Greek and Mandarin Utterance Particles: A Comparative Analysis

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1. Introduction

1.1 What are particles?

The word "particle" is frequently used to describe various kinds of morphemes in numerous languages. It often appears as a catch-all term serving to label any class of morpheme that does not seem to fit into what are traditionally understood to be the major categories—noun, verb, adjective, and so on. (Dobson 1974:4)[2] Many interjections (among other classes) in English could be considered particles, such as the sentence-final Canadian *eh* or American *huh*, the word *now* or *well* at the beginning of a declarative sentence (usually followed by a comma in written transcriptions), or the so-called "filler" *like*. One would be hard-pressed to come up with a satisfactory gloss for the first word in the sentence *Now, I think you've got the wrong idea*, or the final word in the sentence *Wife on your case again, eh?*, but no speaker (at least, no native

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2 "any word...which is functioning other than as a substantive (noun or attribute) or verb."

speaker) would deny that without the particle present, although the truth conditions do not change, the pragmatic meaning of the sentence does.

Particles can, strange though it may seem, consist of more than one "word," which in the case of the particle is more likely to be heard as simply another syllable. Good examples of this type include the sentence-initial *hey now*, or the British sentence-final *innit* (*isn't it*)[3]. Especially in the case of the second, it is clear that "particle" is not really the name for a morphological category, since (somewhat) more complex expressions can be used as particles. Rather, it describes a class of words which do not have immediately transparent glosses yet which contribute meaning, albeit often in a subtle or nuanced fashion.

Particles convey such diverse kinds of pragmatic information as the speaker's emotional state, the speaker's assumptions about the addressee's emotional state, the speaker's expectations about the addressee's likelihood of listening to him, whether the statement is assumed by the speaker to be true or false, the urgency (or lack thereof) with which the speaker is talking, and any number of other important considerations in any conversation. Some of these effects can also be indicated by variations in rhythm, stress, and pitch; however, in standard written English these features cannot generally be expressed. Instead, the writer will use particles such as *well* or *so* to lend the proper tone to his writing.

So significant is the role that these particles play that the writer, or speaker, will often not have to think consciously about using a specific particle; the particle appropriate to the point of

3 The form does not change regardless of the number of the subject of the sentence, indicating that the meaning of *innit* is other than an actual verb phrase. In fact, it is used in sentences that have an animate subject, suggesting that the *it* is non-referential.

discourse will likely come to mind without any need to search for it, though when there is a need to create a certain tone, especially if it is one different from that which the writer or speaker is feeling at the moment, the appropriate particle must be selected. Some particles are inappropriate, or take on markedly different meanings, when used in a position better suited to another particle. *Eh* is a good example of this phenomenon: at the end of the sentence, usually with a higher pitch than the words preceding it, this particle creates a biased yes/no question, which may be rhetorical, with a somewhat friendly tone—perhaps the speaker expects the addressee to agree with him. At the beginning of a sentence, however, it generally signifies boredom or impatience, possibly condescension. Though particles in many languages often have more than one meaning or interpretation, for the sake of expository expediency only one usage will be considered, but the inherent flexibility of these particles must also be kept in mind.

1.2 Particles in Other Languages

Particles, as described above, are certainly not unique to English. Given how common they are across numerous languages, it is likely that there are many languages in which such particles function in a very similar fashion. Particles in Greek and Chinese will be the focus of this work, and their usage and meaning will be compared and contrasted with the goal of demonstrating this conjecture. English glosses for particles in Greek or Chinese will in most cases not be given; rather, as in 1.1, their meanings will be explained in prose, in such a way as to (with any luck) simulate the kind of knowledge that a speaker of the language would have about the particles being used. If one assumes that a given language has the same range of

expressability as any other, then it is logical also to expect that the layers of meaning added by particles in English are available in other languages. It will be shown that many of these same layers of meaning are conveyed by particles in Greek and Chinese as well.

1.3 Languages Examined

Ancient Greek

Despite their marked differences in spelling, vocabulary, and in some cases syntax—though how much of this is due to style or poetic license is uncertain—the dialects of Greek are all obeisant to the same general grammatical rules, both morphological and syntactic. Greek is a highly synthetic inflected language, in which a word's grammatical function (GF) is indicated as much by its morphology as by its position in a sentence, if not more so. Nouns in Greek are marked for case and number (as are the adjectives and determiners that correspond to them), while verbs agree with their subject in person, number, tense, aspect, voice and mood. In both cases, the Greek word consists of a stem or root phonologically connected to one or more prefixes and/or suffixes, which can be prepositions, as in:

(1)a. *ek-**bainô*** [4]

out go

4 A note on transcriptions: I am using a conventional Romanization for my transcriptions of Greek, in which some letters (such as theta or chi) are transliterated as two, *th* and *kh*, respecively. For Chinese, I use the current standard, Pinyin, but since tones are not an issue here, I have left them unmarked.

"to leave"

*para-**zonion***

beside belt

"dagger"

These affixes are for the most part bound morphemes that provide the relevant inflection, or, in the case of these prepositional affixes, provide relational information to the other elements of the sentence. In some tenses or aspects, the bound morpheme is null, while in others the bound morphemes are polysyllabic, resulting in words such as

(2) *e-* *pe-* ***paideu-*** *k-* *esan*

Pluperfect augment perfect augment "teach" perfect infix 3pl marker

"They had taught"

This is a verb in the pluperfect tense that exhibits a reduplicative prefix (here the root-initial unvoiced labial stop) as one of its several morphemes.

Due to this high morpheme-to-word ratio, making for a high prevalence of inflection, Greek word order is relatively free. Consider the following sentences:

(3)a. *alla* *o Dikaiopolis* *ouk en* *tais Athenais* *oikei*

but D. not in A. live:3-sg-pres-act-ind

b. *all'* *ouk* *en* *tais* *Athenais* *oikei* *o Dikaiopolis*

but not in A. live:3-sg-pres-act-ind D.

Both sentences mean the same thing—"but Dicaeopolis does not live in Athens." They differ subtly with respect to information structure or emphasis (the former makes clear that it is not in Athens that Dicaeopolis lives, while the second might be contrasting Dicaeopolis with a previously mentioned man who does live in Athens) but not with respect to their truth conditions. This is in contrast to less-inflected languages such as English and, as we shall see, Chinese.

Chinese

Mandarin Chinese, which along with Greek is the focus of this work, is a highly analytic and minimally inflected language, with essentially a one-to-one morpheme-to-word ratio. With a few context-specific (and perhaps idiomatic) exceptions, no distinction is made between singular and plural nouns or verbs, with person and tense often remaining unmarked as well. For example, "I am," "you are," and "he is" all use the same (and only) form of the verb "be"—*shi.* In the case of nouns, several objects are differentiated from a single object by the usage of classifiers such as "three of" or "a few," rather than any bound plural-marking inflection. Verb tenses are usually derived from the context in which they appear; a verb in the stated timeframe of "tomorrow" (*mingtian*) is understood as referring to some future time, whereas if the timeframe refers to "today" (*jintian*) then the tense is present. Other complexities of tense,

voice, or mood, as is typical of analytic languages, are expressed via combinations of words, as in this sentence:

(4) *wo* *yao* *qu*
1sg desire/intend go
"I'll go." / "I want to go."

It can be translated with the future-modal "I'll go," but it is more accurately translated with "I want to go," which references a future event via the verbal operator "want" rather than the modal "will."[5] Similarly, the word "finish" is (among the possible translations) *zuowan,* consisting of *zuo* "do" and *wan* "complete;" the second verb is understood semantically as the result of the eventuality denoted by the first verb; that is, it expresses aspect. Passive constructions likewise consist of more words than active constructions, since they include a passive auxiliary. Unlike English, however, the passive does not have the theme in subject position.

