

## 5. ANCIENT & MIDDLE GREEK

In the preceding chapters, we have seen an outline of the synchronic distribution of *pu* in CSMG. The ensuing chapters characterise its diatopic diversification. This chapter addresses an essential aspect of the grammaticalisation: the development of *hópou* up to its becoming a general relativiser around *v* AD. This account is vital in situating the beginnings of the grammaticalisation, within which much of the present range of meanings was determined. This account also includes some mention of the functional antecedents of *pu*—including the participle and *ho:s*—and the provenance of its major functional competitor, *na*.

The chapter concludes with what remains to date the only detailed examination of the post-relativiser diachrony of *pu*: Tzartanos' (1991 [1946, 1963]) internal reconstruction of its various functions. There are some problems with Tzartanos' diachronic account, and it does not call on historical or dialect texts. Furthermore, his account is not synchronically complete or faultless. Nevertheless, his internal reconstruction represents a starting point for the type of account intended in this study.

In a few instances (indicated in the text) I have drawn data from texts included in the *Thesaurus Linguae Graecae* CD-ROM. In the remainder of instances, all of the data, and indeed much of the analysis, has been drawn from the major references in the field (Bakker 1974; Bechtel 1924; Buck 1955; Jannaris 1897; Mandilaras 1973; Monteil 1963; Robertson 1934 [1923]; Schwyzer 1950; Smyth 1959 [1920]; Thumb & Scherer 1959). I have checked the examples (drawn from both inscriptional and literary Greek) throughout with the original sources; this is particularly important with the older references, as they rely on outdated editions or disputed editorial decisions. My contribution has been to criticise the findings where appropriate (particularly with Jannaris and Bakker), and to synthesise them with regard to the overriding question of this thesis: what light these findings shed on the development of *pu* in Greek.

### 5.1. *The history of hópou*<sup>1</sup>

#### 5.1.1. Indo-European antecedents

The story of relativisation in Greek—indeed, in most Indo-European languages—is the story of four Proto-Indo-European stems: *\*yo*, *\*kwo*, *\*so* and *\*to*.

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<sup>1</sup>The following discussion is based mainly on Monteil's (1963) monograph.

Of these, *\*k<sup>w</sup>o* was an interrogative, and has engendered most Indo-European interrogatives, including Latin *quis*, Old Church Slavonic *kuto*, and the Germanic *hw*-forms (including English *wh*-words). In Greek, PIE *\*k<sup>w</sup>* went to *p* before back vowels, and *t* before front vowels; thus, Classical reflexes of *\*k<sup>w</sup>o* include *tís* ‘who?’ (cf. Latin *quis*), *póte* ‘when?’, and *pô:s* ‘how?’ (In Ionic, *\*k<sup>w</sup>o*-reflexes started with *k* rather than *p*—e.g. *kóte* ‘when?’)

The stems *\*so* and *\*to* were demonstrative; their reflexes include Old English *se* ‘neuter article’ and *þæt* ‘demonstrative’, whence Modern English *the* and *that*. In Greek, their reflexes include demonstratives such as *tóte* ‘then’, and the definite article *ho*, *he:*, *tó*, which is also employed as a relativiser in Homeric Greek, Ionic, and Middle and Early Modern Greek.

The normal Classical Greek relativiser was *hós*, *hé:*, *hó*, which was a reflex of PIE *\*yo*. Since other old Indo-European relativisers were also derived from this stem (Vedic *yáh*, *yá*, *yád*, Avestan *yō*, *yā*, *yāt*, Old Church Slavonic *īže*, *jaže*, *ježe*), *\*yo* is usually considered to have been a relativiser; but this presumes that relativisation was extant in Proto-Indo-European, and it does not explain the anaphoric use of *\*yo* cognates (Lithuanian *jís*, *jí*, Latin *is*, *ea*, *id*, Sanskrit *ayám*, *iyám*, *idám*).<sup>2</sup> Monteil (1963:14) thus concludes *\*yo* was anaphoric, with the relativiser function an early secondary development.<sup>3</sup>

So Greek contrasted reflexes of *\*yo*, *\*k<sup>w</sup>o*, and *\*so*/*\*to*, of which the first were relativisers, the second interrogative, and the third demonstrative. Greek formed two further categories of pronouns. The unstressed or stress-shifted versions of *\*k<sup>w</sup>o* reflexes were used as indefinites (e.g. *poté* ‘some time’, *pó:s* ‘somehow’). The prefixing of *ho-* (< *\*yo*) to *\*k<sup>w</sup>o* reflexes formed indirect interrogatives, which were also used as relativisers.

This meant that Greek had extensive paradigms of correlative pronouns, sharing the same suffixes (usually old case endings); this is illustrated in Table 13.

<b>Relative</b>	<b>Demonstrative</b>	<b>Interrogative</b>	<b>Indefinite</b>	<b><i>*yo</i> + <i>*k<sup>w</sup>o</i></b>
<i>hós</i> ‘who’	<i>ho</i> , <i>he:</i> , <i>tó</i> ‘the’; <i>hósde</i> , <i>hé:de</i> , <i>tóde</i> ‘that’	—	—	—
—	—	<i>tís</i> ‘who?’	<i>tís</i> ‘someone’	<i>hóstis</i> ‘whoever’
<i>hoîos</i> ‘of which sort’	<i>toîos</i> ‘of that sort’	<i>poîos</i> ‘of what sort?’	<i>poiós</i> ‘of a certain sort’	<i>hopoîos</i> ‘of which sort’
<i>hoû</i> ‘where’	—	<i>poû</i> ‘where?’	<i>pou</i> ‘somewhere’	<i>hópou</i> ‘where’
<i>hoî</i> ‘thither where’	—	<i>poi</i> ‘whither?’	<i>poi</i> ‘towards somewhere’	<i>hópoi</i> ‘whither’
<i>he:i</i> ‘where; as’	<i>te:i</i> ‘here, this way’	<i>pê:i</i> ‘where? how?’	<i>pe:i</i> ‘somehow; to some place’	<i>hópe:i</i> ‘by which way; as’

<sup>2</sup>Properly speaking, these derive from an anaphoric *\*h<sub>1</sub>e*, (*h<sub>1</sub>*)*ih<sub>2</sub>*, (*h<sub>1</sub>*)*id*, of which *\*yo* is apparently an *o*-stem variant (Beekes 1995:202–205).

<sup>3</sup>For a summary of scholarship on the origin of Indo-European relativisers, see Shields (1990). On the broader question of how subordination should be reconstructed for Proto-Indo-European, see Jeffers (1987)—who concludes that *\*yo* in Proto-Indo-European marked two clauses as belonging in the same syntactic constituent.

<i>hót<sup>h</sup>en</i> ‘whence’	<i>tót<sup>h</sup>en</i> ‘thence’	<i>pót<sup>h</sup>en</i> ‘whence?’	<i>pot<sup>h</sup>én</i> ‘from somewhere’	<i>hopót<sup>h</sup>en</i> ‘whence’
<i>hóte</i> ‘when’	<i>tóte</i> ‘then’	<i>póte</i> ‘when?’	<i>poté</i> ‘at some time’	<i>hopóte</i> ‘whenever’
<i>ho:s</i> ‘as’	<i>tó:s</i> ‘in this way’ (rare)	<i>pô:s</i> ‘how?’	<i>pós:s</i> ‘somehow’	<i>hópo:s</i> ‘as’
<i>hósos</i> ‘as much’	<i>tósos</i> ‘that much’	<i>pósos</i> ‘how much?’	<i>posós</i> ‘some’	<i>hopósos</i> ‘as much... as’
<i>hosákis</i> ‘as many times as’	<i>tosákis</i> ‘that many times’	<i>posákis</i> ‘how many times?’	—	<i>hoposákis</i> ‘as many times as’
—	—	<i>podapós</i> ‘from what country?’	—	<i>hopodapós</i> ‘of whatever country’
<i>he:líkos</i> ‘of which age’	<i>te:likósde</i> ‘so old’	<i>pe:líkos</i> ‘how old?’	<i>pe:líkos</i> ‘of some age’	<i>hope:líkos</i> ‘of whatever age’
<i>hóteros</i> ‘the one of the two which’ (rare)	<i>héteros</i> ‘the other one’	<i>póteros</i> ‘which of the two?’	—	<i>hopóteros</i> ‘whichever one of the two’

Table 13. Ancient Greek correlative pronouns

A noteworthy feature of the table is the incomplete paradigm for *hós*: there is no corresponding interrogative *\*pós*. However, though the nominative *\*pós* is unattested, other interrogatives point to various oblique case endings attached to *\*pós*: *poî* is a locative, *pê:i* a dative, and *pô:s* an instrumental.

### 5.1.2. Early Greek locative relativisation

In Homeric Greek, most locative relativisation was done by two relativisers which were not to survive into Modern Greek: *hót<sup>h</sup>i*, which occurs 93 times in Homer, and *ént<sup>h</sup>a* (not derived from *\*yo* at all), occurring 58 times as a relativiser and 66 as an anaphor. Of these, *hót<sup>h</sup>i* is restricted to Homer and the Arcadian dialect; *ént<sup>h</sup>a*, on the other hand, survived in use into Classical Greek (2 instances in Aristophanes).

The major competition to *ént<sup>h</sup>a* came from relativisers based on *\*yo* and *\*yo + \*kwō*. For these, the unmarked case endings were the locatives *-oi* (and its Ablaut variant *-ei*) and *-a:i* (Attic-Ionic *-e:i*). In dialects other than Ionic-Attic, *-oi* pronouns were used to denote both motion towards and stationary place (Buck 1955 §132.3).<sup>4</sup> In Ionic-Attic, another case ending was innovated, to distinguish the two functions: the genitive *-ou* ending.

The forms ending in *-ou* (*hoû*, *hópou*) are also of case origin. With the exception of the two examples [in Homer] Il III 15; Il XVI 306 (which may be subsequent Atticisms) [Footnote: Il III 15 may be reconstituted with *hópoi* or *hópei:i*; in Il XVI 306, the verse will not scan with *hópou*], they are not encountered anywhere but Ionic and Attic: these two dialects seem to have sought out a distinction between non-motion and motion, both of which are neutralised in the other dialects through *hópoi* (just as *en* in the prepositional domain).<sup>5</sup> To express non-motion, Ionic-Attic uses a form of the partitive genitive denoting a portion of space; as for

<sup>4</sup>For more information on the dialect distribution of adverbial locative endings, see §5.1.4.

<sup>5</sup>Attic distinguishes *eis* ‘to’ from *en* ‘at’.

*hórou* (which could not be the genitive of a non-existent \**hópos*), it results from a mechanical creation modelled on *hoíos/hopoíos*. (Monteil 1963:387)

The partitive genitive Monteil refers to is a genitive normally used to express that the referent is a portion of something greater—as in *a glass of wine*:

(1a) (viii BC)

Ἄδρηστοιο δ' ἔγημε θυγατρῶν  
adré:stoio d ége:me t<sup>h</sup>ugatrôn  
Adrastos' and he.married of.the.daughters (GEN)  
*And he wedded one of the daughters of Adrastos* (Il XIV 121)

(1b) (viii BC)

νόησε δὲ δῖος Ὀδυσσεύς/πλησάμενος δ' οἴνοιο δέπας δείδεκτ' Ἀχιλλῆα  
nó:ise dè dí:os odusseús,/ ple:sámenos d oínoio dépas deídekt ak<sup>h</sup>ilê:a  
*But noble Odysseus marked it, and filled a cup with wine and pledged Achilles* (Il IX 224)

In Greek, this partitive could also be used to denote “localisation which one can specify over a great space [...] a precise localisation in space, either for a concrete object or something comparable to space” (e.g. time) (Humbert 1945:268–270). So the genitive can be used to denote a location—spatial or temporal—when that location is understood as part of a greater whole. This usage is already extant in Homeric Greek:

(2a) (viii BC)

ἔσπεριος δ' ἂν ἔπειτα, λοεσσάμενος ποταμοῖο, ἰδρῶ ἀποψυχθεῖς, προτὶ Ἴλιον ἀπονεοίμην...  
hesperíos d àn épeita, loessámenos potamoío, / hidrô: apopsuk<sup>h</sup>t<sup>h</sup>eís, protì ílion aponeoíme:n...  
*So then at evening, having bathed in the river* ([in the waters] of the river, [in part] of the river) *and refreshed me of sweat, I might return to Ilios.* (Il XXI 560)

(2b) (viii BC)

τοῦδ' αὐτοῦ λυκάβαντος ἐλεύσεται ἐνθάδ' Ὀδυσσεύς  
toúð' autoú lukábantos eleúsetai ent<sup>h</sup>ád' odusseús  
*Ulysses will come here in this same year* ([in a day] of this same year') (Od XIX 306)

The genitive is also used to denote temporal location in Mycenaean:

(2c) (xv~xiii BC)

𐀓𐀗𐀕𐀕, 𐀓𐀗𐀕𐀕 𐀓𐀗𐀕𐀕 𐀓𐀗𐀕𐀕 𐀓𐀗𐀕𐀕 𐀓𐀗𐀕𐀕 𐀓𐀗𐀕𐀕  
*di-wi-jo-jo 'me-no' qe-ra-si-ja OLES 1*  
διώιο μηνός q<sup>w</sup>ηρασία (?) ἐλαίφοιο 1/0/0  
*diwío menós* (GEN) q<sup>w</sup>e:rasiai elaiwoio 1/0/0  
*In the month Diwios, to the Hunter-Goddess* (?), 1/0/0 measures of oil (KN Fp 5)

So the use of the genitive as a locative ending in *hórou* must date after the extension of the partitive genitive to locations—which is fairly early in Greek, as the usage is well established in Homer, and anticipated through its temporal equivalent in Mycenaean.

There are two consequences for the story of *pu*. First, *hórou* is not an element of Proto-Greek, but a dialectally restricted innovation—alien to the three dialects of Greek which were extinct by Middle Greek: Arcado-Cypriot, Aeolian, and Western Greek. Locative relativisers in those dialects have either dative, instrumental, or locative-case endings (§5.1.4). Where the endings are potentially genitive-based, they are ablatives rather than stationary (Doric *hō:*, *hópo:* ‘whence’) (Buck 1955 §132.8).

- (3) αἰ δὲ μὴ πράξαίεν ὁ κ[όσμος], ἀποτεισάντων ἕκαστος τι[ῶ] κόσμ(ω) στα[τήρας] |  
 πε[ν]τακατίος τᾶι πόλι [ὄ]πῶ κα συλάσει |  
 ai dè mè: prá:ksaien o kósmos, apoteisántō:n ékastos tō: kósmo: statê:ras  
 pentakátios tâ:i póli **opô:** ka sulásei  
 and if the body of chief magistrates does not act, let each one of the body pay  
 fifty staters to the city, **wherever** he obtains it **from** (Coll 5100.16)<sup>6</sup>

The innovation of a genitive locative (which extends to other stems, like *állou* (CSMG *a'lu*) ‘elsewhere’ and *pantak<sup>h</sup>ou* (CSMG *pa'du*) ‘everywhere’) is specific to Proto-Ionic.<sup>7</sup>

The second consequence relates to Joseph’s (1997) challenge to grammaticalisation theory. Joseph disputes that grammaticalisation can derive all function words from content words, as function words can arise by analogy instead. He illustrates this with the Modern Greek nominative clitic *tos*, which he derives analogically from accusative clitic *ton*, rather than as an independent reduction of nominative *af<sup>t</sup>os* ‘he’. As Monteil finds, the *hop-* relativisers of Greek are an even clearer instance of function words arising by analogy: there has never been a nominative *\*hópos*, whence the various oblique case forms *hópei:i*, *hópoi*, *hópo:s* etc. could be derived—certainly not as late as Proto-Ionic, when *hórou* was formed.<sup>8</sup> Whatever its subsequent career, *hórou* started life not as a grammaticalisation in the proper meaning of the word, but as an analogical formation—confirming Joseph’s contention.<sup>9</sup>

<sup>6</sup>The identification with the genitive is Monteil’s (1963:387); however, while the Cretan GEN.SG of *o*-stem nouns is indeed *-o:* as against Attic *-ou*, a much more plausible etymon seems to be the Proto-Indo-European Ablative (*\*-ōd*; early Latin *-ōd*, Sanskrit *-ād*), which Buck (1910) explicitly identifies as the etymon for the Doric ablatives.

<sup>7</sup>In Modern Greek, the *-ou* ending extends yet further: the Ancient ablative *πότ<sup>h</sup>εν* (*‘prothen*) ‘whence?’ was remodelled, by analogy with *‘pu*, to *‘puθe*. This ending was in turn analogically extended to other nouns, such as *ο<sup>l</sup>υθε* ‘from every where’, and *α<sup>l</sup>υθε* ‘from elsewhere’.

