# On the syntax of av in Ancient Greek temporal clauses\*

Camille Denizot<sup>1</sup>, Liana Tronci<sup>2</sup> & Sophie Vassilaki<sup>3</sup> <sup>1</sup>Université Paris Nanterre, <sup>2</sup>Università per Stranieri di Siena, <sup>3</sup>INALCO-Sedyl cdenizot@parisnanterre.fr, tronci@unistrasi.it, sophie.vassilaki@inalco.fr

## Περίληψη

Εξετάζεται ο ρόλος της σύνταξης στην έκφραση της τροπικότητας, ιδιαίτερα η εκφορά του αοριστολογικού ἄν με υποτακτική στις χρονικές προτάσεις που εισάγονται με ὅτε / ὅταν και δηλώνουν το ενδεχόμενο (ή προσδοκώμενο). Η έρευνα στηρίζεται σε σώμα κειμένων από τρεις περιόδους της Ελληνικής: ομηρική ποίηση, Κλασσική Ελληνική, Ελληνιστική Κοινή της Καινής Διαθήκης. Προτείνεται μια νέα περιγραφή του ἅν με βάση τις συνταγματικές και παραδειγματικές ιδιότητές του. Η περιγραφή λαμβάνει ιδιαίτερα υπόψη τα κειμενικά συμφραζόμενα που καθορίζουν τη συντακτική λειτουργία του μορίου και επισημαίνει τα βασικά στάδια της εξέλιξής του πριν τη νεοελληνική εκφορά ὅταν+οριστική /+αοριστικό θέμα.

Λέζεις-κλειδιά: τροπικότητα, Αρχαία Ελληνική, μελέτη βάσει σωμάτων κειμένων, χρονικές προτάσεις, τροπικό μόριο, υποτακτική

## 1 Introduction

Modality has been explored in many detailed ways from a semantic point of view, e.g. Palmer (2001) among others. Our aim is to investigate the role of syntax in the expression of modality in Ancient Greek (AG), with special attention to the role of  $\alpha v$  and its interaction with moods. In this paper we focus on temporal clauses with and without  $\alpha v$  (in particular  $\delta \tau a$  and  $\delta \tau \alpha v$  clauses), which permits a discussion of the semantic and syntactic status of  $\alpha v$ .

The research is corpus-based. We focus on three corpora representative of different stages of AG, i.e. Archaic, Classical and Koine Greek. Figure 1 shows the difference in the frequency of ǎv depending on the centuries under investigation.<sup>1</sup>



Figure 1 | Frequency of av throughout Ancient Greek

<sup>\*</sup> Although this paper was prepared jointly by the three authors, Camille Denizot can be held responsible for 3.2, Liana Tronci for 3.1, and Sophie Vassilaki for 3.3. Other sections are co-authored.

<sup>&</sup>lt;sup>1</sup> Calculation of the z-score century by century, showing under- and over-represented uses of av as compared to the size of the corpus.

We take into account all occurrences of  $\delta \tau \epsilon$  and  $\delta \tau \alpha v$  clauses<sup>2</sup> in the following texts, which were chosen as a sample for each period: (1) Homeric poems for the first known uses of  $\alpha v$ ; (2) the Lysias corpus (without fragments) and the political speeches of Demosthenes (1-24) for the heyday period of Classical Greek; (3) the New Testament for the fading uses correlated with the reshaping of the modal system in Koine Greek. Table 1 gives the total number of occurrences for each text. As far as Koine Greek is concerned, we also give the data of the LXX (cf. Section 3.3 for further details).

	őτε	<b>ὅταν</b>	TOTAL
Homeric Greek (HG)	455	28 + 25 ὅτε κε(ν)	
TOTAL	455	53	508
Classical Greek (CG)			
Lysias	51	34	85
Demosthenes	114	124	238
TOTAL	165	158	323
Koine Greek (KG)			
LXX	175	85	260
NT	123	103	226
TOTAL	298	188	486

Table 1 | Corpus under study<sup>3</sup>

### 2 Presentation of the project

### 2.1 Temporal clauses with av

As is well-known,  $\alpha v$  is not compatible with all moods or tenses (e.g. not with the indicative present and only under certain conditions with the future), and only occurs in certain syntactic contexts (subordinate clauses, but only certain types) and with certain subordinators (e.g. with  $\omega \zeta$  but not  $v\alpha$  for final clauses). We focus on the use of the subjunctive +  $\alpha v$  because it is the only case where  $\alpha v$  occurs in subordinate clauses and is closely combined with the subordinator.