Because of the relatively inflection-free nature of Chinese, the old-fashioned view among Sinologists is that Chinese does not have "words" in the way that other languages do, and that instead, Chinese simply has characters which fall into place in a highly idiomatic fashion to form sentences.[6] Modern linguistic descriptions of Chinese have, however, largely rejected this view

5 Though it should be noted that "will" originally served the purpose, as a verbal operator, that "want" now does.
6 Hoosain 1992: This is the conclusion reached by Hoosain in a relatively recent work, which is dismissed early on in Packard 2000. Sinology, up until fairly late in the 20th century, as a field tended to value the study of language (almost always Classical Chinese) as a means to an end, namely, the study of philology, and thus generally did not include anything resembling a modern understanding of linguistics.

and instead advanced the idea that Chinese has monosyllabic words consisting of one lexical morpheme. Additionally, certain characters, many of which can function as free morphemes and have their own separate denotations, function as bound morphemes in certain situations in order to form polysyllabic words.[7] The character/word *sheng* by itself means "(give) birth," but follows the character *yi* "medicine" to form *yisheng*, "doctor." Most words in modern Chinese are such a two-syllable variety (i.e. compounds), with many longer words as well. This development likely indicates a shift towards a more synthetic language in the future, as compared to the largely single-character words of Classical Chinese. This is also borne out in the case of aspect-marking words such as *le*, which was originally the verb *liao* "complete," but has undergone a phonetic and semantic "bleaching" process to more closely resemble a tense- or aspect-marking morpheme,[8] which can have the meanings exhibited in the following examples:

(5)a. Perfective aspect:

Wo chi bao le

1sg eat (be)full (le)

"I've eaten my fill"

b. Change in state:

Xianzai shi wo de le

Now be 1sg of (le)

7 Packard uses this premise as the basis for *The Morphology of Chinese.* Since this work is directed at unbound free particles, there will not be space to discuss his (excellent) X-bar theoretic account of Chinese word formation.
8 Interestingly enough, *liao* still exists in Mandarin Chinese, used in different situations entirely.

"It's mine now (and was not previously)"

This and other similar words are called "particles," since although they are not strictly speaking bound morphemes, they are also often not words in and of themselves—that is, they do not have lexical meaning without syntactic reference to other words, and they do not have their own tone; they are best described as enclitics. In fact, *le* and other particles have been shown to function as a type of agglutinative morphology, as in:

(6) *ta zuotian xie-wan-le yifeng xin*

he yesterday write-COMPL-PERF a letter

'He wrote a letter yesterday (he finished it)'(from Cinque 1999:55)[9]

At the same time, it is ungrammatical to re-arrange the sentence to read

(6)a *ta xie-wan zuotian-le yifeng xin*

or

(6)b *ta xie-le-wan yifeng xin*

This fact suggests that *le* has glommed on (i.e. cliticized) onto the verb *wan,* itself apparently a clitic of *zuo.* In this view, the particles *wan* and *le* serve in a role somewhat analogous to the

9. 'PERF' refers to the Perfective Suffix, while 'COMPL' refers to the Completive Suffix. The former indicates "termination" while the second indicates "completion," a contrast that is not necessarily observed when *wan* or the full *liao* form of *le* are used by themselves.

various morphemes illustrated above in Greek, with the difference that one of the particles (*wan*) can serve as a verb in its own right, meaning simply "finish." These particles, in the above sentence, are clearly part of the verb[10]—they do not modify its syntactic role in the sentence, nor do they change its inherent meaning. The "utterance" particles with which this work concerns itself are of a different character from these "grammatical" particles.[11] They cannot be construed as having a fixed morphological role in the way that the grammatical particles do.

1.4 What are Particles?

As illustrated above, the verbal syntax of Chinese often involves aspect-marking grammatical particles that function as part of the verb phrase, in what might be considered an agglutinative morphology. The corresponding Greek construction, however, does not employ such morphological particles, the roles being instead played by a wide array of bound morphemes that take the form of affixes. Therefore, the problem of differentiation amongst the various kinds of particles is not the same in one language as in the other.

In Chinese, the distinction can be made fairly simply. In order to illustrate the brief definition given at the end of 1.3, this section will use as an example the particle *ma*, which is perhaps the most commonly-used of these utterance particles. When one studies Chinese, *ma* is

10 As opposed to the verb phrase.

11 Packard (2000) uses the term "grammatical affix" to refer to the particle *le*; perhaps this would be an even better term than "grammatical particle" as it distinguishes this class of word even further. He does not, however, address particles as a separate subject (since his work is concerned primarily with the morphology of nouns and verbs, not particles) and as such, I feel that referring to both classes of word as "particles" is acceptable for my purposes, since it is a term common to Greek and Chinese.

often the first particle learned; it is present in the expression *Ni hao ma?* "How are you?" which is a common greeting learned by many students of Chinese.[12] This is an idiomatic expression, but the *ma* particle is performing the same role here that it does in other cases, acting as a question-marking particle to make the preceding statement into a yes/no question, as in this example:

(7)*a. Naben shu hen zhongyao*
that book very important
"That book is important."

b. Naben shu hen zhongyao ma (?)
that book very important PRT-*ma*
"Is that book important?"[13]

At first, this particle might be likened to aspect-marker *le*; in the following example, they appear to occupy the same place in the sentence with analogous effect:

(8)*a. Nimen renshi-**le***
2pl recognize/know-PERF
"You recognized/got to know (something/someone)."

12 This expression is, however, considered unnatural by native speakers, for reasons that will become clear later.
13 Note that the intensifier *hen* is not translated; it is redundant to translate it as "very," since it is ungrammatical to say simply **Naben shu zhongyao.* In other instances it would be explicitly rendered into English, however.

*b. Nimen renshi **ma**?*

2pl recognize/know PRT-*ma*

"Do you recognize/know (him/her/it)?"

Notice that the particles in question occur in what seems like the same environment, namely, after the verb in an SV sentence. They also appear to have the same type of effect: *le* puts the sentence into the perfect aspect, while *ma* indicates that the sentence is a question. Based purely on this sample size, one[14] might jump to the conclusion that *le* and *ma* operate in the same manner in the same environments. This interpretation, however, is incorrect, as the following expanded paradigm shows:

(9)a. *Name nimen renshi-**le** wo-de jiejie*

so 2pl know/recognize-PERF 1sg-possessive (older) sister

"So, you met/recognized my sister."

b. *Name nimen renshi wo-de jiejie **ma** ?*

so 2pl know/recognize 1sg-possessive (older) sister PRT-*ma*

"So, do you know my sister?"

14 Such as this writer, during the early days of his Chinese study.

c. **Name, nimen renshi wo-de jiejie **le**.*

d. **Name, nimen renshi **ma** wo-de jiejie.*

The particles appears to have the same effect on the meaning when translated into English, however, their markedly different positions in the sentences given above indicate strongly that they do not play the same syntactic role at all.

Perhaps more importantly, the particles *le* and *ma* can co-occur without difficulty, as in the sentence

(10) *Chi-bao-le* ***ma****?*

eat-full-PERF PRT-*ma*

"Have you eaten well?" (a traditional greeting)

Clearly, the two particles are not in complementary distribution. *Ma* appears to be hierarchically higher since it occurs finally, suggesting that it attaches to the highest phrasal level (the Tense Phrase), while *le* attaches to a head. *Ma* does not, therefore, occupy the same position as *le*, and in fact, despite coincidental appearances to the contrary, it never does. From these examples, it is not difficult to see that *le* gloms onto the verb and functions as a grammatical affix not unlike bound Greek verb morphemes, as noted in 1.3; the particle *ma* does not.

At this point, the Chinese utterance particle has been defined in terms of what it is not—but its actual role needs to be further examined. This will be the focus of section 2.

1.5 Towards a Comparison of Greek and Chinese Particles

Separated by nearly five thousand miles and half as many years, what could Attic Greek and Mandarin Chinese have in common? Beyond the generic similarities common to natural languages, Greek and Chinese use utterance particles in nearly the same way. Polysyllabic and morphologically complex, speech in Greek would seem to bear little relation to the short and uninflected words of Chinese.

Indeed, any comparison between the two would seem a linguistic cul-de-sac because of the gross dissimilarities present. However, despite irreconcilable syntactic, phonetic, and semantic differences between the national language of the PRC and the tongue of the Hellenes, a perhaps unexpected but nonetheless significant common feature is present in both languages: the use of utterance particles to express meaning in a fashion unrelated to affixation or modification. The Greek particle has been called "a word expressing a mode of thought" (Denniston 1959:xxxviii) as well as indicating "moods of emotion, nuances." (Denniston 1959:xxxviii) Particles of Chinese "are integral in conveying emotive and epistemic nuances on the part of the speaker." (Wu 2004:25) For example, while Chinese *hao* and Greek *eu* both mean "well" or "good," when used as responses to a previously-made statement they are often followed by a particle, creating the commonly-heard *hao* ***a*** in Chinese, and the *eu* ***ge*** response so frequently seen in Plato. There is no comparable English equivalent for either of these particles, thus making them difficult to translate; each one, however, carries an emphatic or affirmative meaning, and perhaps a limitative meaning as well, intensifying the force of the speech act and

making the complete phrase take on a pragmatic shade different from the simple adjective or adverb.