<sup>8</sup>As there was alternation in Indo-European between *\*k<sup>w</sup>o-* and *\*k<sup>w</sup>i-* (e.g. Latin *quod/quid*; Hittite *kwis* but Sanskrit *kas*), the missing nominative may be *hótis* (< *\*yo* + *\*k<sup>w</sup>is*), rather than *\*hópos* (< *\*yo* + *\*k<sup>w</sup>os*); *hótis* is a rare (Homeric) variant of *hóstis*. However, the oblique case forms point to an *-os* declension, and the oblique case forms of *tís* ‘who’ < *\*k<sup>w</sup>is* seem incompatible with *hórou*, *hópoi* (Genitive Ionic *téo*, *teú*, Attic *toú* < *\*k<sup>w</sup>eso*; Dative Ionic *téoi:i*, Attic (indefinite) *to:i* < *\*k<sup>w</sup>e(sm)ei*—cf. Old Church Slavonic neuter dative *česomu*) (Beekes 1995:206). So *hótis* is a problematic nominative to postulate: alternation of *\*k<sup>w</sup>o-* and *\*k<sup>w</sup>i-* within the same declension paradigm does not seem to be characteristic of Indo-European.

<sup>9</sup>For completeness, mention should be made of unstressed *pou*. This word, which properly meant ‘somewhere’, came to acquire an epistemic function, conveying uncertainty about an utterance (‘I suppose, I think’) (Denniston 1954:490–495). This function was already present in Homer (4a), and is characteristic of Plato, particularly in ironic use (4b).

### 5.1.3. The function of the *ho-* prefix

We have evidence that the *\*yo + \*kwo* combination is of some antiquity in Greek; the following appears to be a Mycenaean instance of the combination, although the tablet is substantially undeciphered:

- (5) (xiii BC)  
 ἄραρακανάω (?) φάρμακον (?) ὄτι φότομος φέρει 1  
*a-wa-ra-ka-na-o pa-ma-ko jo(?)-qi wo-to-mo pe-re 1*  
 'Αραρακανάω (?) φάρμακον (?) ὄτι φότομος φέρει 1  
 awarakanaó:i p<sup>h</sup>ármakon **hóti** (**jók<sup>h</sup>i**) wótomos p<sup>h</sup>érei 1  
 To Awarakanaos (?), **whatever** medicine (?) Wotomos brings, 1 (PY Un 1314)

*\*yo + \*kwo* pronouns have three functions in Classical Greek. The first is as indefinite free relatives, where they occur with the subjunctive and the particle *án*

- (4a) (viii BC)  
 λίην γὰρ κατὰ κόσμον Ἀχαιῶν οἶτον αἰείδεις, ὅσσ' ἔρξαν τ' ἔπαθόν τε, καὶ ὅσσ' ἐμόγησαν Ἀχαιοί, ὡς τέ **που** ἢ αὐτὸς παρεὼν ἢ ἄλλου ἀκούσας!  
*lí:en gàr katà kósmon ak<sup>h</sup>aiṓ:n oíton aeiðeis, / hóss' érkxan t' épat<sup>h</sup>ón te, kai hóss' emóge:san ak<sup>h</sup>aiói, / hó:s té **pou** è: autòs pareṓ:n è: álloú akoúsas!*  
*for thou singest well in order the fate of the Achaeans, both what things they did, and suffered, and what things the Achaeans laboured; as if **perchance** either being thyself present, or having heard from another. (Il VIII 491)*

- (4b) (400~387 BC)  
 ὅστις γὰρ νόμων διαφθορεὺς ἐστὶν σφόδρα **που** δόξειεν ἂν νέων γε καὶ ἀνοήτων ἀνθρώπων διαφθορεὺς εἶναι.  
*hóstis gàr nómo:n diap<sup>h</sup>oreús estin sp<sup>h</sup>ódra **pou** dókseien àn néo:n ge kai anoé:to:n ant<sup>h</sup>ró:po:n diap<sup>h</sup>oreús eínai.*  
*a destroyer of laws **might** very well be supposed to have a destructive influence upon young and foolish human beings. (Pl Cri 53c)*

Geldart (1870:199) sees a connection between this epistemic *pou* and CSMG *pu*:

- (4c) (424 BC)  
 ΑΛΑΝΤΟΠΩΛΗΣ: τί δ' ἀγκυλοχείλης ἐστίν;  
 ΔΗΜΟΣΘΕΝΗΣ: αὐτό **που** λέγει,  
 ὅτι ἀγκύλαις ταῖς χερσὶν ἀρπάζων φέρει.  
*alantopó:le:s: tí d agkulok<sup>h</sup>eíle:s estín?*  
*de:most<sup>h</sup>éne:s: αὐτό **pou** légei, /*  
 SAUSAGE-SELLER: But what are the crooked claws?  
 DEMOSTHENES: That, **I take it**,  
 means/ that with crooked fingers he seizes and carries his prey.  
 SAUSAGE-SELLER. But what [mean] the mandibles?  
 DEMOSTHENES: That's self-evident./  
 His fingers, crooked to carry off their prey. (Rogers)  
 SAUSAGE-SELLER. 'Old crooked-claws'?  
 DEMOSTHENES: Speaks for itself.  
 Old crooked-claws goes everywhere, grabs everything..  
 (Ar Eq 203)

Under the conventional interpretation, *αὐτό που λέγει* means 'that, **I suppose**, means...', or, ironically, 'that **obviously** means' (as Rogers has rendered it.) Geldart prefers to see *pou* here as a relativiser: "What does *agkulok<sup>h</sup>eíle:s* mean?' 'Just what it says'" (precisely that **which** it says)—which is how the utterance would read in Modern Greek. But there is no corroboration for such an interpretation, and the pathway for the reanalysis bringing about *pu* is quite different, as becomes clear in this chapter. Geldart also sees a parallel between epistemic *pou* and *pu* as an emotive complementiser; but this ignores the modern syntactic status of *pu*.

(corresponding to English *ever*). Monteil (1963:389) finds there are only around ten such locative instances in his corpus,<sup>10</sup> so this is a minor function of *hórou*.

(6) (400~387 BC)

ἔπειτα, ὅπου ἂν τύχη τῶν λεγομένων, ἐνέβαλεν ῥῆμα ἄξιον λόγῳ βραχὺ καὶ  
 συνεστραμμένον ὡσπερ δεινὸς ἀκοντιστῆς  
 épeita, **hórou** ἂν tük<sup>h</sup>e:i tō:n legoménou:n, enébalen rē:ma áksion lógo:i brak<sup>h</sup>ù kai  
 sunestramménon hós:per deinòs akontisté:s  
*But then, at some chance point in the conversation* (**wherever** it might  
 happen to be amongst the things being said'), *like a brilliant marksman he*  
*shoots in a telling phrase, brief and taut* (Pl Prt 342e)

The second function involves indirect questions. Ancient Greek distinguishes between indirect questions proper (i.e. complements involving interrogative speech acts), where only *\*yo* + *\*kwo* pronouns are used (7a), and instances where the complement is not interrogative—where *\*yo*-pronouns are used (7b):<sup>11</sup>

(7a) (~450 BC)

εἰρόμην τοὺς ἀγγίστα οἰκέοντασ τῆσ λίμνησ ὅκου εἶη ὁ χοῦσ ὁ ἐξορυχθεῖσ. οἱ δὲ ἔφρασαν  
 μοι ἵνα ἐξεφορήθῃ  
 eirómē:n tou:s ágk<sup>h</sup>ista oikéontas tē:s límne:s **hókou** eíe: ho k<sup>h</sup>ou:s ho eksoruk<sup>h</sup>t<sup>h</sup>eí:s.  
 hoì dè ép<sup>h</sup>rasán moi hína eksep<sup>h</sup>oré:t<sup>h</sup>e:  
*I asked those who dwelt nearest to the lake where the stuff was that had been*  
*dug out. They told me whither it had been carried...* (Hdt II 150)

(7b) (431 BC)

οὐκ	οἶσθ'	οἶ	κακῶν	ἐλήλυθασ
ouk	oíst <sup>h</sup>	hoi	kakō:n	elé:lut <sup>h</sup> as
NEG	you.know	whither	bad (GEN.PL)	you.have.arrived

You do not know the degree of misfortune **to which** you have arrived  
*if you but knew how deeply you are involved in sorrow...* (Eur Med 1306)

In (7b) the addressee is not posing a question, as he is ignorant of the topic; neither is the speaker, as he already knows the answer. Since the complement is not an interrogative speech act, it is introduced by *hoi* rather than *hópoi*. The distinction between indirect and direct interrogatives was so strong that, when a speaker echoed an interlocutor's question, this was grammatically treated as an embedded speech act, and a *\*yo* + *\*kwo* word was used:

(7c) (423 BC)

ΣΤΡΕΨΙΑΔΗΣ:	ἀλλ' ἢ Λακεδαίμων ποῦ 'στιν;	
ΜΑΘΗΤΗΣ:		ὅπου 'στιν; αὐτήι.
strep <i>si</i> áde:s:	all he: lakedaímo:n pou' stin?	
mat <sup>h</sup> e:tē:s:		hórou stin? hauteí.
STREPSIADES:	But <b>where</b> 's Sparta?	
STUDENT:		( <b>Where</b> is it?) Here (Ar Nu 214)

<sup>10</sup>Monteil's corpus is comprised of the works of Homer, Hesiod, Pindar, Herodotus, Aeschylus, Sophocles, Euripides, Aristophanes, and Lysias.

<sup>11</sup>This bar does not apply to all *\*yo*-words: *hós* can introduce indirect questions, but it occurs 3 to 4 times less frequently in that function than *hóstis* (Monteil 1963:150).

The third usage of *\*yo + \*k<sup>w</sup>o* is the hardest to characterise: it involves *\*yo + \*k<sup>w</sup>o* pronouns as relativisers, headed or free, without the indefinite particle *án*. This usage involves all *\*yo + \*k<sup>w</sup>o* pronouns, and the easiest starting point is to consider the most frequent such pronoun—i.e. the semantic contrast between *hós* (< *\*yo*) and *hóstis* (< *\*yo + \*k<sup>w</sup>o*).

### *hóstis*

Traditionally (e.g. in Kühner & Gerth (1963 [1898–1904])), *hóstis* is treated as an indefinite pronoun. Monteil (1963:131–145) considers this an over-simplification, and instead distinguishes three types of use for *hóstis*. In the first, which is rare (4 examples out of 202 in Homer), *hóstis* stresses that the identity of the referent is irrelevant, and is equivalent to English *whoever* (CSMG *opiosdipote*). In this usage *hóstis* is headless, and equivalent to the instances with the subjunctive and *án* mentioned above; so it corresponds here best to the traditional ‘indefinite’ characterisation (cf. 6).

- (8a) (viii BC)
- |                                    |                           |                    |     |
|------------------------------------|---------------------------|--------------------|-----|
| καὶ πολλάκι δόσκον ἀλήτη/ τοίῳ,    | ὅποῖος                    | ἔοι                | καὶ |
| καὶ polláki dóskon alé:te:i/ toíoi | hopoîos                   | éoi                | kaì |
|                                    | whatever.kind             | he.may.be          | and |
| <i>ὅτεν</i>                        | κεχρημένος                | ἔλθοι              |     |
| <i>hóteu</i>                       | kek <sup>h</sup> re:ménos | él <sup>h</sup> oi |     |
| whatever (GEN)                     | needing                   | he.may.come        |     |
- For I [...] oftentimes gave to such a wanderer, whatever kind of man he might be, and **whatever** he came in need of.* (Od XVII 421)

The two other types encompass the third, non-interrogative and non-subjunctive usage of *\*yo + \*k<sup>w</sup>o* mentioned immediately above. In the second type, which Monteil calls *définissant* (defining), the head is either empty or indefinite; the relative clause defines which of the set denoted by the head is intended. The relative clause is thus restrictive; the head by itself is indefinite (it does not uniquely identify a referent). The full noun phrase is definite (the relative clause identifies that referent), but non-specific (the referent cannot be named). To use logical terminology, the relative clause is intensional, rather than extensional. The following illustrate this usage of *hóstis* in both headless (8b) and headed clauses (8c):

- (8b) (viii BC)
- |  |               |                        |
|--|---------------|------------------------|
| δώσω γὰρ δίφρον τε δύο τ' ἐριαύχενας ἵππους [...]                                  |               |                        |
| ἄροίτο.  |               |                        |
| dó:so: gàr díph <sup>h</sup> rón te dúo: t eriaúkh <sup>h</sup> enas híppous [...] | <i>hóstis</i> | ke tlaíe: hoì t autò:i |
| kû:dos ároito.   |               |                        |
- For I will give him a chariot, and two horses of arching neck, [...] to **whosoever** shall dare the deed, and for himself shall win glory.* (Il X 307)



- (8c) (viii BC)  
 ἄφρων δὴ κείνός γε καὶ οὐτιδανὸς πέλει ἀνήρ/ ὅστις ξεινοδόκῳ ἔριδα  
 áph<sup>h</sup>ron dè: keínós ge kaì outidanòs pélei anér:/ **hóstis** kseinodóko:i érida  
 man whoever  
 προφέρεται ἀέθλων  
 prop<sup>h</sup>ére:tai aét<sup>h</sup>lo:n  
*That man indeed is foolish and worth nothing, **whoever** proposes a strife in  
 contests with his host (Od VIII 210)*

In (8b), the identity of the recipient of the gift is not irrelevant (although *hóstis* is translated by *whosoever*). Nonetheless, while the entire noun phrase is definite (= ‘the man who...’), it is also non-specific (the recipient is defined by attribute, rather than identified.) Similarly in (8c), the entire noun phrase refers to a definite individual, who is defined by the attribute given in the relative clause; by itself, the head *anér* ‘man’ is indefinite.

The defining function is the major function of *hóstis* in Homeric Greek; it is because the head is indefinite if present at all (8c) that such clauses are traditionally characterised as indefinite. It is from this function that the indirect interrogative *hóstis* is derived. While the reverse process, where the interrogative gives rise to the relativiser, is more usual cross-linguistically, this is improbable for Greek, as *hóstis* is not used as a direct interrogative.<sup>12</sup> The following example points to the reanalysis of the non-specific relativiser into an indirect interrogative:

- (8d) (viii BC)  
 εἶπ’ ὄνομ’ ὅτι σε κεῖθι κάλεον μήτηρ τε πατήρ τε  
 eíp’ ónom **hótí** se keít<sup>h</sup>i káleon mé:te:r te paté:r te  
 say! name which you there called mother and father  
 Tell us the name **that** your mother and father gave you there/ Tell us **what**  
 name your mother and father gave you there  
 Say, **what** is the name **whereby** they called thee at home, even thy father  
 and thy mother (Butcher & Lang)  
 Tell the name, **whatever** both thy mother and father there called thee  
 (Buckley) (Od VIII 550)<sup>13</sup>

The third type of *hóstis*, which Monteil calls *actualisant* (actualising), is incipient in Homer, and reaches fruition in Classical Greek. *hóstis*-clauses start to introduce subordinate clauses on which the realisation of the matrix clause is contingent:<sup>14</sup>

<sup>12</sup>The possible pathways are DIRECT INTERROGATIVE > INDIRECT INTERROGATIVE > RELATIVISER (which cannot apply in this instance, as *\*yo + \*k<sup>w</sup>o* is never interrogative, and interrogativity is incompatible with a *\*yo* head), and RELATIVISER > INDIRECT INTERROGATIVE (> DIRECT INTERROGATIVE). Given its restricted distribution and role in the grammar, it is implausible that the indirect interrogative itself is etymologically primary.

<sup>13</sup>A defining relativiser is particularly suited to reanalysis as an indirect interrogative: one asks questions when one knows the general class the referent belongs to (i.e. that it is a name), and its defining property (that it is the name of the addressee, given by his parents), but not its specific identity (that it is Odysseus). The referent of ‘**what** is your name’ is thus definite but non-specific until the question is answered; and the same holds for *hóstis*.

<sup>14</sup>In (8e), for instance, seeing a leader is contingent on that leader being able to ward off destruction. As far as I can tell, this is merely another way of stating that the relative clause is in-

- (8e) (viii BC)  
 πάπτηγεν δ' ἀνὰ πύργον Ἀχαιῶν εἴ τίς ἴδοιτο/ ἠγεμόνων,  
 pápte:nen d anà púrgon ak<sup>h</sup>aiō:n eí tin ídoito/ he:gemóno:n,  
 if someone he.would.see of the chiefs  
 ὅς τις οἱ ἀρὴν ἐτάροισιν ἀμύναι.  
*hós tis* hoi arèn hetároisin amúnai.  
 who  
*and he looked along the tower of the Achaians if perchance he might see any of the leaders, **that** would ward off destruction from his comrades (Il XII 334)*

But this logical contingency serves to highlight the definiteness of the *hóstis*-NP—the contingency *defines* the antecedent, uniquely identifying it as the value fitting the intensional predicate.

