy of given-new information', in P. Cole, (ed.), *Radical Pragmatics*, New York: Academic Press, 223–56.

RICHTER, FRANK, 1993 'Settling the truth: verum focus in German', Ms, University of Massachusetts at Amherst.

ROOTH, MATS E., 1985. *Association with Focus*, Ph.D. dissertation, University of Massachusetts, Amherst.

ROSENKVIST, HENRIK, 2007. 'Subject doubling in Oevdalian', Working Papers in Scandinavian Syntax 80, Centre for Languages and Literature, Lund University, 77–102.

SADOCK, JERROLD, 1971. 'Queclaratives', *Chicago Linguistic Society* 7, 223–31.

SAPIR, EDWARD, 1921. *Language. An Introduction to the Study of Speech*, London: Harcourt Brace & Company.

SEARLE, JOHN, 1975. 'Indirect speech acts', in Peter Cole & Jerry L. Morgan (eds.) *Syntax and Semantics*, vol. 3, New York: Academic Press, 59–82.

SLINGS, SIMON R., 1989. 'Critical notes on Plato's "Politeia", II', *Mnemosyne* 42, 380–97.

SLINGS, SIMON R., 1992. 'Written and spoken language: an exercise in the pragmatics of the Greek sentence', *Classical Philology* 87, 95–109.

SMYTH, HERBERT W., 1956. *Greek Grammar. Cambridge*, MA: Harvard University Press.

TOOSARVANDANI, MAZIAR, 2010. *Association with Focus*, Ph.D. dissertation, University of California, Berkeley.

THWING, RHONDA & WATTERS, JOHN, 1987. 'Focus in Vute', *Studies in African Linguistics* 9, 95–121.

VAN ROOY, ROBERT, 2003. 'Negative polarity items in questions: strength as relevance', *Journal of Semantics* 20, 239–73.

WACKERNAGEL, JACOB, 1892. 'Über ein gesetz der indogermanischen wortstellung', *Indogermanische Forschungen* 1, 333–436.

WEIL, HENRI, 1887. *The Order of Words in the Ancient Languages compared with that of the Modern Languages*, translated by C.W. Super. Boston, MA: Ginn & Co.

WOOD, ESTHER J. & GARRETT, ANDREW J. 2001. 'The semantics of Yurok intensive infixation', in Jean Castillo (ed.), *Proceedings from the Fourth Workshop on American Indigenous Languages*. Santa Barbara, CA: Department of Linguistics, UC Santa Barbara, 112–26.

VON FINTEL, KAI, 2006. 'Modality and language', in Donald Borchert (ed.), *Encyclopedia of Philosophy*, 2nd ed., Detroit, IL: Macmillan Reference.