The subjunctive +  $\check{\alpha}v$  does not occur in just any subordinate clause, but only in conditional clauses ( $\dot{\epsilon}\dot{\alpha}v$  + subjunctive), temporal clauses (e.g.  $\check{\sigma}\tau\alpha v$ ), and relative clauses (e.g.  $\check{\sigma}\zeta$   $\check{\alpha}v$ ). This restricted combination is probably not due to chance (Denizot and Vassilaki 2016).

Among subordinate clauses, temporal clauses are interesting when studying modality because they are commonly considered to be somehow independent from the main clause, due to their framing role. Another feature is the variety of temporal relationships and subordinators in temporal clauses (*before, meanwhile, after*, with several possibilities for each meaning). In particular, there is a puzzling variety among temporal clauses as to their relationship to the combination of subjunctive  $+ \check{\alpha}v$ , as shown in Table 2 for the data of our Classical Greek corpus:

without ǎv with ǎv

<sup>&</sup>lt;sup>2</sup> With ὅτε κε as a variant in the Homeric corpus.

<sup>&</sup>lt;sup>3</sup> Translations are available on <u>http://www.perseus.tufts.edu/hopper/</u> for HG and CG texts, and <u>https://www.blueletterbible.org/</u> for the NT.

őτε	165	158
ἕως	32	33
<b>ο</b> πότε	22	5
ἐπεί	64	1
ἐπειδή	303	68
ήνίκα	30	4
πρίν	50	12

#### Table 2 | Temporal subordinators with and without ǎv in our Classical Greek corpus

It is worth noting that  $\check{\alpha}\nu$  can be separated from the subordinator in some cases such as  $\check{\epsilon}\omega\varsigma$ ,  $\pi\rho\dot{\nu}$ ,  $\dot{\eta}\nu\dot{\kappa}\alpha$  (cf. Kühner and Gerth 1898: §398), but that is never the case for  $\check{\sigma}\tau\alpha\nu$ ,  $\dot{\epsilon}\pi\epsilon\imath\delta\dot{\alpha}\nu$ ,  $\dot{\sigma}\pi\dot{\sigma}\tau\alpha\nu$  where the particle and the subordinator are tightly combined.

Among all these possibilities we investigate  $\delta \tau \alpha v$  clauses as compared to  $\delta \tau \varepsilon$  clauses since both of them express the temporal relationship equivalent to 'when' and seem to be semantically more basic and simpler than 'before' and 'until'. They are also well attested at the three different stages and therefore offer good possibilities of comparison. Our study aims to explain the kind of minimal pair such as the one taken from the NT corpus in (1)-(2):

- (1) Όταν δὲ ἔλθῃ ὁ υἰὸς τοῦ ἀνθρώπου ἐν τῆ δόξῃ αὐτοῦ καὶ πάντες οἱ ἄγγελοι μετ' αὐτοῦ τότε καθίσει ἐπὶ θρόνου δόξῃς αὐτοῦ. (Mat 25.31)
   'But when the Son of Man comes in his glory, and all the angels with him, then he will sit upon his glorious throne'
- (2) Καὶ ὅτε ἦλθον ἐπὶ τὸν τόπον τὸν καλούμενον κρανίον ἐκεῖ ἐσταύρωσαν αὐτὸν καὶ τοὺς κακούργους ὃν μὲν ἐκ δεξιῶν ὃν δὲ ἐξ ἀριστερῶν. (Luk 23.33)
  'And when they had come to the place called Calvary, there they crucified Him, and the criminals, one on the right hand and the other on the left'.

#### 2.2. The subjunctive + av pattern

Studying temporal clauses with  $\ddot{\alpha}v$  raises issues about the combination of subjunctive +  $\ddot{\alpha}v$ , which is a meaningful compositional pattern.