So the head of the relative clause is first individuated rather than describing a class of entities—as in superlative expressions:

- (8f) (viii BC)  
 πέπλον δ' ὄστις τοι χαριέστατος ἢ δὲ μέγιστος/ ἔστιν ἐνὶ μεγάρω καὶ τοι πολὺ φίλτατος  
 αὐτῆι/ τὸν θῆς Ἀθηναίης ἐπὶ γούνασιν ἠὲ κόμοιο.  
 péplon d *hóstis* toi k<sup>h</sup>ariéstatos e:dè mégistos/ éstin enì megáro:i kaí toi polù  
 p<sup>h</sup>íltatos autê:i/ tòn t<sup>h</sup>ès at<sup>h</sup>e:naíe:s epì goúnasin eukómoio.  
*and the robe **that** seemeth to thee the most gracious and greatest in thy palace, and dearest unto thyself, that lay thou upon the knees of beautiful-haired Athene (Il VI 271)<sup>15</sup>*

Then the head becomes specific (and arguably definite, although the speaker still cannot name the referent):

- (8g) (viii BC)  
 τούτους μὲν δὴ οἶδα· σὺ δὲ τρίτον ἄνδρ' ὀνόμαζε./ ὄστις ἔτι ζῶος κατερύκεται εὐρέι  
 πόντῳ/ ἢ ἔθανόν·  
 toutouts mèn dè: oída; sù dè trítton ándr' onómazde./ *hóstis* éti zdo:òs katerúketai euréi  
 euréi pónto:i/ e:è t<sup>h</sup>anón;  
*These indeed I know; but do thou name the third man, **who** is still detained alive in the wide sea, or dead; (Od IV 552)*

Finally, by Attic, the head of the *hóstis*-clause can be properly definite, and the relativisation non-restrictive:

- (8h) (472 BC)  
 παῖς δ' ἐμὸς τὰδ' οὐ κατειδῶς ἦνυσεν νεῶν θράσει./ ὄστις Ἑλλήσποντον ἱρὸν δοῦλον ὡς  
 δεσμώσασιν/ ἤλπισε σχήσειν ρέοντα  
 país d emòs tád' ou kateidós é:nusen neō:i t<sup>h</sup>rásei./ *hóstis* hellé:spon-ton hiròn  
 doúlon hò:s desmós:sasin/ é:lpise sk<sup>h</sup>ése:sein réonta  
*my son in ignorance/ discovered it, by youthful pride; **who** hoped/ to check*

tensional—‘a leader such that would ward off destruction’, or using the CSMG intensional relativiser *pu na, iyemonas pu na prostatepsi tus sidrofus tu*. Defining relative clauses, as already claimed, are also intensional.

It may be that Monteil’s distinction between actualising and defining relative clauses is immaterial—what matters is the reanalysis from intensional to extensional relative clauses. As the semantic transition is not a major concern of my research, I do not pursue this issue further here.

<sup>15</sup>This sentence is said by Hector to his mother Hecuba; he presumably already knows which robe he is describing.

*the sacred waters of the Hellespont/ by chains, just as it were a slave.* (Aesch Pers 745)

The head of the *hóstis*-clause can in fact be as definite as a personal pronoun:

(8i) (423? BC)

Ἦς καὶ σὺ φαίνη δεκάδος, οὐ σοφὸς γεγώς/ ὅστις κόρας μὲν θεσφάτοις Φοίβου ζυγεῖς/  
ξένοισιν ᾧδ' ἔδωκας ὡς ζώντων θεῶν.

hê:s kai sū p<sup>h</sup>áine:i dekádos, ou sop<sup>h</sup>òs gegó:s,/ *hóstis* kóras mèn t<sup>h</sup>esp<sup>h</sup>átois  
p<sup>h</sup>oíbou zdugeis/ ksénoisin hô:d édo:kas ho:s zdo:nto:n t<sup>h</sup>eð:n.

*This is the brand of folly you have shown./ First, bowing to Phoebus' words,  
like one who thinks/ the gods exist, you gave your girls to strangers.* ('you  
**who** on the one hand, bowing to Phoebus' words...') (Eur Supp 220)

But by this time, there is no significant functional distinction between *hós* and *hóstis*: *hóstis* can now be used in any context *hós* can.<sup>16</sup> Just like *hós*, *hóstis* is now extensional: it serves to index an entity in the world, rather than defining it by description. The distinction becomes rather one of emphasis, since *hóstis* is phonologically 'weightier' than *hós*.

(8j) (~450 BC)

ὡς δὲ τῷ Μῖνι τοῦτω τῷ πρώτῳ γενομένῳ βασιλεί κέρσον γεγόνεαι τὸ ἀπεργμῆνον,  
τοῦτο μὲν ἐν αὐτῷ πόλιν κτίσαι ταύτην ἧτις νῦν Μέμφις καλεῖται· ἔστι γὰρ καὶ ἡ  
Μέμφις ἐν τῷ στείνῳ τῆς Αἰγύπτου·

ho:s dè tō:i mī:ni toúto:i tō:i pró:to:i genoméno:i basiléi k<sup>h</sup>érson gegonénai tò  
apergménon, toúto mèn en autō:i pólin ktísai taúte:n *hétis* nū:n mémp<sup>h</sup>is kaléetai;  
ésti gàr kai he: mémp<sup>h</sup>is en tō:i steinō:i tē:s aigýptou;

*Then, when this first king Min had made what he thus cut off to be dry land, he  
first founded in it that city which is now called Memphis—for even Memphis  
lies in the narrow part of Egypt* (Hdt II 99)

In time, *hóstis* comes to displace *hós* as the unmarked relativiser, in a instance of Meilletian *affaiblissement* of the older form; in the New Testament, *hóstis* has essentially replaced *hós* in the nominative.

### *hopóteros*

We have sketched the development of *hóstis*, from an indefinite and a defining to an actualising relativiser—or in other terms, from an intensional to an extensional relativiser. (Incidentally, intensionality unifies the indefinite headless *hóstis* with the defining bounded *hóstis*.)

But of the *\*yo* + *\*kwo* pronouns, *hóstis* is atypical, because both the *hós* and *tis* elements are declinable.<sup>17</sup> For the other *\*yo* + *\*kwo* pronouns and adverbs, including *hópou*, the *\*yo* element is an indeclinable prefix, and there is no evidence that it ever was declined. What has taken place with these elements is illustrated by Monteil (1963:174–175) with the case of *hopóteros* 'whichever one

<sup>16</sup>According to Rydbeck (1967:102), the differentiation between *hóstis* and *hós* was always unique to Attic anyway, and was not characteristic of Ionic.

<sup>17</sup>e.g. MASC.NOM.SG *hóstis*, MASC.GEN.SG *hóutinos*, FEM.NOM.SG *hétis*, FEM.NOM.PL *haítines*, etc.

of the two'. In *hóstis*, *tis* can be analysed as an indefinite (whence the 'indefinite', intensional meaning of *hóstis*); there is no need to appeal to an interrogative meaning of *tis*. By contrast, *póteros* does not become an indefinite in Greek until Plato; so in Homeric *hopóteros*, the *\*k<sup>w</sup>o* element can only have been analysed synchronically as an interrogative. Furthermore, in Homeric Greek the *hopóteros*-clause always follows its matrix when used as an indirect interrogative, and always precedes its matrix when used as a headless relative.

Monteil thus concludes *hopóteros* was initially an indirect interrogative, which was reanalysed as a relativiser—the opposite direction to the reanalysis of *hóstis*. As an indirect interrogative, under Ancient Greek SOV order, *hopóteros* would normally follow its matrix. In this post-verb position there would be no obvious motive for reanalysis.

- (9a) (viii BC)  
 αὐτὰρ ἔπειτα/ κλήρους ἐν κυνέῃ χαλκῆρεϊ πάλλον ἑλόντες/ ὀπότερος δὴ πρόσθεν  
 ἀφείη χάλκεον ἔγχος.  
 autàr épeita/ klérou en kunéei k<sup>h</sup>alkérei pállon **helóntes**,/ **hoppóteros** dè: próst<sup>h</sup>en  
 ap<sup>h</sup>eíe: k<sup>h</sup>álkeon égk<sup>h</sup>os.  
*then they took the lots, and shook them in a bronze-bound helmet, **to know***  
***whether of the twain** should first cast his spear of bronze. (Il III 317)*

By contrast, when it was syntactically detached from its matrix, Monteil contends, through topicalising left-dislocation, *hopóteros* was reanalysed as a nominal:<sup>18</sup>

- (9b) (viii BC)  
 Ζεῦ πάτερ, ἴδῃθεν μεδέων! κύδιστε! μέγιστε! ὀπότερος τάδε ἔργα μετ' ἀμφοτέροισιν  
 ἔθηκε, τὸν δὸς ἀποφθίμενον δῖναι δόμον Ἄιδος εἴσω  
 zdeû páter, íde:t<sup>h</sup>en medéon! kúdiste! mégiste!/ **hoppóteros** táde érga met  
 amp<sup>h</sup>otéroisin ét<sup>h</sup>e:ke, **tòn** dòs apof<sup>h</sup>tímenon dû:nai dómon áidos éiso:  
*Father Zeus, that rulest from Ida, most glorious, most great; **whichsoe'er** it*  
*be that brought this trouble upon both peoples, vouchsafe that **he** may die*  
*(‘grant **him** to die’) and enter the house of Hades (Il III 321)*

There is no obvious reason why a relative *hopóteros*-clause, whether subject, or direct object as in (9b), should consistently appear in front of its matrix—unless as a result of such a reanalysis. The syntactic distribution of *hopóteros* represents a neat functional split between the interrogative and the relative.

So *hopóteros* is a distinct phenomenon to *hóstis*. But we have already claimed that an indirect interrogative is an unlikely origin for a relativiser. The impetus for the formation of *ho+ póteros* must thus be analogy with *hóstis*. In *hóstis*, *tis* is an indefinite, but it is homophonous with the interrogative *tís* ‘who?’. There was no indefinite *póteros* extant in Homeric Greek, to act as the analogue of *tis*. But there was an interrogative *póteros*, and this was pressed into service to fill the analogy with *hóstis*—a reanalysis carried out “inaccurately from the genetic

<sup>18</sup>The reanalysis would thus be something like: *I find out **which one** should cast his spear > **Which one**, I find out, should cast his spear > **Whichever one** I find out should cast his spear (should die...)*

point of view, but ingeniously in practice” (Monteil 1963:177). That the prefix is indeclinable must be a result of it being an analogical formation, rather than a morphologically autonomous element—particularly if the analogy was with a neuter form like *hóti*, or a variant of *hóstis* in which *hós* was invariant (*hótis* (MASC.NOM), *hóteo* (MASC.GEN)).

### Locatives

The pathway of development exemplified by *hopóteros* is confirmed by the other *\*yo + \*kwo* pronouns. For example, *hopoíōs* ‘of which kind’ is predominantly an indirect interrogative in Homer, while the relativiser functions fully develop only in Classical Attic (Monteil 1963:203). Here too, the indirect interrogative must constitute the original function. There is no reason to think the same development did not take part for the *\*yo + \*kwo* locatives. The *\*yo + \*kwo* locatives in Homer behave as follows, by my count:

	<i>interrog.</i>	<i>relative</i>
<i>hórou</i>	1	1
<i>hopót<sup>h</sup>i</i>	1	1
<i>hopót<sup>h</sup>en</i>	3	0
<i>hóp(p)e:i</i> (locative) <sup>19</sup>	8	6
<i>hóp(p)e:i</i> (instrum.)	0	4

Table 14. Relativiser/Interrogative counts in Homer for *\*yo + \*kwo* locatives

The table shows that for the locatives, the indirect interrogative function is still dominant in Homer. The ambiguity between the two functions is illustrated neatly in (10):

- (10) (viii BC)
- ὄς αἰχμῆς ἀπέλαμπ’ εὐήκεος, ἦν ἄρ’ Ἀχιλλεὺς/ πάλλεν δεξιτερῆι, φρονέων κακὸν  
 Ἴκτορι δίῳ/ εἰσορόων χροῖα καλόν, ὅπῃ εἴξειε μάλιστα.  
 hò:s aik<sup>h</sup>mê:s apélamp eué:keos, hé:n ár ak<sup>h</sup>illeùs/ pállen deksiterê:i, p<sup>h</sup>ronéο:m  
 kakòn héktori díoi:/ eisoróο:m k<sup>h</sup>róa kalón, **hópe:i éikseie málista**.  
*so flashed there forth a light from the spear Achilles poised in his right hand,*  
*devising mischief against noble Hector, eyeing his fair flesh to find **the fittest***  
*place.* (Il XXII 321)

The clause *hópe:i éikseie málista* ‘**where** it would yield most’ could be either a sentence and an indirect interrogative (‘to find the answer to the question: **where** would it yield most?’), or a nominal and a free relativiser (‘to find (the place) **where** it would yield most’).

The overall functional distribution of *\*yo + \*kwo* locatives in Classical Greek may be tabulated as follows; the count includes *\*yo* locative relatives for comparison:

<sup>19</sup>Removing duplicate (formulaic) instances (3 for each function).

<b>Relativisers</b>	<i>*yo</i>	<i>*yo+*k<sup>w</sup>o</i>	<i>*yo+*k<sup>w</sup>o</i>	<i>*yo+*k<sup>w</sup>o</i>	<i>*yo+*k<sup>w</sup>o</i>
	REL	REL	INTERROG	INDEF	TOTAL
<i>hoî/hópoi</i>	23	16	16	4	36
<i>hoû/hópou</i>	86	69	20	1	90
<i>hê:i/hópe:i</i>	71	33	12	4	49
<i>hót<sup>h</sup>i/hopót<sup>h</sup>i</i>	107	4	0	0	4
<i>hót<sup>h</sup>en/hopót<sup>h</sup>en</i>	85	7	22	0	29

Table 15. Relativiser counts in Monteil's corpus by function

Indirect interrogatives account for a significant proportion of instances of *\*yo + \*k<sup>w</sup>o* locatives. But there is a drop in time in the proportion of interrogatives—particularly with *-e:i*, as compared to its Homeric usage, and the newer relativiser *hoû/hópou*. When used as relativisers, *\*yo + \*k<sup>w</sup>o* locatives are characterised by the late function of *\*yo + \*k<sup>w</sup>o* pronouns: “the *hopo-* series is in opposition to the simple series not as different in nature, but as more expressive and insisting [i.e. emphatic]” (Monteil 1963:389). This confirms that the relative function is a late development for these locatives. Indeed, as Monteil's counts indicate, *\*yo + \*k<sup>w</sup>o* relativisers were fast catching up to *\*yo-* relativisers in distribution in Classical Greek, so that they could no longer be said to be textually marked.<sup>20</sup>

Like Attic *hóstis*, *hópou* functioned as an indefinite relativiser (‘whatever’) (11a), as an indirect interrogative (11b), and as an emphatic definite relativiser (11c).

(11a) (413 BC)

ὅπου δ' Ἀπόλλων σκαίος ἦ, τίνες σοφοί;  
*hópou* d apóllo:n skaiòs ê:i, tínes sop<sup>h</sup>oí?  
**Where** Apollo is ignorant shall men be wise? (Eur El 972)

(11b) (v BC)

ἄρ' ἂν παρ' ὑμῶν, ὃ ξένοι, μάθοιμ' ὅπου/τὰ τοῦ τυρράνου δόματ' ἐστὶν Οἰδίπου;  
 â:r ân par humô:n, ô: ksénoi, máthoim' *hópou*/tâ toû turránu dóm:mat estîn oidípu?  
 Might I learn from you, sirs, **where** is the house of Oedipus? (Soph OT 925)

(11c) (367~347 BC)

εἶτα ἐν τῇ τοιαύτῃ πόλει ὅπου μὴ λόγῳ ἔργῳ τε ἱκανοὶ φύλακες εἶεν, ἀρετῆς πέρι  
 γιγνώσκοντες ἱκανῶς, θαυμαστόν τι ταύτην τὴν πόλιν ἀφύλακτον οὖσαν πάσχειν ἃ  
 πολλαὶ πάσχουσι τῶν νῦν πόλεων;  
 eíta en tê:i toiaúte:i pólei *hópou* mē: lógo:i érgo:i te hikanoì p<sup>h</sup>úlakes eíen, aretê:s  
 péri gignó:skontes hikanô:s, t<sup>h</sup>aumastón ti taúte:n tē:n pólin ap<sup>h</sup>úlakton oúsan  
 pásk<sup>h</sup>ein hà pollaì pásk<sup>h</sup>ousi tō:n nū:n póleo:m?  
 In a state like this, **where** there are no custodians competent in act as in  
 thought from their competent acquaintance with virtue, is it surprising, I ask  
 you, if a state left so unguarded has the fortunes of too many of our states of  
 today? (Pl Lg 964c)

<sup>20</sup>The exception to this tendency occurs when the *\*yo + \*k<sup>w</sup>o* relativisers were trisyllabic; here it seems, metrical and stylistic factors came into effect. Although Monteil does not consider the possibility, the scarcity of *hopót<sup>h</sup>i* is probably also associated with the fact that *hót<sup>h</sup>i* was a primarily Homeric relativiser: the relativising function of *\*yo + \*k<sup>w</sup>o* pronouns was still under development in Homeric Greek.

Discounting the two suspect Homeric instances, all our examples of *hó pou* date from *v* BC onwards, in Attic-Ionic texts—Herodotus’ 19 instances representing Ionic; so we lack the insight into the early history of *hó pou* given us by Homeric *hóstis*. However, it is unlikely that the semantic development of *hóstis*—‘whatever’ > NON-SPEFICIC RELATIVISER > INDIRECT INTERROGATIVE; EMPHATIC RELATIVISER > UNMARKED RELATIVISER—was duplicated independently for *hó pou*: *hó pou* received its semantics, as well as its form, from analogy with *hóstis*.

**5.1.4. Locative Endings**

In preceding discussion, the behaviour of locative relativisers ending in *-oi*, *-ou* and *-ei* has been investigated, without a proper study of the origin of those endings. In this section, the various locative suffixes used in Ancient Greek dialects are studied; this clarifies the paradigm into which Attic-Ionic innovated the genitive-based ending, and shows some interesting counterexamples to the posited factive development of stationary locatives. The evidence for the specific Attic-Ionic development is also investigated carefully.