1.5 Hypothesis

Utterance particles in Greek and Chinese are often classified into categories such as "interrogative," "conjunctive," or "adversative." The similarities in the naming conventions for the two languages are more than simple coincidences. While I do not propose a "Sino-Hellenic" language family as an explanation for these similarities, the fact remains that Chinese and Greek utterance particles exhibit essentially the same behavior in many instances, as will be shown below. Given the shared characteristics of Greek and Chinese that will be demonstrated, one could argue that the English particles I touched on earlier also tend to fit the same pattern, although in order to do so would likely require a great deal of re-classification of a number of words. It is my contention that, if such fundamentally different languages as Greek and Chinese show the same utterance particle behavior, then it is likely the case that all languages have some version of the same kind of particles.

1.6 Scope and Method

A comprehensive description of the particle system of Greek or Chinese, let alone both, lies well beyond the scope of this work. Indeed, the most thorough dissertations on the subject attempt to tackle few more than half a dozen from either language. My approach is similar. The

basic understanding of what is and is not a particle has, I hope, already been established; by now, the reader will know all of the required fundamentals, including the distinction between "particles" as grammatical affixes and "particles" as they are discussed in this paper. Rather than taking a broad brush to the subject and attempting to create a generalized understanding of "how particles work," this work focuses on pairs of what I perceive to be analogous (or at least roughly analogous) Chinese and Greek particles, demonstrating their use within their respective language. From these specific examples, I demonstrate the similarities and differences between one pair and another, and by examining each in turn I derive a model for discussing the fundamental similarities between Greek and Chinese particles.

1.7 Existing Literature

The primary resource for each language is the literature previously written on the subject. In order to explore the subject and test my hypothesis, I look at the analyses of individual particles in the various works discussing Greek and Chinese particles. Often, the analysis and discussion of a Greek particle takes the same form as that of a Chinese particle. The real test, though, lies in the application of one writer's description of a particle in one language to that of a particle in the other language. This is impeded somewhat by the fact that there is, as far as I have been able to find, no pre-existing writing that explores particles from a comparative perspective. Perhaps this thesis shall serve to establish a precedent in this area.

The Chinese work is much more accessible than the Greek, largely because most of it is relatively recent and therefore written for an audience of modern linguists. The discussions of

Greek particles, such as there are, tend to be geared more towards an audience of philologists, and the cornerstone work (Denniston 1959), while undeniably thorough and not exactly what one could call out of date, is written entirely without consideration for theoretical linguistics as understood today.[15] Moreover, the Greek material available for study is, more often than not, of a very "polished" character, much of it formalized (such as epic poetry or moral treatise). The writing on the subject, therefore, is designed to address these formal corpora. This makes it difficult to synthesize the work on each language into a comprehensible whole; however, the material on each is thorough enough that, at least in the case of Greek, much of what is said can be re-phrased in terms more amenable to such a synthesis. My task in this work is, therefore, to identify those instances in which the semantic analyses for a given Greek particle and Chinese particle are *mutatis mutandis* the same, and then explain how, despite the vast differences in the languages, these particles are shown by the authors, and by the data, to behave on a par pragmatically despite inherent syntactic differences.

2. Analysis and Comparison

2.1 Overview

This section contains the most significant part of the work. It will address pairs of utterance particles cross-linguistically based on their usage and the commentary that has been

15 It has come to my attention, but not until very recently, that the Netherlands is the centre of modern theoretical study of Classical linguistics, and that several Dutch philologists are currently addressing this issue, with at least one having the goal of replacing Denniston with a modern, theoretical work on the same subject.. Unfortunately, the latest book on the subject has not been made available to me yet, and as such I was not able to use it as a source in this work. A future expansion of this thesis may, however, be able to employ such resources.

written about them. For this subsection (2.2), the analysis will be semantic or pragmatic, because the semantic or pragmatic conditions change based on context, and, moreover, semantic or pragmatic descriptions of the particles in question tend to be more fully-developed than syntactic descriptions. In the next subsection (2.3) a possible syntactic description will be proposed, attempting to illustrate and explain the argument for similarity from a different standpoint.

2.2 Utterance Particle Comparisons

2.2.1 Interrogative: Greek *âra* and Chinese *ma*

These two particles are a logical jumping-off point for comparison. Both maintain consistent positions in their sentence structure, and moreover, both can be added to a sentence that is already well-formed, without any change to the pre-existing syntactic relationships, thus making them easy to isolate.

The particle *ma* has been examined above. As shown above, it can be attached at the end of a declarative sentence to form a yes/no question. Here is the example from 1.3:

(11)*a. Naben shu hen zhongyao*

that book (is)very important

"That book is important."

b. Naben shu hen zhongyao ***ma*** *(?)*

that book (is)very important PRT-*ma*

"Is that book important?"

This particle, as described earlier, forms a question. But it is, in fact, more pragmatically complicated than a simple yes/no question. In Mandarin, there exists an alternative formulation for yes/no questions, namely the so-called "A-not-A" construction, which works thus:

(12) *Qing wen, ni* ***shi bu shi*** *women-de laoshi*

Please ask 2sg be not be 1pl-possessive teacher

"Pardon me, are you (or are you not) our teacher?"

Chao (1968:800) and Li and Thompson (1981:550) maintain that this is the "neutral" way of forming a question. That is, the A-not-A question does not suggest that the asker expects to hear either a "yes" or a "no," nor that he has any other expectation as to the addressee's response. The authors maintain that the particle *ma* exists in a "nonneutral context" and "implies either a slight or a considerable doubt about an affirmative answer" (Li and Thompson 1981 and Chao 1968, respectively). Therefore, the A-not-A, perhaps because of the presence of both the affirmative and negative forms of the proposition A, is the true interrogative, and the *ma* particle therefore indicates a presumption as well as a question.

The following example illustrates that *ma* is a non-neutral particle that gives rise to questions expecting negative responses. Lu (2005:27) offers the following the example in which

a teacher has given a test expected to take over an hour to complete, and is surprised by a student who turns the test in after only 30 minutes. The teacher asks the student:

(13) *(ni)* *xie-wan-le* ***ma****?*

(2sg-implicit) write-COMP-PERF PRT-*ma*

"(You are) completely done?" "Are you really done?"

In this situation, the teacher "clearly has a presumption about the truth value of the statement preceding the particle," specifically, he or she does not believe it to be true. Because of this bias, *ma* also appears in rhetorical questions, generally in contexts where the Gricean Cooperative Principle and the Maxim of Quality would predict that both conversational participants know that the addressee would respond in the negative, and therefore the purpose of the question is not a request for information but rather emphasis. (Lu 2005:31) An example is this sentence, occurring in a conversation about a coworker, in which the speaker has been referring to an earlier conversation with that coworker at which the addressee was not present (from Lu 2005:31):

(14) *Ni zhidao ta zenme shuo* ***ma****?*

2sg know 3sg how speak PRT-*ma*

"Do you know what he said?"

This is followed immediately (i.e., without pause for a reply) by further elaboration of the conversation in question. The proposition "you know what he said" is assumed to be false in this context because the addressee was not present at the earlier conversation, and therefore, though he or she may have an expectation, it is not the same as actually knowing the answer. In this case, the rhetorical question has as its implication the denial of the proposition preceding the particle.

In Ancient Greek, we find a similar particle generally defined as "interrogative," the particle *âra*. This particle, much like *ma*, is added to a declarative sentence to form a yes/no question; unlike *ma,* it is generally sentence- or utterance-initial. This, despite being a drastic difference in word order, does not necessarily bespeak any great difference in meaning or usage. Consider the following sentence:

(15) ***âra*** *katagelasasthe* *mou* *os* *methuontos?*

PRT-*ara* ridicule.2pl.future me thus inebriated

"You would laugh at me because I am drunk?" (Plato, *Symposium* 212e)

The sentence *katagelasasthe mou os methuontos* is grammatical in Greek (in this case, Attic Greek); the addition of the particle at the beginning does not require any alteration of the rest of the sentence.