As far as the subjunctive is concerned, suffice it to say that it is a non-assertive mood, i.e. with no speaker commitment. It is a purely representational form, with no time anchoring. The state of affairs (SoA) is merely representational and projective.

As for av, we mention here only two recent studies, which argue for a unified meaning of the particle<sup>4</sup>. Gerö (2000) argues that av is a reflex of the intensionality of the contexts where it appears. Although intensionality is an interesting feature, the way av combines with the subjunctive remains unclear. Beck *et al.* (2012) argue that av is a universal quantifier over actual or possible situations; in the case of the subjunctive + av, quantification is over multiple situations per world (which is another interesting characteristic). However, neither of the two studies investigates how these situations or possible worlds are constructed and how they become meaningful within a text.

The goal of our study is to give a more detailed description of  $\alpha v$ , taken as a modal particle and not as a logico-semantic operator. By taking temporal clauses into account, we investigate how the modal particle interacts with a specific subordinator and with a specific mood, within a specific text to build a propositional content referentially.

<sup>&</sup>lt;sup>4</sup> In all contexts, not only in temporal clauses.

As Basset (1988) puts it, the particle  $\alpha$  links the representational content to a situation built by the speaker's point of view; this point of view is shaped by implicit representations about previous SoAs, which are mentioned in the context, or remain implicit.

When  $\check{\alpha}v$  is combined with the subjunctive the pattern has a semantic value, called here 'eventuality' (a label equivalent to Modern Greek  $\varepsilon v \delta \varepsilon \chi \delta \mu \varepsilon v o$ ). The combination of a purely representational content (subjunctive) with a relational element ( $\check{\alpha}v$ ) builds a linguistic pattern, which cannot be referential by itself. It becomes fully referential only by its syntactic relation to contextual elements in the main clause, and this explains why the pattern occurs only in dependent syntactic structures (temporal, conditional, and relative clauses). These characteristics also explain why eventuality patterns frequently co-occur with indefinite markers. Eventuality patterns scan possible situations, which is one of their remarkable textual functions. In the case of temporal clauses, it means that the propositional content does not refer to a moment but to a situation, built up by the speaker. All these characteristics can be found in spite of formal differences from Homeric to Koine Greek.

### 3 A diachronic development

#### 3.1. Homeric Greek

As far as Homeric Greek (HG) is concerned, we consider both patterns of  $\check{\alpha}v$  + subjunctive and  $\kappa\epsilon(v)$  + subjunctive, since the two particles, belonging to Ionic and Aeolic dialects respectively, are considered functionally more or less equivalent by scholars<sup>5</sup>.

In  $\delta\tau\epsilon$ -clauses,  $\check{\alpha}\nu$  + subjunctive contrasts with the indicative, cf. (3)-(4), where both temporal clauses specify the NP  $\check{\eta}\mu\alpha\tau\iota\tau \check{\varphi}$  in the day'. The functional difference is clear: in (3), the reference of  $\check{\eta}\mu\alpha\tau\iota\tau \check{\varphi}$  is to a day located in the past and identified by the true temporal clause; in (4), there is no time reference and  $\check{\sigma}\tau$ '  $\check{\alpha}\nu$  + subjunctive "builds" a prospective situation by conveying an eventuality meaning.

- (3) Καὶ γὰρ ἐγὼν ἐπίκουρος ἐὼν μετὰ τοῖσιν ἐλέχθην <u>ňµατι τῷ</u> ὅτε τ' ἦλθον 'Αμαζόνες ἀντιάνειραι. (Il. 3.188-189)
   'For I, too, being their ally, was numbered among them on the day when the Amazons came, the peers of men'
- (4) Οὐ γὰρ πρὶν πολέμου ἀποπαύσεται ὅβριμος Ἔκτωρ πρὶν ὅρθαι παρὰ ναῦψι ποδώκεα Πηλείωνα, <u>ἡματι τῷ</u> ὅτ' ἂν οῖ μὲν ἐπὶ πρύμνῃσι μάχωνται στείνει ἐν αἰνοτάτῷ περὶ Πατρόκλοιο θανόντος. (Il. 8.473-476)
  'For dread Hector shall not refrain him from battle until the swift-footed son of Peleus be uprisen beside his ships on the day when at the sterns of the ships they shall be fighting in grimmest stress about Patroclus fallen'

HG  $ilde{o}\tau\epsilon$  may combine with the subjunctive without the modal particle (64 occurrences), unlike later stages of the language.<sup>6</sup>  $ilde{O}\tau\epsilon$  + subjunctive clauses do not express any time reference and usually depend on gnomic statements:

<sup>&</sup>lt;sup>5</sup> Cf. Monro (1891: 333), Chantraine (1953: 345), Ruijgh (1992) and Wathelet (1997).