*o-stem Locatives*

The sundry endings of locative relativisers originate in Proto-Greek, and ultimately Proto-Indo-European case endings. The pertinent PIE case endings for *o/e*-stem nominals, illustrated with the stem *\*k<sup>w</sup>o-*, and its Greek reflexes, are (Rix 1976:117):

		<i>Proto-Indo-European</i>	<i>Greek</i>
GEN.SG	<i>-s(i)o</i>	<i>*k<sup>w</sup>osjo;</i> <i>*k<sup>w</sup>oso &gt; *k<sup>w</sup>oo</i>	<i>*poîo;</i> <i>pô:, poû (Ionic)<sup>21</sup></i>
ABL.SG	<i>-et</i>	<i>*k<sup>w</sup>oet &gt; *k<sup>w</sup>õt</i>	<i>pô: (Cretan)</i>
DAT.SG	<i>-eĭ</i>	<i>*k<sup>w</sup>oeĭ &gt; *k<sup>w</sup>õĭ</i>	<i>*pô:i</i>
INSTR.SG	<i>-eĭ</i>	<i>*k<sup>w</sup>oĕĭ &gt; *k<sup>w</sup>õĕ</i>	<i>pô:s<sup>22</sup></i>
LOC.SG	<i>-i</i>	<i>*k<sup>w</sup>oi</i>	<i>pôî</i>

Many of these case endings ceased being productive by Proto-Greek: the Ablative and Genitive merged, as did the Locative and Dative. The Instrumental is still distinctive in Mycenaean Greek (at least in its plural form), but by Homeric Greek had already merged with the dative, with a few isolated exceptions. The only domains where these case endings are still traceable in Classical Greek and Ancient Greek dialects are pronominal and adverbial endings, such as are considered here.

Locative expression endings were sharply differentiated between the Ancient Greek dialects. Arcadian and Cypriot used archaic suffixes—*-t<sup>hi</sup>* and *-pi* respectively (Bechtel 1924 I 376, I 439). The other Greek dialects used as locative rela-

<sup>21</sup>Although *ou* was occasionally originally diphthongal, in most instances—as in this—it was a conventional orthographic rendering of [o:].

<sup>22</sup>In Greek, *o:e:* contracts to *o:* (Rix 1976 §59.c); the *-s* may be analogically taken from the genitive (Palmer 1980:284).

tivisers various case endings affixed to *\*yo* and *\*yo + \*k<sup>w</sup>o* pronouns. Of these, the obvious choice is the old locative ending, *-i*, which affixed to *\*yo* gave *\*yoi > hoî*. Peculiarly, however, the forms *hoî* and *hópoi* are restricted in Greek dialect, particularly in stationary denotation. Thus, although secondary references confidently assert the dialects used these forms as stationary relativisers (Buck 1955 §132.3 is only one instance), I have not been able to identify a single unambiguously stationary instance amongst the examples cited in the literature and available to me.<sup>23</sup>

That *hoî* and *hópoi* must nevertheless have enjoyed currency as stationaries can be deduced from the following secondary evidence:

- The *-oi* locative ending, inasmuch as it survived with nominals in Classical Greek, was stationary rather than directional (Smyth 1959 [1920] §229b, 1535): e.g. *oíkoι* ‘at home’, *p<sup>h</sup>ale:roî* ‘at Phalerum’. This distinction is also in place in Mycenaean, which used the allative suffix *-de* for directionals, and dative/locatives for stationaries (Palmer 1963:49).
- Many dialects of Greek feature stationary locative relativisers ending in *-ui(s)* and *-ei*—which are also of locative case origin, with *-ei* held to be an Ablaut variant of *-oi*.
- Some dialects feature other stationary adverbs ending in *-oi*, or at least *-oi*-adverbs corresponding to Attic-Ionic *-ou*. The list includes Lesbian *ípsoi* ‘heavenwards’ (Attic-Ionic *hupsoû*), Corinthian *éksoi* Argolian *ék<sup>h</sup>oi* ‘outside’ (Attic-Ionic *éksoi*, with an ablative ending), and Corinthian and Argolian *éndoi* ‘inside’ (Attic-Ionic *éndon*, with an accusative ending). That at least some of these adverbs were stationary is shown by the following example, from Argolis:

(12a) Μαρσύας εἶλετο στύλων [κατ]αζοῶν τὰν ἔχθοι καὶ τὰν ἔνδοι ΧΘΘΘ=– ∷  
 marsúas heíleto stúlo:n kataksoḗn tàn *ék<sup>h</sup>oi* kaì tàn *éndoi* 1339  
 Marsyas contributes towards the polishing of the columns on the **outside** and on the **inside** 1339 coins (IG IV 1484.66)

- Several dialects, including Lesbian (12b, 12c) and Doric (12d, 12e) use *poi* as an epistemic marker ‘presumably’, in the same way as Attic and Ionic uses *pou* (4a).

(12b) ὁ δὲ ἀποκτείνας| εὐάγης ἔστω κ|αὶ κάθαρος, [vac.] αὶ δὲ *poi* ἐν νόμῳ τινὶ ἄλλ[λο τι  
 γράφεται| ἐνάντιον τῷ νόμῳ τούτῳ, ἄκυρον ἔστω·  
 o dè apokteínas euáge:s ésto: kaì kát<sup>h</sup>aros. ai dé *poi* en nómo: tinì állo ti gráp<sup>h</sup>:tai  
 enántion tḗ: nómo: toúto:, ákuron ésto:;  
 and the killer shall be deemed guiltless and pure. If **perchance** something else

<sup>23</sup>Thumb & Scherer (1959 §313.4a) state that *hópoi* is attested in Eretria, Euboea (Ionic) in the meaning ‘where’, but do not give a corpus reference.



is written in some other law, contrary to this law, it shall be null and void;  
(Plassart & Picard 1913:157.12)<sup>24</sup>

- (12c) (vii~vi BC)  
 ὄνασσο' Ἀθανάα πολεμάδοκε,/ ἅ ποι Κορωνήας μεδ[...]  
 ô: nass at<sup>h</sup>anáa polemádoke,/ á **poi** koroné:as med[...]  
*Queen Athena, warlike one, who **perhaps** as ruler of Coronea...* (Alc 325)
- (12d) (476 BC)  
 Μοῖσα δ' οὕτω ποι παρέ/στα μοι νεοσίγαλον εὐρόντι τρόπον/ Δωρίῳ φωνᾶν ἐναρμόξαι  
 πεδίλω/ ἀγλαόκωμον·  
 moísa d' hóuto: **poi** paré/sta moi neosígalon eurónti trópon doríoi p<sup>h</sup>o:nàn  
 enarmóksai pedíloi aglaóko:mon;  
*In such wise, **methinks**, was I aided by the Muse,/ when I found a mode,  
 bright with the sheen of newness, for linking up the voices of my gladsome  
 chorus to the measure of the Dorian sandle.* (Farnell) (Pi O 3.4)
- (12e) (431–400 BC)  
 αἰ δέ ποι στρατείας δέη κοινᾶς, βουλευέσθαι Λακεδαιμονίως καὶ Ἀργείως ὅπα κα  
 δικαιοτάτα κρίναντας τοῖς ζυμμάχοις.  
 ai dé **poi** strateías dée:i koinâ:s, bouleúest<sup>h</sup>ai lakedaimonío:s kai argeío:s hópai: ka  
 dikaiótata krínantas toís ksummák<sup>h</sup>ois.  
*If it shall be **anywhere** necessary to make an expedition in common, the  
 Lacedaemonians and Argives shall consult upon it and decide, as may be most  
 fair for the allies.* (Th V 79)<sup>25</sup>

It is unlikely that the development ‘in some direction’ > ‘perchance’ occurred in Doric and Aeolian, in parallel to ‘somewhere’ > ‘perchance’ in Attic-Ionic; so *poi* must have had the meaning ‘somewhere’ in those dialects.

- Hesychius’ *v* AD dialect dictionary explicitly glosses *hópoi* as “*ént<sup>h</sup>a, hórou, pou*”, and *hoíka* (emended by at least some scholars to *hoíka*) as *hórou án* ‘wherever’ (Doric *ka*= Attic *án*). Since Hesychius renders non-Attic words into literary Attic, rather than into the contemporary vernacular, there is no reason to think *hórou* here is directional (though *hórou* already starts being used as a directional in Attic): in some unnamed variant of Greek, *hoí, hópoi* must have been stationary and equivalent to Attic *hórou*.
- Greek grammarians explicitly say that *-oi* in other dialects is equivalent to Attic *-ou*. For instance, a Byzantine grammar (Cramer 1963 [1835–1837]:I 418) states:

Aeolians say *hupsou* ‘heavenwards’ as *hupsou* by changing *u* into *i*; in the same way, Attic *pantak<sup>h</sup>ou* ‘everywhere’ corresponds to *pantak<sup>h</sup>oi*, *oudamou* ‘nowhere’ to *oudamoi*, *pou* to *poi*; not always, but frequently.

<sup>24</sup>This instance of *poi*, which the editors (p. 159) regard as the “first epigraphic instance of the equivalence in Aeolian of *poi* and *pou*”, may not be epistemic but locative (‘somewhere in a law’); if so, this strengthens even further the case for *poi* being stationary outside Attic-Ionic.

<sup>25</sup>The same epistemic/locative ambiguity as in (12b) (‘anywhere/perchance’).

While *-oi* itself is thin on the ground as a locative suffix, its Ablaut variant *-ei* (Buck 1955 §132.2), and to a lesser extent *-ui* (which might be a cognate: Buck 1910:§132.4; Palmer 1980:45) are widespread amongst the dialects.

### *a-stem Locatives*

Another group of locative suffixes prospered in all Greek dialects. These involve the  $\bar{a}$ -stem nominals of Proto-Greek, derived from PIE  $*-e_{\bar{a}2}$  (Rix 1976 §140), rather than the *o*-stem nominals. For pronominals in Greek, the  $\bar{a}$ -stem is associated with feminines, while the *o*-stem is associated with masculines and neuters. The phonetic development of these forms is complicated by the fact that Proto-Greek  $*\bar{a}$  went to *e:* in Ionic and (in most environments) Attic. The relevant Proto–Indo-European and Greek case endings involving the  $\bar{a}$ -stem are:

		<i>Proto–Indo-European</i>	<i>Non-Ionic</i>	<i>Ionic-Attic</i>
DAT.SG	<i>-eĵ</i>	$*k^we_{\bar{a}2}eĵ > *k^w\bar{a}eĵ$	<i>pâ:i</i>	<i>pê:i</i>
INSTR.SG	<i>-eĵ<sub>1</sub></i>	$*k^we_{\bar{a}2}eĵ_1 > *k^w\bar{a}e$	<i>pê:</i>	$*p\hat{a}$ : <sup>26</sup>
LOC.SG	<i>-i</i>	$*k^we_{\bar{a}2}i > *k^w\bar{a}i$	<i>pâ:i</i>	<i>pê:i</i>

Three  $\bar{a}$ -stem adverbs are attested in Greek dialects: *-e:*, *-a:i/e:i*, and *-a:/e:*. In themselves, these adverbs are tangential to an account of *hópou*; the main value of referring to them is the different pathway along which they developed. This is largely because of the phonological merger between the instrumental and the locative for the  $\bar{a}$ -stem.

The merger is present for all three suffixes. *-e:* is etymologically instrumental, but most instances of its use are clearly locative. The other two adverb endings, *-a:i* and *-a:* (Ionic *-e:i* and *-e:*) are, according to Buck (1910 §132.5a) of dative-locative and “probably” instrumental origin, respectively. Buck adds, however, that, given the increasing tendency in Ancient Greek to reduce *a:i*, *e:i*, *o:i* to *a:*, *e:*, *o:*, “for the most part it is impossible to distinguish this (*-a:*) from the commoner type in original *-a:i*, to which many forms in *-a:* may equally belong.”<sup>27</sup>

One should add that, by Classical Greek, the instrumental and locative had both been subsumed into the dative in productive morphology (precisely because of their phonological proximity), so that it would be very easy to conflate the locative and instrumental meanings. In Classical Greek the dative carried out both instrumental (Smyth 1959 [1920] §1503–1520) and locative functions (Smyth 1959 [1920] §1530–1538); so *éballé me lít<sup>h</sup>ois* (DAT) meant ‘he hit me

<sup>26</sup>In West Greek and Boeotian, *a:e:* contracts to *e:*, whereas in Attic *a:e:* contracts to *a:* (Rix 1976 §59.b, §60.c). Thus, Proto-Greek  $*p^husá:ete$  ‘you (PL) blow’ goes to  $p^husá:te$  in Attic, but  $p^husê:te$  in Boeotian. This is why Palmer (1980:284) explicitly identifies as Doric “the old instrumentals in *-e:* like *ê:* ‘where’.”

<sup>27</sup>For Attic, Thraette (1981–1996 §64.01.b) dates the merger between the two endings as “not much before the beginning of the second century BC [...] a phenomenon which supports the origin of these adverbs as datives.”

**with stones**, and *naíein óresin* (DAT) ‘to dwell **among the mountains**’ (Soph OT 1266).<sup>28</sup>

If the dative also did the work of locative and instrumental, then an adverbial expression dative in form and locative in meaning would be susceptible to reanalysis as an instrumental, and vice versa. This is precisely what happened with *hê:i/hópe:i*, formally a dative.<sup>29</sup> Notwithstanding the existence of ambiguous instances such as (13a), it is to the preexisting distribution of the dative in general in Greek that this double function should be attributed.<sup>30</sup>

(13a) (viii BC)  
 πάπτηγεν δὲ ἕκαστος ὅπη φύγοι αἰπὸν ὄλεθρον.  
 pápte:nen dè hékastos **hópe:i** p<sup>h</sup>úgoi aipòn ólet<sup>h</sup>ron.  
 and each looked about **where** (how) he might escape bitter destruction. (Od  
 XXII 43)

On the other hand, *hoî/hópoi* was not susceptible to formal reanalysis as an instrumental. The reason for this is morphological accident: *o*-stem nominals had a short *o* (LOC.SG *-oi*, DAT.SG *-oi*, INSTR.SG *-o:(s)*), while *a*-stem nominals had a long *a* (LOC.SG *-ai*, DAT.SG *-ai*, INSTR.SG *-e:*, (apparently) *-a:*). The *a*-stem locative and dative could readily be conflated, and whether through the general functionality of the Greek dative or phonological reasons, the *a*-stem locative and instrumental could also be conflated. The *o*-stem locative, on the other hand, retained a short *o* distinct from the long *o:* of the dative and instrumental. There was thus no mechanism whereby the *o*-stem locatives could be conflated with the dative and instrumental. So *-ai/ei* could convey manner, and the two other locative endings, locative *-oi* and genitive *-ou*, could not.

That there was liberal traffic between *a*-stem locatives and instrumentals is shown clearly by the dialectal data:

<sup>28</sup>In Classical prose as opposed to poetry, the locative dative without a preposition was restricted to proper names (e.g. *plataiaís* ‘in Plataeae’; this also includes the locative case remnants like *p<sup>h</sup>aleroî*.)

<sup>29</sup>One should also note the possibility (Hatzidakis 1992 [1915, 1930]:II 462) that these forms are originally instrumental, and took on the dative *-i* ending by analogy, the instrumental no longer being productive in Greek.

<sup>30</sup>The use of *-ai* as a locative adverb ending is of considerable antiquity: *ta (tai)* is the only locative discernible in the Mycenaean Linear B texts, although the reading given is by no means certain:

(13b) (xv~xiii BC)  
 𐀓𐀓𐀓𐀓 𐀓𐀓 𐀓𐀓𐀓𐀓 𐀓𐀓  
**ta-pa-e-o-te** ‘VIR 10’ **a-pe-o-te** ‘VIR 4’  
 τᾶι παρόντες ἄνδρες 10 ἀπεόντες ἄνδρες 4  
**tâ:i** pareóntes ándres 10 apeóntes ándres 4  
 ten men present (**there** present?), four absent. (KN B 823)

The interpretation is Scherer’s (Thumb & Scherer 1959 §339.7a); Ventris & Chadwick (1959:171), who gloss the verb as ‘present’, suggest (somewhat less plausibly) *tárp<sup>h</sup>a eóntes*, with *tárp<sup>h</sup>a* an unattested adverbial formation from *tárp<sup>h</sup>ús* ‘often’. Palmer (1963:456) is inclined to think *ta-pa-e-o-te* is a distinct verb.