Assuming that this particle does indeed correspond roughly to the Chinese *ma*, then it would follow that *âra* implies the same negative assumption as *ma*. Denniston agrees tentatively with this hypothesis:

"Strictly speaking, a)$ra does not imply any expectation of a positive or of a negative answer. Practically, however, in Greek as in English, the mere putting of a proposition in an interrogative form implies, in certain contexts, a doubt of its truth, and a)$ra, by itself, often has a sceptical tone." (Denniston 1959:46)

Notably, like Lu, Chao, and Li & Thompson, Denniston also asserts that the negative expression *âr' ou*, "more definitely and more frequently expects a positive answer." He, however, is not as committed to *âra* by itself being a necessary indicator of the negative assumption as the Chinese crowd, and divides the representative uses he finds into those "leaving the question open" and those "expecting a negative answer," with a third, less definite category "expecting a positive answer."(Denniston 1959:47)

Denniston's categorization, however, appears not to take context into account—perhaps because he is not operating with the Gricean Cooperative Principle and Maxim of Quality as Lu is—and thus, when his separate categories are examined for context, they appear more in line with Lu's assessment of *ma*. Analysis of these on the same terms as the Chinese sentences is complicated because, as mentioned previously, the Greek texts come from philosophical treatises and dramas, but they nonetheless are intended to represent speech. Denniston categorizes the following as "leaving the question open"(Denniston 1959:46):

(16)a. ***âr'*** *estin?* ***âr'*** *ouk estin? ê gnomê planâ?*

PRT-*âra* be.3sg.pres PRT-*ara* not be.3sg.pres or judgment err

"Is it she? Is it not? Am I mistaken?"(Sophocles, *Oedipus at Colonus*, 316)

b. *ô philtat' ,* ***âra*** *zontos ê tethnêkotos?*

O dearest PRT-*ara* alive or dead

"O best of friends, is he alive or is he dead?"(Euripides, *Electra* 229)

In the first example, the rapid succession of questions[16] (which emphasizes the confusion or distress felt by the speaker, Antigone) causes the *ara* utterance to be juxtaposed with the *ar' ouk* utterance. It is impossible to evaluate one without consideration of the other, and whatever negative assumption the *ara* utterance carries is neutralized by the opposite assumption in the following utterance. Conversely, in the second example there is only one utterance, but the particle *ara* has scope over two antithetical propositions, "he is alive" and "he is dead." In both instances, then, the perceived neutrality is due to the presence of both positive and negative propositions. As for example 15, when one looks at the work, one can see that the speaker goes on to declare *ego de, umeis gelate, omos eu oid' oti alethe lego,* "What do I care, go on and laugh —I know full well that I am speaking the truth."(*Plato,* Symposium 213e) The command (*gelate* is the imperative equivalent to *gelasasthe*) for the other Symposiacs to do what he was wondering if they would do suggests that he, at least rhetorically, was suggesting that they wouldn't have the courage to laugh at him normally. The supposed neutrality, therefore—if it can in fact be construed, which is dubious—comes from the imperative in the next sentence,

16 Repetition of a word in this fashion is called *anaphora* and is a common stylistic technique in Greek and Latin poetry and oratory.

combining with the preceding question, much as in the other examples above. The speaker is also acknowledged to be inebriated, lending credence to the assumption of a particularly defiant tone here.

As another example, Denniston cites the following as an example of a question expecting a negative response:

(17) *êdê dei me douleuein ...* ***âra*** *moi kalos ekhei?*

now must.3sg.pres me serve PRT-*ara* me well have.3sg.pres

"Now I must live as a slave ... is my lot in life good? (Euripides, *Electra* 816)

The negative assumption is supported, as in (15), by the context, which is familiar to both the speaker and the addressee: Electra is now forced to serve those who murdered her father, and she is addressing her dead brother Orestes, who is (or was) a sharer in her suffering. Orestes knows that Electra is not, in fact, happy, and she knows that he knows; as a result, the answer to this question, rhetorical by necessity because of the prior death of the addressee, is assumed to be negative.

2.2.2 Emphatic: Greek *dê* and Chinese *de*[17]

As the title suggests, each of these two particles is used to assert a proposition strongly, more strongly than a simple declaration. Denniston considers *dê* to indicate a speaker's belief

17 The transcriptions are similar, but the pronunciations are very different;

"that a thing really and truly is so" and that it has something of the meaning of "verily,"(Denniston 1959:203-4). Lu provides a perhaps more lucid characterization of the Chinese particle *de*, stating "The use of the particle *de* indicates that the speaker is confident of the truth of the statement preceding the particle." (Lu 2005:131) Lu's examples show a contrast between sentences with *de* and those without, such as:

(18)a. *bu hui hen tong*

not will very painful

"It won't hurt very much."

b. *bu hui hen tong* ***de***

not will very painful PRT-*de*

"It really won't hurt very much."(Lu 2005:132)

Her claim is that, without the *de*, the speaker would not be making the claim with conviction, which, in the context she uses of a nurse about to administer a shot, would be an important characteristic with which to impart one's speech. Similarly, in Greek, it has the effect of stressing the most significant statement in the sentence, as in

(19) *okumoros* ***dê*** *moi tekos esseai*

swift-dying PRT-*dê* 1sg.dat child be-2sg.fut.ind

"Doomed then to a speedy death shalt thou be, my child" (Homer, *Iliad* 18.95)

One cannot have a native speaker's intuition about the sense of a sentence lacking the *dê*, however, one can surmise that, were the adjective *okumoros* not emphasized, the *pathos* of the sentence would be greatly diminished as a result. Stylistic concerns aside, without the emphasis, the focus of the speech is less clear, and thus, from a pragmatic standpoint, a significant amount of information may go un-communicated. Note also that the *dê* does not appear at the end of the sentence, but follows the predicate. In the examples below, the predicate is sentence-final, and thus so is the particle, but this does not mean it functions the same as the Chinese particle.

To examine further the similarities and differences between these particles requires an investigation into the environments in which they occur. Syntactic discussion will be reserved for the next subsection, but the usage conditions for these particles will inform heavily upon a discussion of their semantic commonalities. In Chinese, *de* is sentence-final (as with the other Chinese particles under discussion) and follows a verb or an adjective—which, as previously noted, are very nearly the same in Mandarin, and should thus be considered together under the category of "predicate." This is true in (18), as well as in the following examples:

(20)a. *Gaosu-le ta ta hui shengqi* ***de***

tell-PERF 3sg 3sg will upset PRT-*de*

"If you tell him he will get mad for sure?" (Lu 2005:133)

b. *zhe dongxi san-bai-kuai-qian mai-bu-lai* ***de***

this thing 300 dollars buy-NEG-result PRT-*de*

"Three hundred dollars definitely cannot buy this thing."(Lu 2005:132)

c. Q: *Shi ma?* A: *Shi* ***de***.

be PRT-*ma* be PRT-*de*

Q: "Is that so?" A: "Indeed it is."

Greek is more flexible than Chinese, both in word order and in words that can be emphasized with *dê*, and as a result the particle *dê* can appear with several parts of speech. But, like Chinese, situations in which it follows the predicate are by far the most common[18], and when the particle is used in this way, it tends to follow the same pattern as in Chinese, such as

(21)a. *ego d' emauton poll' eloidorêsa****dê***

1sg.nom and myself.acc much rebuke.1sg.past PRT-*dê*

"And I did rebuke myself many times indeed." (Euripides, *Helen*:1171)

b. *legô ... katoikêsai...kai paida tonde tôn ap' Aiakou monon leleimmenon* ***dê***

say.1sg.pres settle.inf also child which of those by Aeacus only left (past part.) PRT-*dê*

"I say...that..he must also go live there, the child who is the very last of the line of Aeacus." (Euripides, *Andromache*:1247)

Note here that the Greek particles are predicate-final, but like the sentence-final Chinese examples, they follow a verb or adjective that is emphasized by the presence of the particle.

18 Denniston finds more uses with verbs than with any other part of speech, and more uses with adjectives than with other non-verbs.