<sup>&</sup>lt;sup>6</sup> Cf. Willmott (2007: 8): "the use of the moods is here less 'mechanical' than in Attic".

- (5) <u>Κρείσσων γὰρ βασιλεὺς</u> ὅτε χώσεται ἀνδρὶ χέρηϊ (Il. 1.80)<sup>7</sup>
   'For mightier is a king, when he is angry at a lesser man'
- (6) [...] <u>Η γὰρ δμώων δίκη ἐστίν,</u> <u>αἰεὶ δειδιότων</u>, ὅτ' ἐπικρατέωσιν ἄνακτες οί νέοι. [...] (Od. 14.59-61)
  'Since this is the lot of slaves, ever in fear when over them as lords their young masters hold sway'

Time-reference is the crucial difference between  $\delta \tau \varepsilon$  + subjunctive and  $\delta \tau \varepsilon$  + indicative, as Chantraine (1953: 255, 256) also remarks: "l'indicatif est employé lorsqu'il s'agit de constater purement et simplement un fait"; on the contrary, clauses with  $\delta \tau \varepsilon$ ,  $\delta \pi \delta \tau \varepsilon$ ,  $\epsilon \tilde{\upsilon} \tau \varepsilon$ ,  $\epsilon \pi \epsilon i$  + subjunctive correlate to express "l'éventualité ou la généralité".

Let us now turn to the differences between  $\delta\tau\epsilon$  + subjunctive clauses and  $\delta\tau' \, \alpha\nu / \delta\tau\epsilon \, \kappa\epsilon\nu$  + subjunctive clauses. The latter are used when there is some specific reference to the speaker and his interlocutors, that is to the speech act, which is not the case when  $\delta\tau\epsilon$  + subjunctive occurs (cf. Basset 1988: 37 who relates the particle  $\alpha\nu$  to the "actualité du locuteur"). Evidence is given by two formal features (a)-(b) and one semantic difference (c):

(a) the verbs in  $\delta \tau$ '  $\delta \nu / \delta \tau \epsilon \kappa \epsilon \nu$  clauses may be inflected in the  $1^{st} / 2^{nd}$  person, whilst they are usually inflected in the  $3^{rd}$  person in  $\delta \tau \epsilon$  + subjunctive clauses;

(b)  $\delta \tau' \ \alpha \nu / \delta \tau \epsilon \kappa \epsilon \nu$  clauses may be subordinated to imperatives and exhortative subjunctives, whilst  $\delta \tau \epsilon$  + subjunctive clauses usually depend on indicatives;

(c) the typical events expressed by  $\delta\tau\epsilon$  + subjunctive clauses concern atmospheric phenomena and imply some recurrence.

Examples (7) and (8) show these differences:

(7) [...] Ἀτὰρ κατακήομεν αὐτοὺς

τυτθόν ἀπὸ πρὸ νεῶν, ὥς κ' ὀστέα παισὶν ἕκαστος

οἴκαδ' ἄγῃ <u>ὅτ' ἀν αὖτε νεώμεθα πατρίδα γαῖαν</u>. (Π 7.333-335)

'And we will burn them a little way from the ships that each man may bear their bones home to their children, whenso we return again to our native land'

(8) [...] ἄλλά τε πάντα εἴλυται καθύπερθ', <u>ὅτ' ἐπιβρίση Διὸς ὄμβρος</u> (Il. 12.285-286)
'[...] but all things beside are wrapped therein, when the storm of Zeus drives it on'

In summary, in HG the subjunctive without the particle is capable of expressing the eventuality values conveyed by  $\delta\tau\epsilon$ -clauses. The role of the particles  $\Delta\nu / \kappa\epsilon(\nu)$  is to connect the eventuality values of  $\delta\tau\epsilon$ -clauses to the speech act, i.e. the subjective point of view of the speaker with respect to the events.