Locative *-ai:*

- (14a) (after 183 BC)  
 κῆς τὸν ῥόον τὸν ἀπὸ Ῥιγρῶν καταρέο[ντα] κᾶν ῥόον κῆπι τὸν κριθθὸν κοῖλον ἐς τὰν δεξι[άν]|| **ἄι** ὕδωρ ρεῖ ἐς τὸν τῶν φαξίων ὄρον;  
 k e:s tòn rōon tòn apò rigrân kataréonta k ân rōon k e:pi tòn krit<sup>h</sup>t<sup>h</sup>on koílon es tàn deksian **ái** údo:r rei es tòn tō:n waksíon ó:rons;  
 and (the boundary continues) onto the stream flowing from Rigras, and along the stream, and onto the (unknown adjective) vale, to the right **of where** the water flows, on to the Axian mountains; (Coll 5016.11; Crete)
- (14b) (175~174 BC)  
 μὴ ἐξέστω δὲ Ἑστῖο **ἀλλαχᾶ** κατοικεῖ(ι)ν, ἀλλ' ἢ ἐν Δελφο[ί]ς.  
 mè: ekséstō: dè hestìo: **allak<sup>h</sup>ái** katoikeîn, all è: en delp<sup>h</sup>oís.  
 And Hestio shall not be permitted to dwell **anywhere** but in Delphi. (Coll 2085.4; Delphi)

Manner *-ai:*

- (15a) Αἰγλάτας τῷ Καρνεῖο[ι] τῷ δ' ἄγαλμ' ἀνέθεκε, πελνπάκι νικάσας τὸ[ν] μ[α]φ[όν] καὶ ποτέθ[ε] κε[ ] [τὸν] δολιχὸν τριάκις, Ἀθαναίοις δ[ὲ] ... | [... **ἡ?** **ἄπερ** Συρμαία [...]  
 aiglátas tōi karneío[i] tō d' ágalm' ané<sup>h</sup>eke, penpáki nikásas tòn maip<sup>h</sup>on kai poté<sup>h</sup>e ke tòn dolik<sup>h</sup>on triákis, at<sup>h</sup>anaíois dè [...] **há:iper** surmaía [...]  
 Aegletes erects this sculpture to Carnaeian Apollo, having won in the *maip<sup>h</sup>ós* five times and formerly the long course thrice, and in the Athena Games [...] **as** (?) in the Syrmaean Games [...]. (IG V 1 227.7; Laconia)
- (15b) τὸν τοῖχον λύσαντα τὰν πάροδον ποιῆσαι ἐς τὸν ναὸν [τ]αύται  
 tòn toík<sup>h</sup>on lúsanta tàn párodon poiê:sai es tòn naòn **taútai**  
 and, the wall being demolished, the side-entrance into the temple should be made **in the same way**. (IG XII 3 248.14; Anaphe)
- (15c) αἰ μή τις αὐτὸς δοίη μὴ ὑπ' ἀνάγκας, τιτουφέσθω σιτατῆρα κατὰν θυσίαν φεκάστλαν καὶ τῷ κρίως τὰν διπλείαν πορτιφωνὲν δ' **ἄπερ** τῶν ἄλλων.  
 ai mé: tis autòs doíe: mè: up anánkas, titouwést<sup>h</sup>o: statê:ra katàn t<sup>h</sup>usían wekástan kai tō: krío:s tàn dipleían; portiph<sup>o</sup>:nèn d' **ái:iper** tō:n álo:n.  
 if one will not give unless under compulsion, he shall be fined a stater for each sacrifice, and shall give twice the number of rams; and he shall be brought to court **as** with the other matters. (Coll 5128.8; Crete)<sup>31</sup>
- (15d) (mid v BC)  
 χρῆθαι δὲ τοῖδδε ἄι τάδε τὰ γράμματ' ἔγραψε,| τῶν δὲ πρόθθα, **ὅπαι** τις ἔχει, ἢ ἀμφαντύι ἢ πὰρ ἀμφαντῶ, μὴ ἔτ' ἔλνδικον ἦμεν.  
 k<sup>h</sup>rê:t<sup>h</sup>ai dè toídde ái táde tà grámmat' égrapse, tō:n dè prót<sup>h</sup>ta, **ópai**:i tis ék<sup>h</sup>ei, è: amp<sup>h</sup>antúi è: pàr amp<sup>h</sup>antō:, mè: ét éndikon ê:men.  
 These regulations shall be followed from the time of the inscription of this law, but as regards matters of a previous date, **in whatever way** one holds (property), whether by virtue of adoption or from the adopted son, there shall be no liability. (Coll 4991 IX.19; Crete)<sup>32</sup>
- (15e) [...]ρ αὐτος Κρονίδα[ις...]/ [...**ὅπαι** κε θέλη τρ[...]  
 [...]r autòs kronída[is...]/ [...**óppai** ke t<sup>h</sup>éle: tr[...]  
 ... (Zeus) himself, the son of Cronus,... **however** he wishes... (Alc 112; Lesbos)

<sup>31</sup>Bechtel (1924:II 760) gives the translation 'vor Gericht laden, wie in Beziehung auf die andren Dinge.'

<sup>32</sup>Translation from Buck (1910:274).

Manner *-a:*:

- (16a) (v BC)  
 Δαμόνονι ἀνέθηκε Ἀθαναία[ι] πολιάχοι νικάῃας| *ταντᾶ, ἡᾶτ'* οὐδέχ| πέποκα τὸν νῦν.  
 damónon ané<sup>h</sup>eke at<sup>h</sup>anaíai poliák<sup>h</sup>oi nikáhas *tautâ, hât'* oudès pépoka tòn nû:n.  
 Damonon erects (this memorial inscription) to Athena the protector of the city,  
 having gained victory **in such as way as** noone ever has until now. (IG V 1  
 213.5; Laconia)<sup>33</sup>
- (16b) (v BC)  
 καὶ Παρπαρόνια ἐνίκεῖ Ἐνυμακρατίδας παιδάς| στάδιον καὶ δίαυλον καὶ δολιχὸν  
 καὶ ὁ κέ[λεξ]| μιᾶς ἀμέρας *ἡαμᾶ* ἐνίκε.  
 kai parparónia eníke enumakratídas paídas stádion kai díaulon kai dolikh<sup>h</sup>on kai ho  
 kéleks miâ:s améras *hamâ:* eníke.  
 And Enymakratides won at the Parparos Games in the boys' competitions at the  
 stade-length course, the double-stade course and the long course, and the race-  
 horse in the same day was **likewise** victorious. (IG V 1 213.48; Laconia)
- (16c) ἐν τοῖς αὐτοῖς δικασταῖς *ᾶ* κα ἀλῶι  
 en toîs autoîs dikastaîs *hâ:* ka halô:i  
 amongst the same judges **as** he was convicted (Jahreshefte des  
 Österreichischen Archäologischen Instituts XIV (1911).168:19 (cited in Bechtel  
 1924:II 33); West Locria)
- (16d) καὶ τὸ θέθμιον τοῖς Ὑποκναμιδίους Λοφροῖς *ταύ/τᾶ* τέλεον εἶμεν Χαλειέοις τοῖς σὺν  
 Ἀντιφάτᾳ φοικηταῖς.  
 kai tò t<sup>h</sup>ét<sup>h</sup>mion toîs hupoknamidíois lofroîs tautâ: téleon eîmen k<sup>h</sup>aleiéois toîs sùn  
 antip<sup>h</sup>áta woike:taîs.  
*Lex Locrorum Hypocnemidorum colonis lata eadem de Chaliensibus, qui  
 Antiphata duce in coloniam venerunt, valent.*  
 And the law of the Hypocnemidian Locrians shall hold **to the same extent** as  
 with the Chaliens, who colonised the area under Antiphatas. (IG IX 1 334.46;  
 West Locria)

Locative *-a:*:

- (17a) ἐξέσιτω δὲ Θερσί[π]πῳ καὶ ἄλλα *ὄππα* κε θέλη τῶ[ν] ἴρων στᾶσα[ι] τὸ ψάφισμα  
 eksésto: dè t<sup>h</sup>ersíppo: kai álla *óppa* ke t<sup>h</sup>éle: tō:n íro:n stâ:sai tò psáphisma  
 and Thersippus shall also be permitted to erect other copies of the decree in  
 temples, **wherever** he wishes. (IG XII 2 645a.49; Lesbos)<sup>34</sup>

The manner interpretation of *-a:*, in turn, gave rise to a purposive function in Cretan:

- (17b) (mid v BC)  
 αἰ δὲ καὶ τετνόκη ἢ μὴ νυνιατὸν ἦι <η> ἐπιδιέθθαι,| καλῆν ἀντὶ μαϊτύ[ρ]λων δυῶν ἐν  
 ταῖς πέντε, *ᾶι* δείκσει ὅπῃ κ' ἦι  
 ai dè ka tetnóke:i è: mè: nunatòn ê:i epidiét<sup>h</sup>t<sup>h</sup>ai, kalê:n antì maitúro:n duô:n en taîs  
 pénte, *â:i* deíksei opê: k' ê:i  
 And if he has died or is unable to be present, let the other be summoned in the

<sup>33</sup>Buck (1910:227) gives the translation 'having won victories in such a manner as never any one of those now living.'

<sup>34</sup>Both Buck (1910 §132.5) and Bechtel (1924:I 100) contend that Lesbian *-a:* is derived from *-a:*.

presence of two out the five witnesses, **to** show them where he is (Coll 4998 II.9)

(17c)

(before 100 BC)

ἐφ' ὧν καὶ τὸ πλῆθος τῶν πολιτῶν, ἀκούσαντες τὰ πεπραγματευμένα καὶ τὰν [ό]λαν αἴρεσιν τῷ ἀνδρὶ, ἂν ἔχων τυγχάνει εἰς τὴν ἁμὰν πόλιν, ἀπεδέξατο μεγάλως ὅπαι οὖν καὶ ἡ πόλις τῶν Κνωσίων φαίνεται εὐχάριστος ἰόνσα καὶ τὸς καλὸς κάγαθὸς τῶν ἀνδρῶν ἀποδεχομένα καὶ τιμόνσα  
 ep<sup>h</sup> hō:n kai tò plē:t<sup>h</sup>os tō:n politā:n, akouśanten tà pepragmateuména kai tàn hólان haíresin tō: andrós, hân ék<sup>h</sup>o:n tugk<sup>h</sup>ánei eis tàn hamàn pólin, apedéksato megálo:s; **hópai** oún kai ha pólis tō:n knosíō:n p<sup>h</sup>áine:tai euk<sup>h</sup>áristos íónsa kai tòs kalòs k agat<sup>h</sup>òs tō:n andrō:n apodek<sup>h</sup>oména kai timónsa  
 So the assembled citizens, on hearing what had occurred and all about that man's goodwill, which he happens to hold towards our city, did greatly applaud it; **so that** the city of Knossos may thus be seen to be grateful and to applaud and honour good and virtuous men (Ditt 721.20)

As can be seen, the extension of *-ai* from instrumental to locative has been slight, and the Lesbian development has been cast in doubt by scholars. On the other hand, the originally locative *-ai* is in extensive use as both an instrumental and locative. Indeed, the distribution of *hópai*, particularly in Ancient Cretan, is reminiscent of the distribution of *hórou* in Classical Greek, although *hópai* as a purposive takes on an irrealis function absent from *hórou*.

This is interesting as a counterexample to the localist view of the development of *pu*. A stationary locative like *hópai* acquires an irrealis function in Cretan, independent of any allative function. (It is true that *-ai* was used directionally in Greek dialects, but this was a late development; Buck (1910 §132.5) says it is restricted to Phocian, although there are also instances in Heracleia.) Rather, it acquires the irrealis because of the morphological conflation of the instrumental and the locative. This, one might retort, is a contingent fact, and one that should not negate the underlying factivity of stationaries. Yet language is full of such contingent developments; and the point to be made is that such contingent developments consistently frustrate attempts to impose schematic templates on linguistic developments.

### *Locative endings in Attic-Ionic*

Of the plethora of locative endings described above, Attic-Ionic used just three: *-ou*, *-oi*, and *-ei* (< *-ai*).<sup>35</sup> As already argued, *-ou* is genitive in origin, and an innovation specific to Proto-Ionic; it is present not only in literary Attic and Ionic, but also in Ionic inscriptions:

(18a)

(357~356 BC)

καὶ ἡμῖν πὸ ἀλίσκωνται, πάσχειν αὐτὸς ὡς πολεμῖος καὶ νηποινεὶ τεθνάναι  
 kai é:m **po:**<sup>36</sup> halísko:ntai, pásk<sup>h</sup>ein autòs ho:s polemíōs kai nepoineì tet<sup>h</sup>ánai

<sup>35</sup>There is some vestigial usage in Ionic of *-i<sup>h</sup>* (Bechtel 1924:III 229–230), but not of *hót<sup>h</sup>i* or *hopót<sup>h</sup>i*.

<sup>36</sup>In some variants of the Ancient alphabet, o was an orthographic realisation of [o:], realised in the standard Ionic alphabet as ou.

and if they are captured **anywhere**, he shall suffer as an enemy, and he shall be executed with impunity (Ditt 194.7; Amphipolis)

- (18b) ὅπου ἂν [θ]άνηι, ἐπὶ[ν ἐ]ξενιχθῆι, μὲ ἰέναι γυνοαῖκας π[ρὸ]ς τ[ὴν οἰ]κίην ἄλλας ἐ τᾶς μίαινομένας.  
*hópu* ἂν t<sup>h</sup>áne:i, epè:n eksenik<sup>h</sup>t<sup>h</sup>ê:i, mè iénai gunaíkas pròs tèn oikíe:n állas è tâ:s miainoménas.  
**Wherever** he might die, before his corpse is carried out for burial, no woman may enter into the house other than those defiled [by his death = his relatives] (Ditt 1218.23; Keos)

- (18c) (iv BC)  
 [ὁ ἀναί]ραιρημένος τὸν κῆ[πον τὸ χωρ]ίον καθαρὸν παρέξει [τὸ περὶ τᾶς] πύλας, ὅπου ἢ κόπρος [ἐξεβ]άλλετο.  
 ho anairaire:ménos tòn kê:pon tò k<sup>h</sup>o:ríon kat<sup>h</sup>aròn paréxei tò perì tâ:s pû:las,  
*hópu* he: kópros eksebálleto.  
 The person who purchases the garden shall render clean the space around the gates, **where** the dung is discarded. (IG XII 8 265.4; Thasos)

Bechtel (1924:III 228) further notes that “on the basis of *poû*, *hópu* the Attic were the first to have built the form *hoû*.”<sup>37</sup> *hoû* is absent in Ionic; the one exception, Democritus 40, is textually suspect.<sup>38</sup> Now, as argued above, the use of the genitive was an analogical extension to the stems *po-* and *hopo-*, as these stems do not have a nominative form *\*pós*, *\*hopós* from which a genitive could be productively formed. The analogy needs to have been made with *hós*: the relativiser *hós* does exist in the nominative, and does have a productive genitive: *hoû* is Classical Greek for ‘whose’, as well as ‘where’.

But locative *hoû* is not an innovation of Proto-Ionic, but of Attic alone: it is a form younger than *poû* and *hópu*. So the latter locatives can not even have been formed by analogy with a locative *hoû*: the application of the genitive to those pronouns was completely schematic, drawing its analogy between the case endings of the pronouns and the general Greek *o*-stem case endings.

Palmer (1980:283) disputes the traditional account of *-ou* as a genitive case ending. His argument is that, were *-ou* truly a genitive, uncontracted locative forms should be attested, i.e. *poîo*, *hoîo*, *hópoio*. (The *-oio* genitive is Mycenaean (Palmer 1963:47) and Homeric; the contraction of its variant *-oo* to *-o:* and *-ou* [ϝ:] is dialect-specific.) Instead, Palmer derives *-ou* from the adverbial particle *\*-u*, inferrable from Attic *pánu* ‘very’ < *pâ:n* ‘everything’ + *\*-u*, Ionic *págk<sup>h</sup>u* ‘very’ < *pâ:n* ‘everything’ + *k<sup>h</sup>i* ‘emphatic particle’ + *\*-u*; cf. Sanskrit *ú* ‘and, also, further; on the other hand (pronominal, prepositional and adverbial emphatic)’. As the reflex of *\*k<sup>w</sup>o* was a nominal, it needed to have some case inflection to which *\*-u* would be attached. The only likely scenario is that this was the loca-

<sup>37</sup>According to Bechtel, this conclusion was first arrived at by Wackernagel in his *Sprachliche Untersuchungen zu Homer* in the 1890s—a reference I have regrettably been unable to obtain.

<sup>38</sup>So Bechtel, referring to the second edition of H. Diels’ *Die Fragmente der Vorsokratiker* (*The Fragments of the Pre-Socratic Philosophers*). I have been unable to find a corresponding instance of *hoû* in the sixth edition of the work (1952; Berlin: Wiedmann) available to me; presumably, this *hoû* was suspect enough to have been excised by that edition.

tive ending: *\*k<sup>w</sup>oju* > *poû*. This development is phonologically feasible, as Greek tended to drop intervocalic yods (Rix 1976 §69).

Now, Attic and Ionic in classical times had long abandoned the *-oio* genitive, and were using *-ou* instead. The only variant of Ionic in which *-oio* can be found in productive use is the Ionic superstrate of Homeric Greek. To demand an uncontracted locative *\*hópoio* < *\*k<sup>w</sup>osjo* or *\*hóteo*, *\*hóteu* < *\*k<sup>w</sup>eso* (Ablaut), therefore, is to demand that a genitive-based locative turn up in Homer. The distribution of locatives in Homer is telling: there are only two genitive-based instances of a *\*yo* + *\*k<sup>w</sup>o* form, both textually suspect. As for *\*k<sup>w</sup>o* forms, there are 14 instances of interrogative *poû* against 5 of *pót<sup>hi</sup>*; *\*poîo*, as well as *poî*, are unattested.