Word order aside, it is not necessary that the particle only emphasize the word directly preceding it; in the case of Chinese, the particle most likely has scope over the entire predicate, such as (20a) *hui shengqi*, which applies to the subject *ta*. In Greek, such as in example (21a), both the action of rebuking and the frequency are emphasized, and of the Greek examples, Denniston says that "*dê* normally emphasizes the word it immediately follows" but also that it is not always so rigid, and in some cases "the freedom with which *dê* is used makes it difficult to determine the precise reference of the particle in all cases."(Denniston 1959:227)[19]

It is worth noting that Lu (2005:133-34) advances a hypothesis stating that the particle can be used in contexts in which the speaker is attempting to convince his or her interlocutor of something, example (18) demonstrating this principle. It is unclear whether this is present in Greek, however, in the lines above from Euripides, it is at least plausible. In example (21b) from *Andromache*, the nymph Thetis is telling Peleus, the father of her son (Achilles) to take their grandchild away to settle in a distant land, and the emphasis placed on *monon leleimmenon* lends urgency to the command. This may not constitute the same level of "persuasion," but the context does suggest that a "persuasive" understanding of the lines would be valid.

Notice also that the particle *dê* does not consistently appear in one position in the sentence, unlike *âra* and the Chinese particles. This, combined with the fact that *âra* does not emphasize the predicate while *dê* (and *de*) do, suggests that these utterance particles do not belong to the same class. This will be addressed in section 2.3.

19 This is further evidence that this particle is not a bound morpheme at all.

2.2.3 Response: Greek *ge* and Chinese *a*

This section addresses these two particles when they are used in responses to a question. Each of these particles, however, exhibits a number of variations in usage and syntactic position (Denniston 1959:114ff; Chao 1968:803-806) and, in fact, *a* at least seems to be, two different particles that are orthographically identical but semantically and phonetically different (Wu 2003:128).[20] I want to concentrate on the use of these particles as confined to responses to questions; needless to say there would be other issues involved were one to expand the scope out to the other uses of these particles, but there is not sufficient space to address this here.

The use of *ge* in answers is "extremely common" (Denniston 1959:130) and, apparently, is related to the use of *ge* for emphasis; this in turn is connected with *ge* as a device for indicating Exclamatory illocutionary force. It can be used for affirmative or negative answers, as shown here:

(22)a. Q: *ê pou* *stenazei* *toisid' Admetos* *kakois...?*

(indicates yes/no question) grieve.3sg.pres these Admetus misfortunes

"Doesn't he bewail these misfortunes...?"

A: *klaiei* ***ge*** [...]

cry.3sg.pres PRT-*ge*

"Yes, he weeps...." (Euripides, *Alcestis* 201-202) **(Affirmative)**

20 I should mention also that *a* has several other allophones, including *ya* and *na*, onset assimilations that result from the preceding word's ending in a high front vowel or a coronal nasal consonant, respectively. Each of these allophones is written with a different character, but this is likely a recent innovation.

b. Q: *mê ti neôteron angelleis?*

not some new announce.2sg.pres

"Don't you have some news to announce?"

A: *ouden* ***g[e]****... ei mê agatha* ***ge***

nothing PRT-*ge* if not good PRT-*ge*

"Nothing at all [...] except good news indeed." (Plato, *Protagoras* 310b) **(Negative)**

While the second case is called "negative," it is in fact the same as the previous case, that is, the *ge* serves to confirm the supposition in the previous sentence. This supposition is expressed in (a) with the expression *ê pou*, which is sometimes translated (imprecisely) as "I suppose," and in (b) with the negativizer *mê*. In both instances, the speaker uses *ge* to emphasize his response, a response that is a confirmation of the question.

Turning to Chinese, the use of *a* in responses seems to play the same role in confirming a supposition that *ge* does in Greek. Consider this exchange:

(23) Q: *ni zhende juede jiu hao he ou?*

2sg really believe wine good drink PRT-*ou* (another question particle, different from *ma*)

"You really think this wine is good to drink?"

A1: *man hao he* ***a***

enough good drink PRT-*a*

"Yeah, it's pretty good."

A2: *wo juede ye man hao he* ***a***

1sg believe also enough good drink PRT-*a*

"I also think it's pretty good." (Wu 2003:196-197)

Like the Greek example, the Chinese exchange here includes two answers (really the same answer, but coming from two different speakers one after the other) both confirming a previously-understood supposition, namely, that some of those present like the wine. The use of *zhende*, "really," implies that someone has previously stated or implied that the wine is good, and the person asking the question is seeking confirmation. Similarly, the questions in the Greek example indicate that there was some previous understanding of wailing or news-bringing, dependant upon both speakers' knowledge of the context (in the first case, that Admetus' beloved wife has died, and in the second, that Socrates would only be awoken at that time if someone had a message for him) and thus the answers confirm a supposition based on mutual knowledge of the context.

Also note that the Greek *ge* is neither sentence-final nor sentence-initial, much like *dê* in some of the examples above. This lends further credence to the idea that not all utterance particles are of a kind.

2.3 Syntactic Analysis

Considering the apparent deficit of syntactic analyses of Greek or Chinese particles[21] in the literature, it is not surprising that the analysis in this work has by necessity been confined to semantic or pragmatic discussion, for which there exists a comparatively greater field from which to pick sources. However, though the syntactic angle has had to be downplayed, there is still much that can be said about the syntax of particles. As previously mentioned, a comprehensive description of the particle system in either language lies outside the scope of this paper; nevertheless, using the examples discussed above, some progress can be made towards a syntactic analysis that can be applied broadly to either language. A definite analysis will not be reached here, but some possibilities will be put forth with the goal of broadly describing both languages.

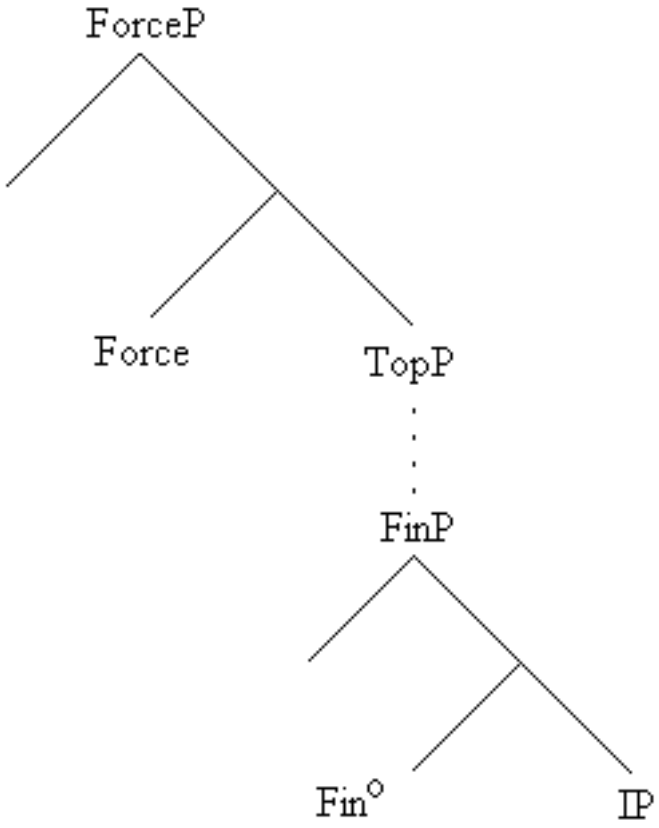
In contrast to analyses that propose a high-level-VP structure, this work assumes a low-level-VP. That is to say, the focus of this paper is the clausal architecture above the TP. This refers to the Illocutionary Force of the statement, which in the examples above could be said to be Interrogative or Emphatic,[22] and which is part of the complementizer system. The complementizer system itself is described as "the interface between a propositional content (expressed by the IP) and the superordinate structure." (Rizzi 1997:283) This appears to adequately describe the manner in which the particles, as shown above, effect changes in the meaning of the sentences in which they appear.

This is a tree diagram for the Force phrase:

21 With the notable exception of Ann Law, in the case of Chinese.

22 Although "Emphatic" is not a standard type of illocutionary force; this indicates that the particles may not, in fact, play the same role.