## 3.2. Classical Greek

CG illustrates the eventuality meaning of ὅταν clauses, which are used for the construction of fictive scenarii, compared to dating-like clauses with ὅτε.

 $<sup>^{7}</sup>$  Even though the verb form χώσεται can be morphologically analysed as either a short vowel subjunctive or an indicative future, it does not seem to have temporal reference to the future here. On the general issue of the relationship between future and subjunctive in HG, cf. Willmott (2007: 54ff.).

As it is a time-anchored subordinator, ὅτε may be used correlatively with τότε or to expand dating temporal phrases<sup>8</sup>. Temporal clauses with ὅτε may expand only an adverb without framing a whole main clause, e.g. in νῦν ὅτε 'now that.'

By contrast,  $\delta \tau \alpha v$ , which is used for framing situations, is often found with indefinites<sup>9</sup>. It may refer to a NP without temporal reference, as in (9) where the NP has a qualifying function ('for tales of that sort, that is to say when he hears...').

(9) <u>Τοὺς γὰρ τοιούτους λόγους</u>, ὅταν ἀπαγγελλόντων ἀκούῃ, ὅτι κακῶς ἤκουεν, ὑμεῖς δ' ἀπεδέχεσθε, μεταβάλλειν αὐτοῦ τὴν γνώμην. (D.7.21.7)
 <u>'For tales of that sort</u>, when he is told that he was traduced and that you believed what was said, make him change his mind'

Όταν clauses may also be used for scanning possible situations without referring to any particular moment of time: in (10) όταν occurs without a main verb as an equivalent of 'either... or', for typical situations and attitudes.

(10) Πολλά γάρ ἂν ποιήσειεν ὁ τύπτων, ὦ ἄνδρες Ἀθηναῖοι (...), τῷ σχήματι, τῷ βλέμματι, τῆ φωνῆ, ὅταν ὡς ὑβρίζων, ὅταν ὡς ἐχθρὸς ὑπάρχων, ὅταν κονδύλοις, ὅταν ἐπὶ κόρρης.
(D.21.72)

'Many things, Athenians may be done by the striker (...) – by gesture, by look, by tone; when he strikes in wantonness or out of enmity; with the fist or on the cheek'

A revealing contrast between  $\delta \tau \epsilon$  and  $\delta \tau \alpha \nu$  clauses is given by examples where the main clause refers to a future event<sup>10</sup>. With  $\delta \tau \alpha \nu$  (61 examples with future reference) a general scenario is projected and  $\delta \tau \alpha \nu$  means 'when and if':

(11) (...) οι τῷ μὲν λόγῷ τῷ δήμῷ πολεμοῦσι, τῷ δὲ ἔργῷ τῶν ὑμετέρων ἐπιθυμοῦσιν: ἄπερ κτήσονται, ὅταν ὑμᾶς ἐρήμους συμμάχων λάβωσιν. (L.34.5.8)
'(...) who in speech make war on the people, but in fact are aiming at your property; and this they will acquire when they find you destitute of allies'

The SoA ('to have no allies') is a mere possibility and it is clear that the speaker hopes that the situation will not happen. It can be contrasted with the rare occurrences of  $\delta\tau\epsilon$  + future (4 occurrences in our corpus):

(12) Μὴ οὖν ἐξελέγξηθ' ὡς κακῶς ἔχει τὰ Ἑλληνικά, συγκαλοῦντες ὅτ' οὐ πείσονται, καὶ πολεμοῦντες ὅτ' οὐ δυνήσεσθε. (D.14.38)

'Do not, then, expose the weakness of the Greeks by issuing a *summons which they will not obey* and declaring a war *which you cannot wage*'<sup>11</sup>

By contrast with (11), the SoA of (12) is certain ('they won't obey'). Hypothesis is not involved and in the assertive temporal clause the propositional content is anchored in time.

<sup>&</sup>lt;sup>8</sup> Correlated with a true temporal phrase (35 times): τότε (13), but also τὸ κατ' ἀρχάς, τὴν ὥραν τοῦ ἔτους, κατ' ἐκείνους τοὺς χρόνους, μετὰ ταῦτα, πρώην, among others).