That the instances of *hópou* are suspect indicates that *-oû* is a late innovation, subsequent to the authoring of the Homeric epics itself. And even though *poû* is textually frequent, it may well turn out that it is likewise a late, Ionic accretion in the text—perhaps an Ionicisation of *poî*, as *poû* is metrically incompatible with the older *pót<sup>hi</sup>*, and could not have replaced it in the poem. The absence of *poû* in the other Greek dialects certainly suggests that *poû* is a late innovation—late enough to be located after the reduction of *\*-o(i)o* to *-ou*. So a locative *\*poîo* need not have ever existed for *poû* to be genitive in origin.

In addition, the Ionic paradigm of *-ou* adverbs includes both pronominals like *poû* and *hópou*, and adverbs transparently derived from nouns, like *hupsou* ‘high up’ < *húpsos* ‘height’ and *autoû* ‘at the same spot’ < *autós* ‘the same’. It is belaboured to call *hupsou* genitive in origin, as Palmer (1980:283) does, but *poû* of non-genitive origin—especially as *hupsou* is also attested in Homer in contracted form (9 instances)—and not as *\*hupsouo*. It is much simpler to explain *hupsou* as a genitive than as *\*hupsou-i*; since the spread of the *-ou* locative paradigm is clearly analogical, and would have started with the most representative members of the paradigm, *poû* and *hópou*, Proto-Ionic speakers clearly understood these forms to be genitives. To postulate that these genitive suffixes are in fact reanalysed fused adverbial suffixes introduces an extra and unneeded level of indirection between Proto-Ionic and Proto-Greek. The semantic differentiation in Attic-Ionic between *-oi* and *-ou* is also difficult to justify if *\*-oiu* was merely a morphological amplification; whereas if the two suffixes were distinct members of a morphological paradigm—locative vs. genitive—they could easily be set up in paradigmatic opposition.

In sum, even if *-ou* originated in an adverbial *\*-u* suffix, its subsequent behaviour indicates that, between early and late Proto-Ionic, it might as well always have been a genitive ending; and the negative evidence Palmer invokes from Homer is not convincing enough to adopt this more involved scenario. The genitive account of *-ou* is thus retained here.<sup>39</sup>

<sup>39</sup>Similar difficulties arise in Schwyzler’s (1950:I 621) analysis; he also contends that a genitive origin for *-ou* in *hópou* is “only apparent”, since *poîo* is absent in Homeric Greek, and the normal Homeric genitive would at any rate be *téo*. Ruling out the proto-forms *\*k<sup>w</sup>oso*, *\*k<sup>w</sup>osu*, and



The innovation of *-ou* functionally displaced the other locative endings in Attic-Ionic; Bechtel (1924:III 228) uses the term *abgelöst* ‘taken over from’. Thus, *-ou* forced *-oi* into a purely directional meaning (‘whither’: 19), while *-ou* took on the stationary meaning (‘where’: 7c):

(19) (423 BC)

ἴθ' ὅποι χροήζεις.  
 ít<sup>h</sup> **hópoi** k<sup>h</sup>ré:zdeis.  
 Lead on **where** you please. (Rogers)  
 Oh, take a running jump...! (Ar Nu 891)

(7c) (423 BC)

ΣΤΡΕΨΙΑΔΗΣ:	ἀλλ' ἢ Λακεδαίμων ποῦ 'στιν;	
ΜΑΘΗΤΗΣ:		ὅπου 'στιν; αὐτήι.
<i>strep<i>si</i>ádes:</i>	all he: lakedáimō:n <b>poú</b> stin?	
<i>mat<sup>h</sup>etê:s:</i>		<b>hópu</b> stin? hauteí.
STREPSIADES:	But <b>where</b> 's Sparta?	
STUDENT:		( <b>Where</b> is it?) Here (Ar Nu 214)

*-oi* was not widely used as a locative in any case, as already seen—being absent from Western Greek and Arcado-Cypriot. In fact, it is even absent in Homeric Greek, which uses *póse* (Il XVI 422, Od VI 199, Od X 431), *hoppóse* (Od XIV 157) as directionals instead (Schwyzer 1950:I 157). This underscores how recent the Attic-Ionic distinction between directional *-oi* and stationary *-ou* is.<sup>40</sup>

Table 16 indicates the distribution of locative relativisers in various ancient texts. Sophocles and Euripides were tragedians, writing in a genre demanding elevated diction (i.e. dialect mixing); Aristophanes, on the other hand, as a comedian, wrote in fairly pure Attic dialect. Lysias was amongst the first major Attic orators.

\**k<sup>w</sup>owo*, Schwyzer appeals to a Proto-Indo-European *u*-stem locative, initially \**pú:* < \**k<sup>w</sup>ū*; the same *u*-stem has been invoked to explain the Doric *-ui* locatives (Palmer 1980:45). According to Schwyzer, this *-u* was analogically extended to other pronouns, like \**autú:*, where it was reanalysed as the genitival ending *-ou*, before *u* itself moved to *y* in Attic-Ionic.

Schwyzer's account also has problems: although the split between Doric *ui*, *us* and Proto-Ionic \**u:* is regular (Schwyzer 1950:I 200), the theory relies on the reflex of Proto-Greek \**oo* (ου) being pronounced identically to the reflex of Proto-Greek *u:* (ῠ). But while Attic ῠ is already fronted in the earliest inscriptions (vii BC), so that KY [kV] never appears as ϙY [kV] (Schwyzer 1950:I 183), Old Attic script, which used a single vowel to render ου, used not Y but O—leading linguists to reconstruct the phonetic value of ου as [o:]. So the reanalysis Schwyzer has in mind is anachronistic, requiring as it does \**u* to be reanalysed as ου centuries before ου was pronounced as [u] rather than [o:]; it must therefore be dismissed.

<sup>40</sup>This distinction never applied to the locative-cum-instrumental *-ei* suffix, which was used in both senses, whether in Attic or in its Doric manifestation as *-ai*. The Proto-Ionic innovation of *-ou* had no effect on the directionality of *-ei*, unlike *-oi*. The reason is apparently that *-ou* and *-ei* are associated with different nominal stems (*o* vs. *a*), which in the Greek pronominal paradigm also meant different genders (MASC/NEUT vs. FEM). *-ou* dislocated *-oi* because they both belonged in the same paradigm (*o*-stem endings), and could be set up in complementary distribution. But since *-ou* belonged to a different paradigm from *-ei*, Proto-Ionic speakers seem not to have regarded the two as being in conflict.

	Il; Od	Hes	Pi	Hdt	Aesch	Soph	Eur	Ar	Lys	TOTAL
<i>hót<sup>hi</sup></i>	93	1	2			2	9			107
<i>ént<sup>ha</sup></i>	58	6	23	25	8	33	48	2		203
<i>hoî</i>						7	10	6		23
<i>hópoi</i>					4	10	7	12	3	36
<i>hê:i</i>	20	2	2		3	13	14	17		71
<i>hópe:i</i>	18	1	2	7	5		7	8	1	49
<i>hoû</i>					8	11	49	10	8	84
<i>hópou</i>	(2)			19	8	22	21	13	5	90

Table 16. Relativiser counts in Monteil's corpus by author

The counts are consistent with the claims made in the literature that *-ou* was an Ionic innovation (absent in Homer, Hesiod and Pindar), and *hoû* an Attic innovation (also absent in Herodotus). By the time of Attic, the Homeric locative *hót<sup>hi</sup>* had been displaced from the language; *ént<sup>ha</sup>* retained a strong presence in the tragedians, but was falling into disuse in the more colloquial language of comedy and rhetoric, and so must have also become old-fashioned. While the stationary/directional pair *hoû/hoî* ~ *hópou/hópoi* was well established, the locative/instrumentals *hê:i/hópe:i*, which transcended the distinction, were still strong in Aristophanes—although as Monteil (1963:391) notes, nine of his 25 instances are instrumentals spoken by Doric characters. Lysias' language, finally, shows the locative system essentially reduced to two elements: directional (*hópoi*), and stationary (*hoû/hópou*).

### 5.1.5. Semantic broadening of *hópou*

Early instances of the semantic broadening of *hópou* occur when the *hópou*-clause denoted abstract rather than concrete location, which would normally be denoted by a preposition like *par hoístisi* 'amongst whom' (20a) or *en hoîs* 'in which' (20b).

(20a) (409 BC)

ὄπου θ' ὁ χεῖρων τὰ γαθοῦ μείζον σθένει, κάποφθίνει τὰ χρηστά, καὶ δειλὸς κρατεῖ/  
τούτους ἐγὼ τοὺς ἄνδρας οὐ στέρξω ποτέ·

*hópou* t<sup>h</sup> ho k<sup>h</sup>éiro:n t agat<sup>h</sup>oû meîzdon st<sup>h</sup>énei, / k apop<sup>h</sup>t<sup>h</sup>ínei tà k<sup>h</sup>re:stá, k<sup>h</sup> o:  
deilòs krateî, / toútous egó: toùs ándras ou stérkso: poté;

*I shall never abide/ the company of those **where** the worse man/ has more power than the better, where the good/ are always on the wane and towards rule. (Soph Ph 456)*

(20b) (414 BC)

ἦδον δ' ὑπὸ φιλορνηθίας πάντες μέλη, ὄπου χελιδὼν ἦν τις ἐμπεποιημένη

ê:idon d hypò philornit<sup>h</sup>ías pántes méle: / *hópou* k<sup>h</sup>elidò:n ê:n tis empepoie:méne:

*So fond they are of birds that all are singing/ songs **where** a swallow figures in the verse (Rogers) (Ar Av 1301)*

In (20c), Bakker (1974:87) reads *hókou* as equivalent to *kat hoústinas* ‘at whom, amongst whom’; as the translation indicates, this is an early instance of the extension of *hórou* to a directional meaning.<sup>41</sup>

- (20c) (~450 BC)  
 ὅκου δὲ πορευόμενοι γινώιατο καὶ κατ’ οὐστίνας ἀνθρώπους, τὸν τούτων καρπὸν ἀρπάζοντες ἐσιτέοντο.  
*hókou* δὲ poreuómenoi ginóiato καὶ *kat hoústinas* ant<sup>h</sup>ró:pous, τὸν τοῦτο:ν καρπὸν harpázdantes esitéonto;  
**Whithersoever** and **to whatsoever** people they came, they seized and devoured its produce; (Hdt VIII 115)

Temporal meanings developed in Greek only for the stationary *-ou* locatives. The development of temporal meanings for locatives is not necessarily an innovation specific to Greek, since Indo-European use the same cases (locative and accusative) to denote location in time and space.<sup>42</sup> However, for the allative and ablative locatives, this development has not taken place in Greek; temporals are instead formed with spatial prepositions. Thus, ‘until’ is *héoi:s, eis hó* ‘to what’, not *hoî, hópoi* ‘whither’; ‘since’ is *eks hoû* ‘from which’, *eks hótou* ‘from when’, not *hót<sup>h</sup>en, hopót<sup>h</sup>en* ‘whence’ (although Aristophanes does use *ént<sup>h</sup>en* ‘thence’ in such a meaning once); and *hê:i (â:i)* is only used as a temporal in ancient Cretan and Heracleian (Bechtel 1924:II 759):

- (15d) (mid v BC)  
 χρῆθαι δὲ τοῖδδε ἀι τάδε τὰ γράμματ’ ἔγραψε,| τῶν δὲ πρόθηα, ὅπαι τις ἔχει, ἢ ἀμφαντύι ἢ παρ ἀμφαντῶ, μὴ ἔτ’ ἔλνδικον ἦμεν.  
*k<sup>h</sup>rê:t<sup>h</sup>ai* δὲ τοῖδδε *â:i* táde tà grámmat égrapse, tḗ:n δὲ prót<sup>h</sup>a, opâ:i tis ék<sup>h</sup>ei, è: amp<sup>h</sup>antú:i è: pàr amp<sup>h</sup>antḗ:, mè: ét éndikon ê:men.  
*These regulations shall be followed from the time of the inscription of this law, but as regards matters of a previous date, in whatever way one holds (property), whether by virtue of adoption or from the adopted son, there shall be no liability.* (Coll 4991 IX.19; Crete)<sup>43</sup>

Monteil (1963:390) concludes that “if the temporal usage is rarer [in Greek], it is without doubt because Greek already had an adequate gamut of temporal conjunctions.” While functional pressure is not an adequate explanation for why a grammaticalisation fails to take place, it is true that the temporal usage of *hoû* and *hórou* was not widespread in Classical Greek, either; the following are representative instances.

<sup>41</sup>There are indeed instances in Xenophon (Cyr 3.1.37) and Sophocles (Tr 40, Aj 1237) where the manuscripts (and editors) vary between *hópoi* and *hórou*.

<sup>42</sup>e.g. Sanskrit *yátra*, originally the locative of the relativiser *ya* ‘in or to which place, where, wherein, wherever, whither’, which already in the Rig-Veda also means ‘on which occasion, in which case, if, when’. In Greek, *péru:s* ‘last year’ and *aiéi* ‘forever’ are of locative origin. An example of the temporal accusative is Greek *témeron/sá:meron* ‘today’ (Palmer 1980:283–4).

<sup>43</sup>Translation from Buck (1910:274).

- (21a) (~442 BC)
- |      |                        |                  |               |          |        |         |        |
|------|------------------------|------------------|---------------|----------|--------|---------|--------|
| οὐ   | γὰρ                    | ἔσθ'             | ὅπου/         | λόγων    | γ'     | ἀκοῦσαι | ζῶν    |
| ou   | gàr                    | ést <sup>h</sup> | <b>hóπου/</b> | lógo:n   | g      | akoûsai | zdô:n  |
| NEG  | because                | is               | where         | of words | anyway | to hear | living |
| ποτ' | ἠθέλησ'                | ἐμῶν.            |               |          |        |         |        |
| pot  | e:t <sup>h</sup> éle:s | emô:n.           |               |          |        |         |        |
| ever | he.wanted              | of ours          |               |          |        |         |        |
- For there was not [a time] **when** he ever wanted to hear words of ours [while] living, anyway.  
*So long as he lived, he never would heed our words,/ Never.* (Soph Aj 1069)<sup>44</sup>

- (21b) (359~355 BC)
- ὅπου γὰρ ἐν τούτοις τις λόγος γένοιτο περὶ Σπαρτιατῶν, οὐδένα δύνασθαι κρύπτειν τὸ μὴ οὐχ ἡδέως ἂν καὶ ὠμῶν ἐσθίειν αὐτῶν.  
**hóπου** γὰρ ἐν τούτοις τις λόγος γένοιτο περὶ spartiatô:n, oudéna dúnast<sup>h</sup>ai krúptein tò mè: ouk<sup>h</sup> he:déoi:s àn kai o:mô:n est<sup>h</sup>iein autô:n.  
*for whenever among these classes any mention was made of Spartiatae, no one was able to conceal the fact that he (Cinadon) would be glad to eat them raw.* (X HG 3.3.6)

These two instances are good examples of temporal usage—especially (21a): ‘there is no case **where**’ is tantamount to ‘there is no time **when**’ in (21a), while spatially locating the mention of Spartans in (21b) is not as pertinent to establishing Cinadon’s state of mind as the fact that his sentiments were uttered on every such opportunity. As expected, the reanalysis of locative to temporal contains several ambiguous instances; (21c), for example, is given by Liddell–Scott–Jones (1940) as an instance of temporal *hóπου*, but a locative interpretation is still licit:

- (21c) (~550 BC)
- πτωχεύει δὲ φίλους πάντας, ὅπου τιν’ ἴδῃ.  
 pto:k<sup>h</sup>eúei dè p<sup>h</sup>íλους pántas, **hóπου** tin íde:i.  
*and [he] beggeth of all his friends wheresoever (whenever?) he may set eyes upon them.* (Thgn 922)

The locatives *hoû* and *hóπου* are also used to denote causes and circumstances in Classical Greek. According to Monteil (1963:390),

this value, frequent enough with temporal subordinators [...] can in effect be an extension of any circumstantial value (‘in a circumstance where’, whence ‘given that’), and it is not necessary to presume an intermediate temporal stage between it and the locative value.

In other words, *hóπου* has undergone two semantic developments: SPATIAL LOCATION > TEMPORAL LOCATION (a development characteristic of Indo-European), and CONCRETE SPATIAL LOCATION > ABSTRACT LOCATION (to be *in* a circumstance; cf. English *where*) > CAUSE. If anything, it seems the circumstance

<sup>44</sup>The collocation *ou gàr ést<sup>h</sup> hóπου* ‘not, because, there.is where... = for there is no time when... = never’, illustrated in (21a), is used frequently by Sophocles, and parallels the established formula *ouk éstin hóstis* ‘not there.is who... = there is nobody who...’ (Monteil 1963:142). See Kühner & Gerth (1963 [1898–1904] §554.4, Note 9).

reading may have led to the temporal reading, rather than vice versa; in (21a), for example, *hórou* seems to have gone from ‘*where*’ to ‘[a time] *when*’ via ‘a circumstance *where*’.

The various shades of the causal/circumstance meaning of *hórou* are illustrated as follows.