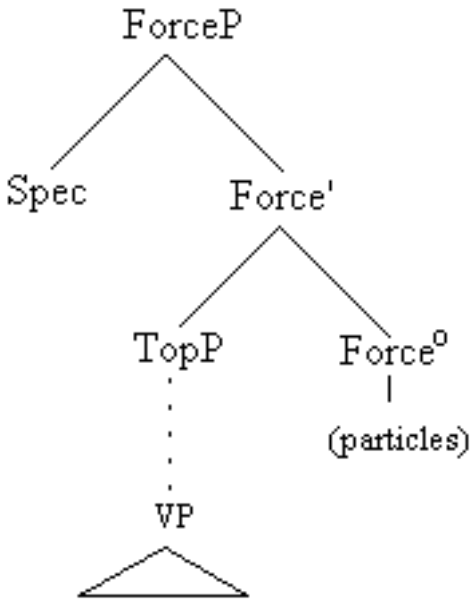
(24)



The tree is adapted from Rizzi 1997:297 "TopP" refers to "Topic Phrase" and "FinP" to "Finite Phrase," which are not at issue here. As can be seen, this is a head-initial structure. In the original source (Rizzi 1997) there is no discussion of particles as they are understood in this paper, and thus little evidence to relate them to this structure. However, an article by Ann Law

(2002) posits a very convincing model whereby Cantonese particles are shown to head the force phrase. Cantonese and Mandarin are different in many respects (see Appendix for a little more on Chinese dialects and languages) but they have many underlying similarities, and for this reason a synthesis can be attempted. This is Ann Law's diagram of the structure of the Cantonese CP domain, adapted from Law 2002:381:

(25)



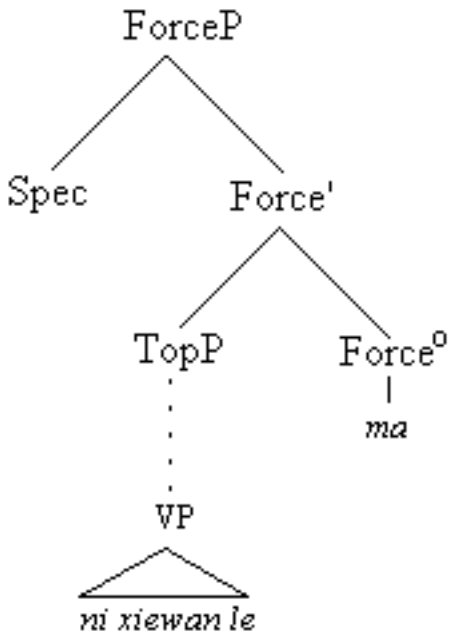
As she argues, the Cantonese sentence-final particles she discusses can be understood as the head in a head-final ForceP, with the result that the particle defines the illocutionary force of a statement. This is very much in line with the interpretation that has arisen above from the semantic and pragmatic analyses.

These two structures are essentially the same, being based in the same assumptions about the role of complementizers, and Law's, in fact, is built off of Rizzi's, the only difference being headedness, which will determine which of the two structures is likely correct for the utterance particles addressed in this paper. The head-final structures posited by Law is eminently appropriate to the sentence-final utterance particle as it occurs in Chinese (Mandarin or otherwise), since it places the particle at the end of a sentence. The Greek particles, on the other hand, are quite different in their word order. They tend to gravitate towards the beginning of sentences (Denniston 1959:lviii), whether appearing clause- or sentence-initially, as in some of the *âra* cases shown above, or, as is more likely with some particles, as the second word in a sentence. (Blomqvist 1969:108) However, numerous types of "postponement" of these particles are possible[23], indicating that the position of a Greek particle, despite having a "normal" or "default" setting, can vary. *Dê*, as shown in (21), can even appear sentence-finally. This difference between the positions in Greek and Chinese particles needs to be accounted for.

If, as this paper has assumed, Mandarin sentence-final utterance particles play analogous roles to Greek particles, then it should be concluded that the particles in both languages occupy the same syntactic position as the Force head. This in turn requires some way to account for the marked difference in word order. For example, if the Law model is used for sentence (13) above (*ni xiewan le ma?*) then it looks like this:

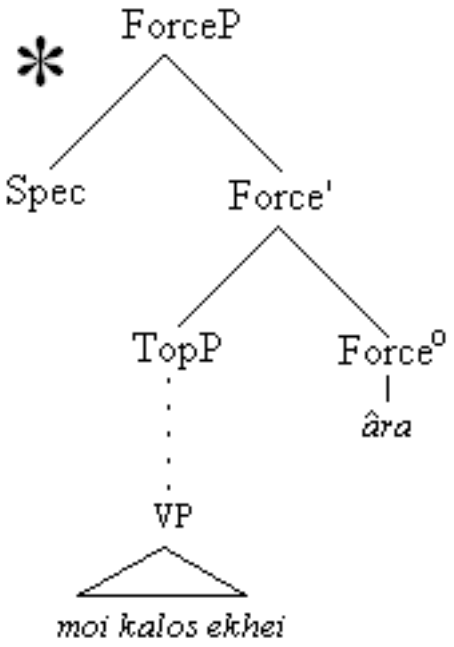
23 Blomqvist 1969:109-126 addresses this subject, finding 75 different ways in which the particle can be offset from its supposedly default position. Unfortunately, the particles he describes are not those used as examples in this paper.

(26)



This produces the word order expected from the example sentence. However, with the Greek sentence from (17) (*âra moi kalos ekhei?*) this head-final construction does not work, since it does not produce the correct word order:

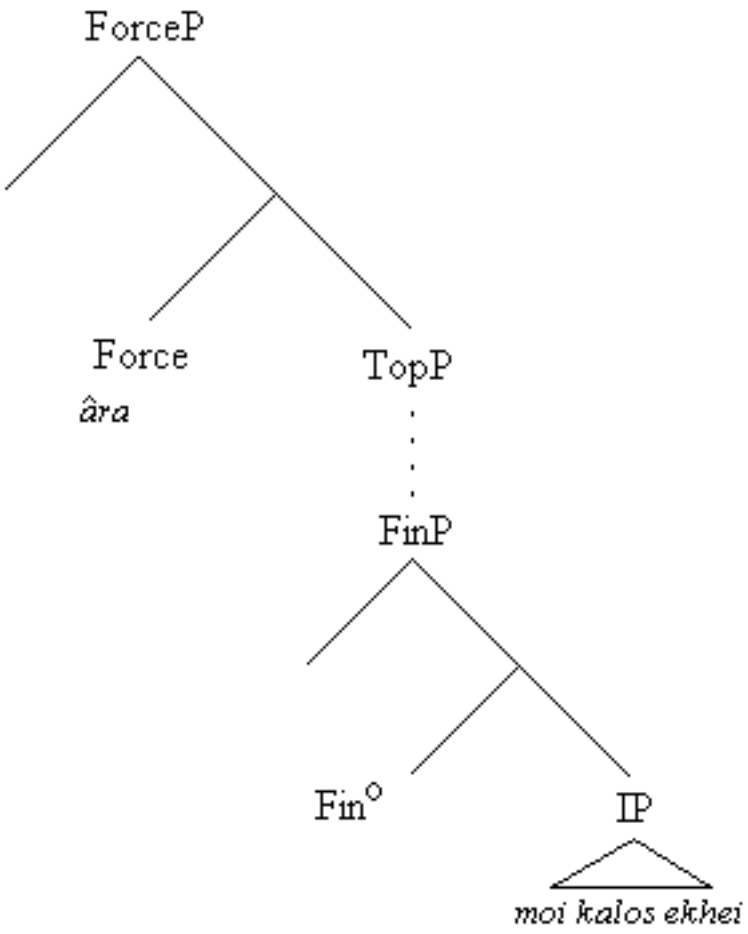
(27)



To obtain the correct word order here would require a rule moving the particle to the (Spec)ForceP position, but this is extremely counter-intuitive: it does not make sense to move a head to its own (Spec) position, and it is in fact illegal—only phrases can move into (Spec), and a head is not a phrase. This suggests that the head-final model is not appropriate to both languages, especially considering that neither language is in fact head-final.