<sup>&</sup>lt;sup>9</sup> 31 examples vs 1 for  $\delta \tau \epsilon$  in a counterfactual environment.

<sup>&</sup>lt;sup>10</sup> We do not discuss here the traditional divide between generic / iterative and prospective meanings (cf. Rijksbaron 1984 and Wakker 1994), that can be explained as contextual interpretations of eventuality meaning. See Denizot, Tronci and Vassilaki (to appear) for further bibliographical discussion and references.

<sup>&</sup>lt;sup>11</sup> Also D.19.262, D.20.28.

The analysis of the data shows that the distribution between  $\delta \tau \epsilon$  clauses with temporal meaning and  $\delta \tau \alpha v$  clauses with eventuality meaning is clear-cut in CG. They do not overlap and have become part of a stabilized system.

### 3.3 New Testament Greek

In the NT  $ilde{\sigma}\tau\alpha\nu$  (123 occ.) and  $ilde{\sigma}\tau\epsilon$  (103 occ.) still display the configurations attested in CG (Burton 1898, Blass and Debrunner 1961, Moulton 1976).  $ilde{O}\tau\alpha\nu$  occurs with the subjunctive (119 occ.), mainly with the perfective/aoristic stem (87 occ.), whilst  $ilde{\sigma}\tau\epsilon$  occurs almost exclusively with the indicative (one contested exception), mainly with the aorist tense in formulaic time-anchored expressions and some standard narrative schemas.

According to NT grammarians (Robertson 1919, Decker 2001), ὅταν refers to a conditional, possible, and, in many instances, iterative event. In the NT corpus, ὅταν conveys mainly an indefinite projecting value<sup>12</sup>, illustrating thus a diachronic continuity of meaning and form in the expression of eventuality:

(13) Καὶ νῦν εἴρηκα ὑμῖν πρὶν γενέσθαι ἵνα ὅταν γένηται πιστεύσητε. (Jhn 14.29)
 'And now I have told you before it comes, that when it does come to pass, you may believe'

3.3.1. Characteristics of ὅταν in the NT

As attested by synoptic examples,  $\delta \tau \alpha \nu$  may be used, on the model of conditionals, in certain 'When & if' bipartite structures, as an equivalent to  $\dot{\epsilon} \dot{\alpha} \nu$ . Note in this respect the use of  $\kappa \alpha i$  as a link between the  $\delta \tau \alpha \nu$  clause and the main clause, whereas this is not the case with  $\dot{\epsilon} \dot{\alpha} \nu$  clauses.

- (14) ὁ λύχνος τοῦ σώματός ἐστιν ὁ ὀφθαλμός σου ὅταν ὁ ὀφθαλμός σου ἀπλοῦς ἦ καὶ ὅλον τὸ σῶμά σου φωτεινόν ἐστιν ἐπὰν δὲ πονηρὸς ἦ, καὶ τὸ σῶμά σου σκοτεινόν. (Luk 11.34)
  'The lamp of the body is your eye. Therefore, when your eye is good, your whole body also is full of light. But when your eye is bad, your body also is full of darkness'
- (15) ὁ λύχνος τοῦ σῶματός ἐστιν ὁ ὀφθαλμός : ἐὰν οὖν ἦ ὁ ὀφθαλμός σου ἁπλοῦς ὅλον τὸ σῶμά σου φωτεινὸν ἔσται. ἐὰν δὲ ὁ ὀφθαλμός σου πονηρὸς ἦ, ὅλον τὸ σῶμά σου σκοτεινὸν ἔσται. (Mat 6.22)

'The lamp of the body is your eye: if your eye is good, your whole body also is full of light. But if your eye is bad, your body also is full of darkness'

Koine Greek exhibits a new combinatory possibility, i.e. the use of ὅταν with the indicative mood (Blass and Debrunner 1961), which is relatively frequent in the LXX, with 20 occurrences out of 175:

(16) καὶ ἐγίνετο ὅταν ἐπῆρεν Μωυσῆς τὰς χεῖρας, κατίσχυεν Ἰσραήλ· ὅταν δὲ καθῆκεν τὰς χεῖρας, κατίσχυεν Ἀμαλήκ. (Εχ. 17.11)