(22a) (~450 BC)

καὶ ἡ ἀρχὴ τῆς χῶρης ταύτης, τὴν οἱ Πέρσαι σατραπηίην καλέουσι, ἐστὶ ἀπασέων τῶν ἀρχέων πολλόν τι κρατίστη, ὅκου Τριτανταίχμη τῷ Ἀρταβάζου ἐκ βασιλέος ἔχοντι τὸν νομὸν τοῦτον ἀργυρίου μὲν προσέιτε ἐκάστης ἡμέρης ἀρτάβη μεστή.

kaì he: ark<sup>h</sup>è: tês k<sup>h</sup>ô:re:s taúte:s, tèn hoi pérsai satrapeíe:n kaléousi, estì hapaséon tòn nô:m ark<sup>h</sup>éon pollón ti kratíste:, **hókou** tritantaíkh<sup>h</sup>mei: tô:i artabázdou ek basiléos ékh<sup>h</sup>onti tòn nomòn toûton arguriou mèn prosé:ie hekástes: he:méres: artábe: mesté:.

*The governorship, which the Persians call ‘satrapy’, of this land is by far the greatest of all the governorships; **seeing that** the daily revenue of Tritantaechmes son of Artabazus, governing the province by the king’s will, was an artaba full of silver (Hdt I 192) (circumstance)*

(22b) (~450 BC)

ταῦτα εἰ μὲν ἔστι ἀληθῆως οὐκ οἶδα, τὰ δὲ λέγεται γράφω· εἴη δ’ ἂν πάν, ὅκου καὶ ἐν Ζακύνθῳ ἐκ λίμνης καὶ ὕδατος πίσσαν ἀναφερομένην αὐτός ἐγὼ ὄρων.

taûta ei mèn ésti ale<sup>h</sup>éos: ouk oída, tà dè légetai gráp<sup>h</sup>o:; eíe: d’ àn pân, **hókou** kai en zdakúnt<sup>h</sup>o:i ek límne:s kai húdatos píssan anaph<sup>h</sup>eroméne:n autós egò: hó:ro:n.

*I know not if this be truly so; I write but what is said. Yet all things are possible; **for** I myself saw pitch drawn from the water of a pool in Zacynthus. (Hdt IV 195) (justification—illocutionary causation)*

(22c) (~450 BC)

ὅκου δὲ ὑμεῖς οὕτω περιέχεσθε τῆς ἡγεμονίης, οἰκὸς καὶ ἐμὲ μᾶλλον ὑμέων περιέχεσθαι

**hókou** dè humeîs hoúto: periék<sup>h</sup>est<sup>h</sup>e tês he:gemoníe:s, oikòs kai emè mâ:llon huméon periék<sup>h</sup>est<sup>h</sup>ai

***When** you set such store by the command, it is but reasonable that I should set yet more (Hdt VII 160) (contingent circumstance—close to conditional)<sup>45</sup>*

(22d) (408 BC)

ὦ γέρον, ἐγὼ τοι πρὸς σὲ δευμαίνω λέγειν/ ὅπου σὲ μέλλω σὴν τε λυπήσειν φρένα.  
ô: géron, egò: toi pròs sè deimaíno: légein;/ **hórou** sè méllō: sên te lupé:sein p<sup>h</sup>réna.

O old man, I truly am afraid to speak to you, **as** I will sadden your mind.

*Sir, I shrink from speaking,/ **knowing** almost anything I say will displease you/ or offend you. (Eur Or 545) (causal)*

There is a gradience between the purely circumstantial meaning of (22a), where no causal relation is posited, and the straightforwardly causal (22d).

There is much ambiguity between the causal/circumstance and temporal usages of *hórou*; indeed, Liddell–Scott–Jones’ (1940) dictionary refers to “a sense involving Time or Occasion”, (i.e. circumstance) as distinct from “of Cause, whereas” (my emphases). While Monteil counts (23a) as a temporal instance, for example, it is much more akin to a circumstance, and could indeed still be interpreted as a locative:

<sup>45</sup>Despite the use of *when* in the translation, this instance of *hókou* is clearly non-temporal.

- (23a) (458 BC)  
 ὑμῖν δ' ἐπαινῶ γλῶσσαν εὐφημον φέρειν,/ σιγᾶν θ' ὅπου δεῖ καὶ λέγειν τὰ καίρια.  
 humî:n d epainô: glô:ssan eúp<sup>h</sup>e:mon p<sup>h</sup>érein,/ sigâ:n t<sup>h</sup> **hópu** deî kai légein tà kaíria.  
*I charge you, hold your tongues religiously./ Be silent **if** (where/when) you must, or speak in the way that will/ help us. (Aesch Ch 582)<sup>46</sup>*

And Liddell–Scott–Jones gloss the collocation *ou gàr ést<sup>h</sup> hópu* (21a), counted by Monteil as temporal, as “there is no case *in which*, i.e. in no case”—namely, as a circumstance.

So by the end of the Classical period, we have a complex locative relativisation paradigm reduced to a locative/stationary and an emphatic/non-emphatic contrast; the stationary locatives have already taken on temporal, circumstance, and causal connective functions; and the static/directional distinction has begun to break down.

### 5.1.6. The history of *hína*

As apparent in previous chapters, *pu* receives its meaning in Modern Greek largely through paradigmatic contrast with *na*; the fact that *na* putatively originates from an old Greek directional relativiser has prompted Christidis’ and Papadopoulou’s localist accounts of the grammaticalisation of the two words. For that reason, an account of the development of *hína* is crucial to this research.

The etymology of *hína* is problematic. In Classical Greek, *hína* has two functions: a locative adverb (almost always relative), and a purposive connective. The word *hína* resembles Sanskrit *yéna*, the instrumental relativiser, and this is the ‘best-guess’ derivation given in both Pokorny (1959) and Debrunner & Wackernagel (1957 [1896]). But the stem vowels of the two words (*ǐ*, *ē*) do not correspond regularly. To resolve this difficulty, Monteil (1963) derives *hína* from the athematic variant of *\*yo*, *\*ə<sub>1</sub>y-* (= *\*h<sub>1</sub>i-*), cognate to Latin *ita* ‘so’, and anaphorics such as Sanskrit *ayám*, Latin *is*.<sup>47</sup>

<sup>46</sup>The temporal meaning is stronger in the following examples:

- (23b) (~390 BC)  
 ἐνθυμουμένους ὅτι σφόδρ' ἂν ἡμῖν ὠργίζεσθε καὶ ἐτιμωρεῖσθε, ὅπου παρεπίπτομεν, ὡς εἰκὸς τοὺς ἀδικούντας  
 ent<sup>h</sup>umouménous hóti sp<sup>h</sup>ódr' àn he:mî:n o:rgízdest<sup>h</sup>e kai etimo:reíst<sup>h</sup>e, **hópu** parepíptomen, ho:s eikòs toùs adikóúntas  
*reflect that you would be highly incensed with us, and would punish us **when** we fell in your way, as criminals deserve. (Lys XXVII 15)*
- (23c) (409 BC)  
 χῶπον δικαίων κάγαθῶν ἀνδρῶν κρίσις/ οὐκ ἂν λάβοις μου μᾶλλον οὐδέν' εὐσεβῆ.  
 k<sup>h</sup> **ópu** dikaío:n k agat<sup>h</sup>ô:n andrô:n krísis,/ ouk àn lábois mou mâ:llon oudén eusebê:  
***When** there is a competition of men just and good, you will find none more scrupulous than myself. (Soph Ph 1050)*

<sup>47</sup>Chantraine’s (1970–1974) etymological dictionary, in agreement with Monteil’s derivation, compares *hína* to the Ancient Cypriot anaphor (*h*)*in*, which corresponds in turn to Old Latin *im* ‘him’. Outside of these, the athematic anaphoric *\*h<sub>1</sub>e/i-* (as distinct from *\*yo*) has not left any reflexes in Greek.

The *-na* suffix corresponds to other Indo-European instrumentals and locatives (Sanskrit *devéna* ‘by a god’,<sup>48</sup> *yéna*, ‘by which means; in which direction, whither’, *téna* ‘in that direction, in that manner’;<sup>49</sup> Latin *pone* ‘behind’; Old High German *hina* ‘thither’; Old Irish *cen* ‘without’).<sup>50</sup> Monteil (1963:377) thus proposes an instrumental origin of *hína*. The locative meaning of the reflexes is not a problem for Monteil, since the Indo-European instrumental is fairly broad in denotation, and instrumentals with locative function are commonplace (as already seen with *hê:i*.)

Both the locative and purposive functions of *hína* are already entrenched in Homeric Greek. The following are examples of Homeric purposive *hína*.

(24a) (viii BC)

τίπτ' αὐτ', αἰγιόχοιο Διὸς τέκος, εἰλήλουθαζ/ ἢ ἴνα ὕβριν ἴδῃ Ἀγαμέμνονος Ἀτρείδαο;  
 típt aút, aigiók<sup>h</sup>oio diòs tékos, eilé:lout<sup>h</sup>as?/ ê: **hína** húbrin ídei: agamémmonos  
 atreídaο?

*Why now art thou come hither, thou daughter of aegis-bearing Zeus? Is it to behold the insolence of Agamemnon, son of Atreus? (Il I 203)*

(24b) (viii BC)

σοὶ δ' ὄδε μνηστῆρες ὑποκρίνονται, ἴν' εἰδῆς/ αὐτὸς σὼ θυμῷ, εἰδῶσι δὲ πάντες Ἄχαιοί;  
 soì d hō:de mne:stê:res hupokrínontai, **hín** eidê:is/ autòs sō:i t<sup>h</sup>umō:i, eidō:si dè  
 pántes ak<sup>h</sup>aiοί:

*Thus the suitors answer thee, that thou mayest thyself know it in thy mind, and that all the Greeks may know it. (Od II 111)*

The other prominent Greek etymological dictionary, Frisk (1955–1972), while admitting the derivation of *hína* is ‘unclear’, also offers the comparison with Sanskrit *yéna*, *téna*, the possible derivation from *\*yo*, and the comparison with *hín*. Frisk also offers a comparison with the accusative interrogative *tí-na* (the regular reflex of Indo-European *\*k<sup>w</sup>im* (Beekes 1995:206) would be *\*tín*); but how that accusative would translate into a purposive is unclear. An accusative derivation would seem to favour the locative meaning of *hína* as etymologically primary; but as seen below, the stationary meaning of *hína* is prior to the directional, and would require a locative rather than an accusative ending.

<sup>48</sup>*-na* is the regular instrumental singular suffix of *a*-stem nouns in Sanskrit (< *\*-neh<sub>1</sub>*, the instrumental of Indo-European *\*n*-stems (Beekes 1995:176)), and had also spread to *\*o*-stems (*vṛk-ena* ‘with the wolf’), amongst which *\*yo* is counted. However, Lithuanian *vilkù* ‘ibid.’ points to an Indo-European *\*o*-instrumental *\*-oh<sub>1</sub>* (Beekes 1995:192), so that the Sanskrit suffix is a later development—and its applicability to Greek is perforce uncertain.

<sup>49</sup>The semantic development of *yéna* and *téna* (detailed in Monier-Williams 1979 [1899]) is interesting for the parallels it presents to both *hína* and *hórou*. While the most ancient Indic text (Rig-Veda) has *yéna* in the instrumental meaning ‘by whom or by which, by means of which, by which way’, the Mahabharata adds the locative ‘in which direction, whither, where’; Manu’s Lawbook adds ‘in which manner’; the Mahabharata and the Kathāsaritsāgara the causal relativiser ‘on which account, in consequence of which, wherefore’, which already in the Rig-Veda also appears as the causal connective ‘because, since, as’; and authors unattributed in Monier-Williams’ (1979 [1899]) dictionary also use *yéna* as a resultative/purposive: ‘that, so that, in order that’.

The semantic progression is thus: INSTRUMENTAL > MANNER > {LOCATIVE; CAUSE; RESULT}.

<sup>50</sup>Pokorny’s (1959) etymological dictionary of Indo-European relates Old Irish *cen* < *\*k<sub>i</sub>-na* and old High German *hina*, reconstructing *\*k<sub>o</sub>-*, *\*k<sub>e</sub>-* as an “ego-deictic”, and *\*k<sub>i</sub>-na* as ‘from where’. Monteil’s attempt to relate these locative instances of *-na* to the Sanskrit instrumental have not been echoed elsewhere, and Debrunner & Wackernagel’s (1957 [1896]) Sanskrit grammar identifies no other possible Indo-European cognate to *yéna* than Greek *hína*.

In Homeric Greek, locative *hína* occurs 17 times. It is a relativiser (with one anaphoric exception); it is usually headed, or has a correlative demonstrative locative, like *tê:i* and *ént<sup>h</sup>a* ‘there’ (pseudo-relative). There are rare instances in Homer where locative *hína* has no antecedent, but instead introduces the complement of a verb of motion (25a) or a perception, cognitive or linguistic verb (25b).

(25a) (viii BC)  
 νῦν δ’ ἐθέλω καταθέσθαι ἴν’ οὐ πυρὸς ἴζειτ’ ἀντιμή.  
 nû:n d e<sup>h</sup>élo: katal<sup>h</sup>ést<sup>h</sup>ai **hín** ou puròs híkset autmé:  
*but now I wish to lay them up, **where** the vapour of fire will not reach them.*  
 (Od XIX 20)

(25b) (viii BC)  
 ἀλλ’ ὄψεσθ’ ἴνα τώ γε καθεύδεται ἐν φιλότῃτι.  
 all ópsesth<sup>h</sup> **hína** tó: ge kat<sup>h</sup>eúdeton en p<sup>h</sup>ilóte:ti.  
*But see **where** they sleep together in love (Od VIII 313)*

Such usage is much more frequent in Ionic-Attic, where *hína* frequently expresses motion towards:<sup>51</sup>

(7a) (~450 BC)  
 εἰρόμην τοὺς ἄγχιστα οἰκέοντας τῆς λίμνης ὅκου εἶη ὁ χοῦς ὁ ἐξορυχθεῖς. οἱ δὲ ἔφρασαν  
 μοι ἴνα ἐξεφορήθη  
 eiróme:n toùs ágk<sup>h</sup>ista oikéontas tês límne:s hókou eíe: ho k<sup>h</sup>oús ho eksoruk<sup>h</sup>t<sup>h</sup>eís.  
 hoì dè ép<sup>h</sup>rasán moi **hína** eksep<sup>h</sup>oré:t<sup>h</sup>e:  
*I asked those who dwell nearest to the lake where the stuff was that had been dug out. They told me **whither** it had been carried... (Hdt II 150) (linguistic predicate; directional)*

(26a) (~450 BC)  
 ἀναπυθόμενος δὲ τοὺς χώρους καταβάλλειν ἐκέλευε ἴνα ἐπιτηδεότατον εἶη  
 anaput<sup>h</sup>ómenos dè toùs k<sup>h</sup>órou:s katabálllein ekéleue **hína** epite:deótaton eíe:  
*in such places **as** (where) enquiry showed to be the fittest he bade them store it [provisions] (Hdt VII 25) (cognitive predicate; static)*

(26b) (414? BC)  
 φόβῳ δ’ ἂ μὴ χρῆν εἰσορᾶν καθήμεθα/ σιγῇ, τέλος δὲ πᾶσιν ἦν αὐτὸς λόγος/ στείχειν  
 ἴν’ ἦσαν, καίπερ οὐκ ἐωμένους.  
 p<sup>h</sup>óbo:i d hà mè: k<sup>h</sup>tê:m eisorâ:m kat<sup>h</sup>é:met<sup>h</sup>a/ sigê:i, télòs dè pâ:sin ê:n hautòs lógos,/ steík<sup>h</sup>ein **hín** ê:san, kaíper ouk eo:ménois.  
*Yet we remained in silence, for fear that we shouldn’t look; but finally everyone made the same decision, to go **to where** they were, even though we were not allowed to.*  
*And still we waited,/ because you had forbidden us to look,/ but we suddenly*

<sup>51</sup>The use of *hoî* by Euripides in (7b) closely parallels that of *hína* by Sophocles in (25c), indicating the equivalence of the two locatives:

(25c) (~442 BC)  
 οὐχ ὀρᾶς ἴν’ εἶ κακοῦ;  
 ouk<sup>h</sup> horâ:s **hín** eî kakoû?  
 NEG you.see *whither* you.are bad (GEN.PL)  
 Can’t you see the degree of misfortune **that** you are **in**?  
 Your situation’s desperate; can’t you see? (Soph Aj 386)



*decided to find out/ and hurried to the inlet.* (Eur IT 1344) (motion predicate; directional)

The stationary usage of *hína* persists in Attic prose and later Greek, although it is characterised in Liddell–Scott–Jones as “rare”:

(26c) (399 BC)

καίτοι εἴπερ ἀπέκτεινε Φρύνιχον, ἔδει αὐτὸν ἐν τῇ αὐτῇ στήλῃ, *hína* περ Θρασύβουλον [καὶ Ἀπολλόδορον], Ἀθηναῖον πεπονημένον <ἐγγεγράφαι>.  
 kaítoi eíper apékteine p<sup>h</sup>rúnik<sup>h</sup>on, édei autòn en tē:i autē:i sté:lei, *hína* per t<sup>h</sup>rasúboulon kaì apollódo:ron, at<sup>h</sup>e:naïon pepoie:ménon eggegráp<sup>h</sup>t<sup>h</sup>ai.  
*If, however, he had killed Phrynichus, he ought to appear as having been made an Athenian in the inscription on the same slab as (where) Thrasybulus [and Apollodorus] does;* (Lys XIII 72)

The two functions of *hína*, purposive and locative, had distinct careers. The locative function of *hína* occupies 10% of all usage of *hína* by prose authors and Aristophanes, and 13% in Homer; however, it takes up 50% of usage in Euripides, and even more in Pindar, Aeschylus and Sophocles. In Aristophanes, at least a quarter of all instances of locative *hína* occur in stylistically-marked passages—including parodies of Euripides. This means that, certainly by 5 BC, locative *hína* was (hypercorrectly) marked for high style—i.e. obsolescent in the vernacular. Conversely, purposive *hína* is avoided in Pindar, Aeschylus, Sophocles, and the Attic inscriptions, but frequent in Aristophanes; this indicates that purposive *hína* was regarded as colloquial. So in the spoken language, the purposive had displaced the locative. The subsequent career of *hína* bears this out: the locative had died out by Middle Greek, while the purposive was to engender the wide usage of *na* in Modern Greek.