Rather than adopt the head-final model, it seems better to adopt the head-initial model as originally shown by Rizzi, since this would produce the correct order in Greek, as here:

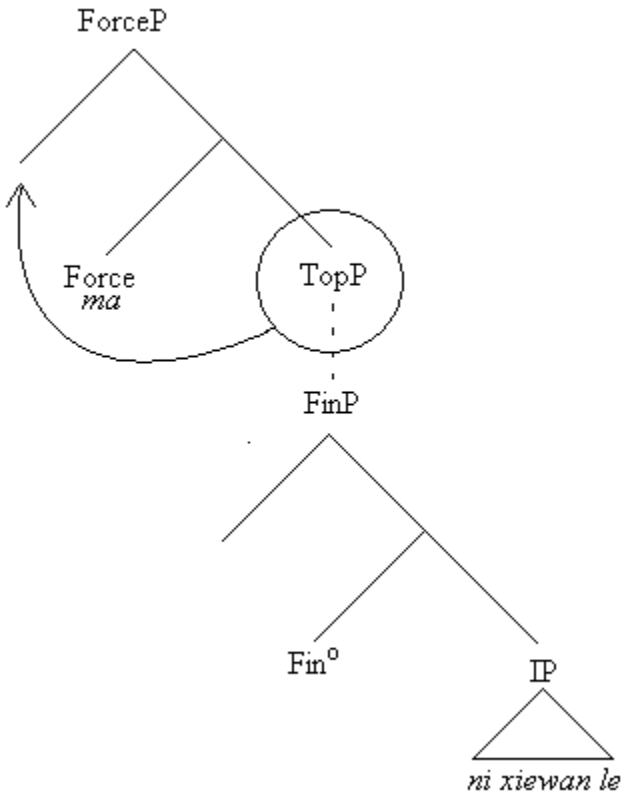
(28)



This produces the correct word order for the Greek sentence, but it would not produce a grammatical Chinese sentence because the particle position given here is not sentence-final. In

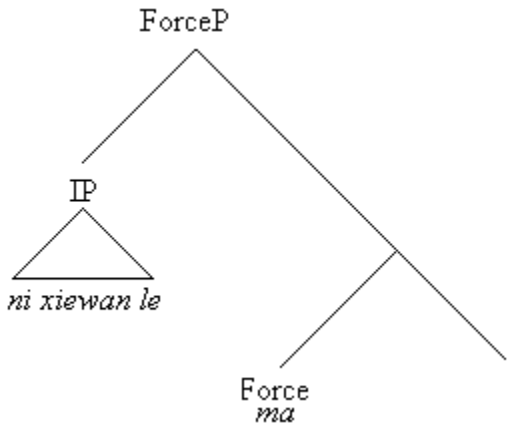
fact, at this point it might appear that the two systems are irreconcilable due to their difference in particle position. However, the difference in particle position can be explained by claiming the force head bears an EPP feature. In English, the EPP is defined as the requirement that every sentence have an explicit subject, which results in the presence of expletive subjects such as "it" in "It is likely that Bill likes chocolate." (Carnie 2002:175) If applied to the hypothetical class of utterance particles, the EPP would state that the particle, essentially, needs to have phonological material in its specifier. If the EPP is assumed for all of the Chinese utterance particles, then the following would take place:

(29)a.



(The complement moves from its original position upwards to the (Spec)ForceP position.)

b.



In the surface structure, the IP is present in (Spec)ForceP, while the utterance particle *ma* now occupies the salient sentence-final position. Conversely, it can be posited that the EPP property is not born by the particle *âra*.

While the head-final model proposed by Law is convincing for Chinese, it does not support the semantic similarity obtained by the comparisons in 2.2. Any rule for raising in that model, moreover, would result in the movement of a Force head to its own (Spec) position, unless different types of underlying structure are posited for Chinese and Greek—an unlikely solution. A head-initial model with consideration for EPP, therefore, seems the most likely

model for the semantic effect of the particles in Greek and Chinese, and the most likely explanation for the differences in sentence particle word order between the languages and the variances that occur within them. Further, though Chinese appears to possess sentence particles as force heads, their equivalents in Greek may be sentence-level, as in the case of *âra,* or predicate-level, as in the case of *dê.*

Because the EPP is lexical in nature, not all particles have the same form of it. This becomes especially notable in the case of the Greek particles *dê* and *ge*, which do not appear at the beginning or the end of a sentence, but it may also apply to Chinese *a* and even *de* as well. In the case of *dê*, for example, it appears that, for the Euripides lines of (21), the EPP only has the effect of putting the predicate in front of the particle, since the *dê* appears predicate-finally. In this case, the effect of the particle is apparently to raise the entire complement to (Spec)ForceP. In the example (19), however, only the predicate *okumoros* is raised, which bears some resemblance to a clefting process. In fact, in both cases the predicate is what is being put in front of the particle, however, because the predicate in Greek can appear at the end of a sentence as well as near or at the beginning, *dê* can appear to behave like *de,* and exhibit some of the same characteristics, but its apparent flexibility results from its not being the same. Thus, *dê* is similar to but not the same as *âra, ma,* and *de*.

The particle *ge* also appears not at the end of a sentence, *per se*, but rather after the predicate. In example 22(a) above, the particle does appear at the sentence, but this is only because the phonological sentence consists of only one word*, klaiei*, which is the predicate in

and of itself.[24] Anything following the predicate would, therefore, appear at the end of the sentence by default. In example 22(b) however, *ge* clearly does not appear at the end of the sentence (at least not in its first use) but rather near the beginning. This suggests that *âra* is not the same type of particle as either of the other two Greek particles.

Given the difference in word order, the utterance particles that have been discussed here can be divided into two types, sentence particles and predicate particles. Sentence particles have scope over the whole sentence, while predicate particles, as the name suggests, only apply to the predicate. Sentence particles, therefore, must appear at the beginning or the end of a sentence, and this is consistent with the tree diagrams above, while a predicate particle, not being sentence-final or sentence-initial, could not appear as the force head. The predicate particles seem to follow the predicate, at least in Greek. Chinese is a more difficult question.

The three Chinese particles that have been examined thus far do not have the kind of difference in word order that the Greek particles do, in that they all appear at the end of the sentence. This would make it seem that all three Chinese particles are the same kind of utterance particle, unlike the different Greek particles. However, all three of them could also be considered to follow the predicate, because they all do. Since Chinese word order is restricted in ways Greek is not, the predicate has to appear later in the sentence than the subject. The major implication of this fact is that there is no quick way to tell, simply from the utterance, which type one of the Chinese particles is, a sentence particle or a predicate particle.

24 Greek verbs do not exhibit the Extended Projection Principle, and often have implied/elliptical subjects.

Considering the assumption that certain particles convey illocutionary force, and the fact that *âra,* a confirmed sentence particle, conveys an Interrogative force, it is safe to consider *ma* a sentence particle as well, since it too conveys Interrogative force; it also fits with the tree diagrams given. The other two Greek particles, however, do not change the illocutionary force of the sentences in which they appear; "emphatic" is not a kind of illocutionary Force[25] and thus those particles which have been described in this paper as carrying that effect could, therefore, considered not to be sentence particles and thus predicate particles.

3. Conclusions and Further Issues

Clearly, the roles of utterance particles in Ancient Greek and Mandarin are similar. Some of these particles convey illocutionary Force and occupy prominent positions in a sentence, while others emphasize a particular word or phrase in the predicate. This appears to be true despite the notable syntactic and morphological differences between the two languages; even though the utterance particles do not tend to appear in the same positions cross-linguistically, their semantic relationships to the sentence's proposition, as an assertion or a question of its truth-value (among numerous other potential roles), have been shown to be remarkably similar. This suggests that, irrespective of languages' syntactic properties, they can not only have the same expressability (something of an axiom) but can employ similar kinds of discrete, non-bound-morpheme "markers" to effect a better understanding of the speaker's relationship to an utterance.

25 Although it should be noted that the emphatic use of *ge* may be related to an "exclamatory" use (Denniston 1959:116), and Exclamatory is an illocutionary force. A paper dedicated to this particle (and there many already) would have to concern itself with this connection, but there is not enough space here.

The implication of this conclusion is that there might exist a class of words that are similar across a number of languages, more so than such relatively broad categories of "preposition" or "verb," two categories which are very different in Greek, but in Chinese can sometimes be the same thing. Such a cross-linguistic class of "utterance particles" would be an excellent and explicit demonstration of the kind of Force CP structure that Luigi Rizzi and Ann Law discuss, since it would allow one to point to a specific phonetically realized element of a sentence and identify it as the Force head. However, with the discussion in this work limited to only two languages, even such disparate languages as ancient Attic Greek and modern Mandarin Chinese, it is too soon to make such a definitive and sweeping conclusion.