"... and it came to pass, that as long as Moses held up his hand, Israel prevailed; and when he let down his hand, Amalek prevailed"

In the NT, there are 6 occurrences of the ' $\delta \tau \alpha v$  + indicative' construction but most of them are considered marginal readings<sup>13</sup>; there is only one unanimously accepted occurrence:

(17) ὅταν αὐτὸν ἐθεώρουν (Mk 3.11)

<sup>&</sup>lt;sup>12</sup> As Porter (1994: 240) puts it, indicative and subjunctive mood differ "in attitude between the writer asserting and merely projecting".

<sup>&</sup>lt;sup>13</sup> See Rev. 4.9 (future), Rev. 8.1 (aorist), Mk 11.25 (present), Mk 11.19 (aorist), Luk 13.28 (future).

## 'when they saw him'

In NT Greek the use and meaning of ὅταν is conditioned by aspect. The aoristic/perfective stem of the subjunctive becomes clearly dominant by this period (87 occ. vs 32 present) unlike the much more balanced distribution between present and aorist stems during the Classical period. Όταν is typically used in parabolic narratives, i.e. storytelling with unspecified spatial and temporal location and with an eventuality meaning (as in *macarisms*, e.g. Luk 6.22, μακάριοί ἐστε ὅταν μισήσωσιν ὑμᾶς), whereas ὅτε is never attested in such contexts:

(18) ἀπὸ δὲ τῆς συκῆς μάθετε τὴν παραβολήν ὅταν ἤδη ὁ κλάδος αὐτῆς γένηται ἀπαλὸς καὶ τὰ φύλλα ἐκφύῃ γινώσκετε ὅτι ἐγγὺς τὸ θέρος 33 οὕτως καὶ ὑμεῖς ὅταν ἴδητε... (Mat 24.32)
'From the fig tree learn its lesson: as soon as its branch becomes tender and puts out its leaves, you know that summer is near. So also you, when you see all these things...'

### 3.3.2. Ότε

In continuity with its use in the Classical period,  $\delta \tau \varepsilon$  occurs only with the indicative (aorist, imperfect and future). 'Ote denotes time-anchored events or actions with mainly past time reference (91 occ. out of 103), mostly with the aorist (75 occ.). It is used with a relatively limited list of verbs in specific contexts: movement, perception (hearing and seeing), telic and achievement predicates. It is often used in formulaic expressions (και ἐγένετο ὅτε ἐτέλεσεν ὁ Ἰησοῦς) with time-space location reference:

- (19) ὅτε δὲ ἡμέρα ἐγένετο τὴν γῆν οὐκ ἐπεγίνωσκον. (Act 27.39)
   'When it was day, they did not recognize the land'
- (20) ἀλλὰ ἔρχεται ὥρα καὶ νῦν ἐστιν ὅτε οἱ ἀληθινοὶ προσκυνηταὶ προσκυνήσουσιν. (Jhn 4.23)
   'But the hour is coming, and now is, when the true worshipers will worship [the Father in spirit and truth]'

## 3.3.3. A diachronic hypothesis

The NT data show that  $\delta \tau \alpha v + a \sigma i st stem may be considered as a 'future' equivalent, with an eventuality meaning, of <math>\delta \tau \epsilon + a \sigma i st$  (indicative), the two forms being related on an aspectual basis, i.e. their common aspect stem and a oristic (indefinite) aspectual value:

ὅταν ἕλθη 'aoristic' future - ὅτε ἦλθεν past value

=> ὅταν ἦλθεν 'aoristic past' (very well attested in LXX and post Classical/Koine authors)

This distribution of  $\delta \tau \epsilon$  and  $\delta \tau \alpha v$  is regular in the NT corpus, and it is supported by the fact that by this period  $\delta \tau \alpha v$  is completely univerbated – which means that  $\dot{\alpha} v$  has lost in  $\delta \tau \alpha v$  most of its modal particle categorial status and features. This distribution offers a new morphological pattern for syntactic and modal change, yielding thus the diachronic emergence of a new temporal conjunction with extended use (both in tense and mood), comparable to the Modern Greek  $\delta \tau \alpha v$ , which will progressively supersede  $\delta \tau \epsilon$  in Hellenistic Greek and subsequent periods.

## 4 Conclusion

We have argued that  $\check{\alpha}v$  has to be analyzed in specific constructions and texts. By our corpusbased approach, we have offered a new description of the  $\check{\alpha}v$  particle and reconsidered its categorial status and its function in a specific kind of combination ( $\check{\sigma}\tau\alpha v +$  subjunctive). Our diachronic approach has allowed us to systematically compare how the subjunctive +  $\ddot{\alpha}v$  combination functions as a syntactic pattern.

Our study shows that (1) the syntagmatic and paradigmatic properties of  $\alpha v$  are relevant for defining its role as a modal particle, (2) these syntagmatic properties change through the three stages of Ancient Greek, although the eventuality value is preserved as a semantic category.

#### References

- Basset, Louis. 1988. "Valeurs et emplois de la particule dite modale en grec ancien". In *In the footsteps of Raphael Kühner*, edited by A. Rijksbaron, 27–37. Amsterdam: Brill.
- Beck, Jana E., Sophia A. Malamud, and Iryna Osadcha. 2012. "A Semantics for the Particle ἄν in and outside Conditionals in Classical Greek". *Journal of Greek Linguistics* 12: 51–83.
- Blass, Friedrich, and Albert Debrunner. 1961. A Greek Grammar of the New Testament and other early Christian Literature, trans. and ed. R. Funk, University of Chicago Press.
- Burton, Ernest de Witt. 1898. *Syntax of the Moods and Tenses in New Testament Greek*. 3rd ed. Edinburgh: T. and T. Clark.
- Chantraine, Pierre. 1953. Grammaire homérique. Tome II: Syntaxe. Paris: Klincksieck.
- Decker, Rodney J. 2001. Temporal Deixis of the Greek Verb in the Gospel of Mark with Reference to Verbal Aspect. Bern: Peter Lang.
- Denizot, Camille, and Sophie Vassilaki. 2016. "La notion d'éventuel comme catégorie linguistique: deux formes modales du grec ancien et du grec moderne". *Bulletin de la Société de Linguistique de Paris* 111: 277–316.
- Denizot, Camille, Liana Tronci, and Sophie Vassilaki. In preparation. "La syntaxe de la modalité et le rôle de åv en grec ancien".
- Gerö, Eva-Carin. 2000. "The Usage of άν and κε in Ancient Greek: Towards a Unified Description". *Glotta* 76: 177–191.
- Kühner, Raphael, and Bernhard Gerth. 1898. Ausführliche Grammatik der Griechischen Sprache. Hannover / Leipzig: Hannsche Buchhandlung.
- Monro, David B. 1891. A Grammar of the Homeric dialect. Oxford: Clarendon.
- Moulton, James H. 1976. *A Grammar of New Testament Greek*, 3rd ed. Edinburgh: T. and T. Clark.
- Palmer, Frank R. 2001<sup>2</sup> [1986]. *Mood and Modality*. Cambridge: CUP.
- Porter, Stanley. 1994. Idioms of the Greek New Testament, 2nd ed. Sheffield: Academic Press.
- Rijksbaron, Albert. 2006<sup>3</sup> [1984]. *The syntax and semantics of the verb in classical Greek, an introduction*. Chicago: The University of Chicago Press.
- Robertson, Archibald. T. 1919<sup>3</sup>. A Grammar of the Greek New Testament, in the light of *historical research*. London: Hodder and Stoughton.
- Ruijgh, Cornelis J. 1992. "L'emploi le plus ancien et les emplois plus récents de la particule κε/ἄν". In *La langue et les textes en grec ancien*, edited by Françoise Létoublon, 75–84. Amsterdam: Gieben.
- Wakker, Gerry. 1994. Conditions and conditionals. An investigation of Ancient Greek. Amsterdam: Gieben.
- Wathelet, Paul. 1997. "Les particules *ke(n)* et *an* dans les formules de l'épopée homérique". In *New Approaches to Greek Particles*, edited by Albert Rijksbaron, 247–268. Amsterdam: Gieben.
- Willmott, Jo. 2007. The Moods of Homeric Greek. Cambridge: CUP.