While the syntactic structure proposed above, incorporating the EPP, offers a sufficient explanation for the variances in particle position, it is not comprehensive, and the EPP is a comparatively high-level, lexical or semantic property, rather than a fundamental syntactic property, meaning that, while it certainly appears to make the theory fit the data, it is nevertheless open to interpretation and far from definitive. In particular, the inconsistency (as in the case of *dê,* for example) of some particles' position prevents the syntactic analsysis from having the desired "firmness." This so-called postponement of particles in Greek (although *dê* is addressed somewhat) is a topic that could occupy an entire paper the length of this one, but which cannot be included in this work due to limitations of space and resources.

It is hoped that the discussion of Greek particles, more in-depth than in other works, will help to make possible a future, even more detailed examination. The comparison between relatively well-studied Chinese utterance particles and well-known but perhaps not as well-

studied Greek ones has helped to reach a point at which this will likely be easier than before. The application of more contemporary and comparative methods of scrutiny to Greek particles[26] could not doubt shed much light on many other areas of Greek syntax, which is an exceptionally rich area given the long history of Greek literature and the tradition of interpretation.[27]

26 This field of study, analytical linguistic approaches to philology, is still quite new and as a result, no works on it were available at the time of this writing.

27 Naturally, there are many avenues for future research here, even if only to refute some of the claims I have made.

One significant line of inquiry that would prove valuable to a more thorough investigation of Ancient Greek would be a better classification of the parts of speech. In Greek, the term "particle" encompasses far more words than can realistically be said to fall into one category; it seems to be catch-all for words that now have better technical categorizations. A few examples—words translated as exclamations are called particles, words translated as various negativizers are called particles, and, more to the point, many particles (as currently defined) co-occur in a number of different combinations, which suggests that they should not be considered in the same category. Given sufficient time and/or resources, these particles could be arranged into a hierarchy of interest as described in Cinque 1999, but in order to accomplish this, a far deeper and more thorough investigation than that allowed by time constraints would be required.

Another, perhaps more focused topic to address would be the similarity of Greek particles to other etymologically related Indo-European words, such as the apparent link between *ge* and Sanskrit *(g)ha* or Gothic *-k.* This is, of course, but one small subdivision of the Indo-European field, but it could prove of great value in exploring the presence or absence of particles in other IE languages. Related to this is the notion of derivation of particles from words that may have originally belonged to other parts of speech. The so-called particle *alla* in Greek, translated as "but," appears to come from the word *allos*, meaning "other," and it is paralleled by the Latin *ceterum*, related to Greek *heteros* meaning "other" as well.

4. Appendix

Language Background

Ancient Greek

Ancient Greek, as studied in most Western educational traditions, was the language written, read, and spoken in both Greece proper and Asia (Western Turkey) as well as the islands of the Aegean between the 9th and 4th centuries B.C., which comprise the Archaic and Classical eras in the chronology of Western Ancient History. Preceded in its development by proto-Greek and Mycenaean (the latter represented in the writing systems of Linear A and B, neither of them related to that in use from the Classical period to the present day), by the time of its development into a recognizable form—usually held to be the 9th or 8th century, in which time the works of Hesiod and Homer are believed to have been recorded—the Ancient Greek language consisted of a number of closely-related (and largely mutually intelligible) dialects such as Ionian, the language of southern Asia; Attic, the language of Athens and northern Greece; Doric, the language of Southern and Western Greece; and Aeolic, the language of the northern parts of Asia.

When Greek is studied as part of a Classical curriculum, these dialects are generally not taught separately; Attic Greek, or some normalized variant of it, is generally held to be the "standard" variety of the Greek language in academic settings, with other forms, such as the

Aeolic of Sappho or the Ionian/Aeolic/Arcado-Cypriot of Homer, being introduced as variants from this supposed norm. This is due in part to the fact that the Koiné ("Common") Greek spoken during the later Hellenistic and Roman eras (and which is the language of the New Testament) derives heavily from Attic Greek, owing to the commercial and political importance of Athens in the Roman Mediterranean. This paper has focused primarily on Attic Greek, especially that of the tragedians.

Mandarin Chinese

The term "Chinese" to denote the language known variously as *Hanyu* ("language of the Hans"), *Putonghua* ("common tongue"), *Guoyu* ("national language") or Mandarin (a term roughly equivalent to "Oxford English")[28] is somewhat misleading, as the People's Republic of China is home to a vast array of languages, many of them with as valid a claim to the name "Chinese" as that of the nation's official language. Cantonese, Hakka, Shanghainese, and Min are but a few of the tongues derived from Classical Chinese, along with Mandarin. Standard Mandarin is itself a variant on Mandarin, the indigenous language of Han-ethnicity Chinese in the northern part of China, including Beijing and the provinces of Hebei and Shandong, among others. Within the 850+ million-speaker speech community of Mandarin, there exist numerous variations in pronunciation, vocabulary, and usage, although in their written form they are all, generally, mutually intelligible. In fact, all of the Sino-Tibetan languages written using Chinese

28 "Mandarin" derives from the Portuguese word, *mandarim* "minister, councilor", that was used to describe holders of a number of bureaucratic positions in the Ming, and later, Qing Empire; the Chinese names for Mandarin Chinese are unrelated to the names for these administrative officials, but the formal (i.e. standardized in vocabulary and pronunciation) version of the language spoken in and around Beijing was that used in communication between these officials, and thus the term has been used in the West to describe this language ever since the 16th century.

characters[29]—a complex array of several thousand picto-, ideo-, phono- and logographic symbolic elements and sub-elements—are mutually intelligible to varying degrees.[30] This parallels the similarities between Greek dialects of the Classical era, though the differences between the spoken forms of Mandarin and (for example) Cantonese are more akin to those between Italian and French than Sicilian and Neapolitan.

29 As well as some Korean and Japanese writings, themselves originally written in a variety of Classical Chinese.
30 This is not accounting for differences between traditional and simplified characters, which are minor in some cases but drastic in others.

Works Cited

1.Blomqvist, Jerker. 1969. *Greek Particles in Hellenistic Prose.* Lund: Berlingska Boktryckeriet.

2.Chao, Yuen Ren. 1968. *A Grammar of Spoken Chinese.* London: Cambridge University Press.

3.Cinque, Guglielmo. 1999. *Adverbs and functional heads: a cross-linguistic perspective.* New York: Oxford University Press.

4.Denniston, J.D. 1934. *The Greek Particles.* Oxford: The Clarendon Press.

5.Dobson, W.A.C.H. 1974. *A Dictionary of the Chinese Particles: with a Prologomenon in which the Problems of the Particles are Considered and they are Classified by their Grammatical Functions.* Toronto; Buffalo: University of Toronto Press.

6.Euripides, *Alcestis.*

7.Euripides. *Andromache.*

8.Euripides. *Electra.*

9.Euripides. *Helen*.

10.Homer. *Iliad.*

11.Hoosain, R. 1992. Psychological reality of the word in Chinese. *Language Processing in Chinese,* Chen, H.-C. and O.J.L. Tzeng, (eds). Amsterdam: North-Holland and Elsevier.

12.Law, Ann. 2002. Cantonese sentence-final particles and the CP domain. Presentation from University College London PhD Day, April 2002.

13.Li, Charles N. and Sandra A. Thompson. 1981. *Mandarin Chinese: A Functional Reference Grammar*. Berkeley: University of California Press.

14.Lu, Wen-Ying. 2005. *Sentence-final Particles as Attitude Markers in Mandarin Chinese*. Urbana-Champaign: University of Illinois at Urbana-Champaign.

15.Packard, Jerome L. 2000. *The Morphology of Chinese*. Cambridge: Cambridge University Press.

16.Plato, *Protagoras.*

17.Plato. *Symposium*.

18.Rizzi, Luigi. 1997. The Fine Structure of the Left Periphery. *Elements of Grammar: Handbook in Generative Syntax,* Haegeman, Liliane (ed.) 281-337. Dordrecht, Netherlands: Kluwer

19.Sophocles. *Electra.*

20.Sophocles. *Oedipus at Colonus.*

21.Wu, Ruey-Jiuan (Regina). 2003. *Stance in Talk: a Conversation-Analysis of Mandarin Final Particles*. Amsterdam; Philadelphia: J. Benjamins.