Now, given the locative use of *hína*, the origin of the purposive would seem straightforward: it is a cross-linguistic commonplace that directional expressions give rise to purposives, for evidence of which one need not venture any further than the English infinitival *to*. Christidis (1982:69) and Papadopoulou (1994a:123) explicitly appeal to this property in their account of *na*.<sup>52</sup> This origin for *hína* was at one time accepted amongst hellenists: Kühner & Gerth (1963 [1898–1904] §553.1 Note 1), for example, consider the locative meaning “original,” comparing its expansion to that of *wo* ‘where’ in dialectal German (comparable in turn to *pu*). As an instance of the reanalysis of locative to purposive *hína*, Kühner & Gerth propose the following:

(27a) (viii BC)

σοὶ δὲ γάμος σχεδὸν ἐστίν, *hína* χρὴ καλὰ μὲν αὐτὴν/ ἔννυσθαι, τὰ δὲ τοῖσι παρασχέιν,  
 oí ké s’ ἄγονται!  
 soì dè gámos sk<sup>h</sup>edón estin, *hína* k<sup>h</sup>rè: kalà mèn autē:n/ hénust<sup>h</sup>ai, tà dè toîsi parask<sup>h</sup>eîn, hoí ké s’ ágo:ntai!  
*but thy marriage is near, when (where, in order that) it is fit that thou shouldst put on beautiful garments thyself, and shouldst give some to others, who will conduct thee.* (Od VI 27)

<sup>52</sup>Christidis also cites German *zu*, Persian *be*, and Bantu purposives.

But more recent scholarship points away from such an account. The first piece of evidence is that the purposive meaning of *hína* is already entrenched in Homer; of 138 purposive instances in Homer, Monteil (1963:380) finds only 11 cases ambiguous with the locative. The proportion of locative to purposive *hína* in Homer is not substantially different from that in Aristophanes; so the process giving rise to the purposive was already complete as early as Homeric Greek. Any ambiguous instances of *hína* in later authors do not imply the reanalysis was ongoing; they merely characterise the dynamic semantic enrichment typical of relativisation (temporal, purposive, causal relative clauses, etc.)

The second piece of evidence is that Homeric *hína* was *not* directional. As Monteil (1963:379) explicitly states,

*hína* is insensitive to the movement/non-movement distinction (*poí?/poú?*), but expresses non-movement more readily. Homer presents only one example [out of 17] (25a) where the notion of movement appears; this developed principally in *v* BC.

Indeed, the Homeric examples where Monteil identifies ambiguity between locative and purposive meaning are consistently stationary:

(27b) (viii BC)

ἄλλ' ἄγε, χρήματα μὲν मुखῶ ἄντρου θεσπεσίοιο/θείομεν αὐτίκα νῦν, ἵνα περ τάδε τοι  
σῶα μίμνη.

all áge, k<sup>h</sup>rémata mèn muk<sup>h</sup>ô:i ántrou t<sup>h</sup>espesíoio/ t<sup>h</sup>eíomen autíka nû:n, **hína** per  
táde toi sóa mímnei.

Come, let us place these riches on the field in the hollow of that divine cave,

**where /so that** they may indeed be guarded in safety.

*But come, let us now straightway put the chattels in the recess of the divine  
cave, that even these may remain here safe:* (Od XIII 364)

But if *hína* became predominantly directional (indeed, directional at all) only in *v* BC, while Homeric Greek already had a fully developed purposive *hína*, and the Homeric instances of a locative/purposive ambiguity are all stationary, then *hína* cannot be an instance of DIRECTIONAL > PURPOSIVE. And the directional meaning *hína* acquired need not be invoked as influencing the subsequent career of the purposive *hína*, as this career can be fully accounted for in terms of a purposive alone.

Monteil (1963:380–382) pursues an alternative origin of purposive *hína*: prompted by the comparative data, he considers both the locative and purposive meanings independent developments from an original instrumental. Amongst the evidence he adduces for this is the fact that the originally instrumental *hâ:i*, *hópai* (the Doric equivalents of *hê:i*, *hópe:i*) developed into purposives in Cretan, and that Latin *ita*, which he considers cognate to *hína*, is primarily an instrumental ('so'), which nonetheless can also introduce purposives. Examples of instrumentals/manner adverbs becoming purposives are by no means rare; this development also took place with the major Greek instrumentals, *ho:s/hópo:s*,

although it is only incipient in Homer (Monteil 1963:346).<sup>53</sup> The instrumental is thus a more plausible origin of the purposive meaning of *hína* than the directional.<sup>54</sup>

Both accounts of the origin of *hína* are problematic.<sup>55</sup> The evidence for an instrumental origin of *hína* is not as strong as Monteil makes it out to be: only the Sanskrit evidence is beyond dispute, and even there the spread of the *-na* instrumental from *\*n*-stems to the pertinent *\*o*-stems is a local phenomenon. The Latin instrumental form *ita*, which Monteil adduces, is a parallel development which might not represent the same suffix; and the Latin, Germanic and Celtic *-na* locatives are treated by Pokorny (1959) as a different phenomenon. However, those locatives are no better evidence for a directional *hína*: the Celtic-Germanic data in fact points to *-na* as an ablative, and not the required allative. The etymological meaning of *hína* for both accounts is absent in Homer; the Attic directional seems to be a secondary development, analogically extending the locative to allative verb complements.

But the close parallel with Sanskrit *yéna* on the one hand, and on the other the fact that Homeric Greek had an entrenched instrumental (*ho:s*) to displace instrumental *hína*, but no distinct directional to displace directional *hína* (*hópoi* is later than Homer), indicate that the instrumental is indeed the original meaning of *hína*. And there is no good evidence for an early directional interpretation of *hína*, which might have determined its transition to a purposive. This means that a localist view of the complementary distribution of *pu* and *na* in Modern Greek is not tenable: there is nothing localist about the development of

<sup>53</sup>One could also mention English *so* as an instance of such a development.

<sup>54</sup>An instrumental meaning for *hína* does not seem to have survived into attested Greek. Monteil gives one instance of *hína* in Pindar which is ambiguous between causal ('because'), temporal ('when'), and instrumental (manner: 'how') readings—but certainly not locative; this would constitute weak evidence of an originally instrumental meaning.

(27c)

(473 BC)

κεῖνος ἄμφ' Ἀχέρων-τι ναιετάων ἐμὸν γλῶσσαν εὐρέτω κελαδῆ-τιν Ὀρσοτρίαίαι ἴν' ἐν ἀγῶνι βαρυκτύπου θάλησε Κορινθίσις σελίνοις.

keínos amp<sup>h</sup> ak<sup>h</sup>éronti naietào:n emà:n glô:ssan heuréto: keladê:tin orsotriáina *hín* en agô:ni baruktýpou t<sup>h</sup>ále:se korint<sup>h</sup>íois selínois.

may he, dwelling by the Acheron, find my tongue celebrating in song **be-cause/when/how/[where?]**, in the contest of the heavy-sounding trident-wielder [Poseidon], he bloomed with Corinthian celery [prize of the Isthmian games].

*As for him, dwelling on the banks of Acheron, let him mark my ringing voice proclaiming **where** in the contest of the loud-thundering Shaker of the trident his glory bloomed with the Corinthian parsley-crowns:* (Farnell)

*may he, who now dwelleth beside the stream of Acheron, find an ear for my voice that ringeth loudly here on earth, **where**, in the contest of the loudly roaring wielder of the trident, he burst into bloom with the Corinthian crown of wild celery.* (Sandys) (Pi N IV 142)

Both translators cited have not hesitated to translate *hína* as 'where' here; but Farnell's rendering is clumsy, while Sandys has had to insert a vacuous antecedent ('on earth') to make the locative reading coherent.

<sup>55</sup>As seen, the very stem of *hína* has been disputed; only its suffix is discussed here.

*hína*. As I contend in the conclusion of this work, this is a fatal blow to a localist view of *pu* itself.

## 5.2. Middle Greek *hópou*<sup>56</sup>

### 5.2.1. Continuation of classical extensions

By the end of the Classical period, we have the onset of the effacement of the *hópou/hópoi* distinction (20c), and the spread of *hópou* to temporal, circumstantial, and causal usages. Two features characterise the development of *hópou* in Early Middle Greek (Hellenistic Koine). The first is that the distinction between *\*yo* and *\*yo + \*kwó* relativisers is effaced in favour of the latter: by the time of the New Testament, *hóstis* was displacing *hós* in the nominative,<sup>57</sup> and *hópou* has displaced *hoû*. Thus, while in the New Testament *hoû* occurs primarily in Luke, a ‘literary’ author, *hópou* is predominant in the New Testament overall (Robertson 1934 [1923]:969). The following counts I have prepared compare the distribution of *hópou*, and *hoû* in three functions: as a locative relativiser, as a genitive possessive relativiser, and as a genitive relativiser acting as the complement of some preposition.<sup>58</sup> The books of the New Testament are ordered from higher to lower linguistic level, relative to the Classical linguistic ideal.

	<i>hópou</i>	<i>hoû</i> (LOC)	<i>hoû</i> (GEN)	<i>hoû</i> (PREP)
Luke	5	5	2	17
Acts	1	9	7	13
Hebrews	3	2	1	7
Other Epistles	6	6	13	23
Matthew	13	2	3	9
Mark	15	0	2	2
John	30	0	6	4
Revelation	8	1	3	2

Table 17. Counts of *hópou* and *hoû* in the New Testament

The counts correlate with the level of education associated with the respective authors; locative *hoû* dominates in the literary authors (Luke, Acts, Hebrews), and is largely absent in the vernacular authors (Matthew, Mark, John, Revelation). Genitive *hoû*, on the other hand, retains a steady presence in all

<sup>56</sup>The following discussion is based mainly on Bakker (1974).

<sup>57</sup>As the extensive discussion in Rydbeck (1967:98–118) shows, the traditional assertion that *hóstis* displaced *hós* is something of an overstatement. There was clearly no semantic differentiation between the two; but *hóstis* is only used in non-neuter nominative contexts, where the definite article does not have an initial *t* to distinguish it from *hós*. (Cf. the respective forms of the definite article and relativiser in DAT.FEM.SG (*tê:i/hê:i*) and NOM.FEM.PL (*hai/haî*). So in the absence of a semantic difference, the distribution of *hós* and *hóstis* was motivated by an avoidance of homonymy with the definite article. For the most part, this also characterises Malalas’ usage in *vi AD* (Weierholt 1963:20).

<sup>58</sup>In the last function, the combination frequently acted as a single connective (e.g. *mék<sup>h</sup>ris hoû* ‘until which = until’, *ap<sup>h</sup> hoû* ‘from which, since’ > CSMG *afu* ‘since’), and so need not count as an Atticism.

New Testament authors. So it is apparent that the locative *hoû* was dying out in the vernacular, whereas the genitive *hoû* was not.

*hórou* occurs readily with a definite antecedent by this stage of its development; any trace of its Homeric indefiniteness is long gone:

- (28) (90~99)  
 ταῦτα ἐν Βηθανίᾳ ἐγένετο πέραν τοῦ Ἰορδάνου, **ὅπου** ἦν ὁ Ἰωάννης βαπτίζων.  
 taûta en be:t<sup>h</sup>ania:i egéneto péran toû iordánou, **hórou** ê:n ho io:áne:s baptízdo:n.  
*This took place in Bethany beyond the Jordan, **where** John was baptizing.*  
 (NT Jo 1:28)

The second characteristic feature of Middle Greek is that the *hórou/hóroi* distinction has been completely effaced in favour of *hórou*. Both *hoî* and *hóroi* are absent from the Septuagint and the New Testament; as the following examples from the New Testament show, *hórou* was entrenched as a directional relativiser:

- (29a) (90~99)  
**ὅπου** ἐγὼ ὑπάγω ὑμεῖς οὐ δύνασθε ἐλθεῖν.  
**hórou** egò: hupágo: humeîs ou dúnast<sup>h</sup>e elt<sup>h</sup>eîn.  
***where** I am going, you cannot come.* (NT Jo 8:21)

- (29b) (90~99)  
 ὅταν δὲ γηράσῃς, ἐκτενεῖς τὰς χεῖράς σου, καὶ ἄλλος ζώσει σε καὶ οἴσει **ὅπου** οὐ θέλεις.  
 hótan dè ge:rásē:is, ektenéi:s tās k<sup>h</sup>eîrás sou, kaì állos zdó:sei se kaì oîsei **hórou** ou t<sup>h</sup>éleis.  
*but when you are old, you will stretch out your hands, and another will gird you and carry you **where** you do not wish to go.* (NT Jo 21:18)

The third Classical locative ending, *-e:i*, is also absent from the New Testament.

The semantic expansion of *hórou* also continued on other fronts. There are more instances of broader senses of location for *hórou*, which would formerly have been expressed by prepositional phrases:

- (29c) (~65)  
 καὶ μὴ δυνάμενοι προσενέγκαι αὐτῷ διὰ τὸν ὄχλον ἀπεστέγασαν τὴν στέγην **ὅπου** ἦν,  
 καὶ ἐξορύξαντες χαλῶσι τὸν κράβαττον **ὅπου** ὁ παραλυτικὸς κατέκειτο.  
 kaì mè: dunámenoi prosenégkai autô:i dià tòn ók<sup>h</sup>lon apestégasan tē:n stége:n  
**hórou** ê:n, kaì eksorúksantes k<sup>h</sup>alô:si tòn krábatton **hórou** ho paralutikòs katékeito.  
*And when they could not get near him because of the crowd, they removed the roof above him (**where** he was); and when they made an opening, they let down the pallet **on which** the paralytic lay.* (NT Mc 2:4)

- (29d) (96)  
 εἶτα γενναῖος γενόμενος αἶρει τὸν σηκὸν ἐκεῖνον, **ὅπου** τὰ ὀστᾶ τοῦ προγεγονότος ἐστίν  
 eîta gennaîos genómenos aîrei tòn se:kòn ekeînon, **hórou** tà ostâ: toû progegonótos estín  
*This, on reaching full growth, takes up the nest containing the bones of its predecessor (**where** = in which the bones of its predecessor are).* (1 Clem 25:3)

There also persist instances of *hórou* used to denote circumstance:

(30a) (100~120)

οὐδέν, ἔφη, τῶν μεγάλων ἄφνω γίνεται, *όπου* γε οὐδ' ὁ βότρυς οὐδὲ σῦκον  
 oudén, éph<sup>h</sup>e:, tṓ:n megálo:n ár<sup>h</sup>no: gínetai, *hórou* ge oud ho bótrus oudè sū:kon  
*Epictetus replied: Nothing great comes into being all at once; why, not even*  
*does the bunch of grapes, or a fig.* (Epict Gnom I 15.7)

(30b) (96)

μέγα καὶ θαυμαστὸν οὖν νομίζομεν εἶναι, εἰ ὁ δημιουργὸς τῶν ἀπάντων ἀνάστασιν  
 ποιήσεται τῶν ὁσίως αὐτῷ δουλευσάντων ἐν πεποιθήσει πίστεως ἀγαθῆς, *όπου* καὶ δι'  
 ὀρνέου δείκνυσιν ἡμῖν τὸ μεγαλεῖον τῆς ἐπαγγελίας αὐτοῦ;  
 méga kai t<sup>h</sup>aumastṓn oūn nomízdomen eīnai, ei o de:miourgós tṓ:n hapánto:n  
 anástasin poié:setai tṓ:n hosío:s autṓ:i doulesánto:n en pepoit<sup>h</sup>é:sei písteo:s agat<sup>h</sup>è:s,  
*hórou* kai di ornéou deíknusin he:mī:n tò megaleíon tḗ:s epaggelías autoῦ?  
*Now, when the Creator of all things has even made use of a bird to disclose*  
*the magnitude of His promises to us, need we find it such a great wonder that*  
*He has a resurrection in store for those who have served him in holiness and*  
*in the confidence of a sound faith?* (1 Clem 26:1)

cause:

(30c) (57)

*όπου* γὰρ ἐν ὑμῖν ζῆλος καὶ ἔρις, οὐχὶ σαρκικοί ἐστε καὶ κατὰ ἄνθρωπον περιπατεῖτε;  
*hórou* gàr en humī:n zdē:los kai éris, ouk<sup>h</sup>i sarkikóí este kai katà ánt<sup>h</sup>ro:pon  
 peripateíte?  
*For while there is jealousy and strife among you, are you not of the flesh,*  
*and behaving like ordinary men?* (NT 1 Cor 3:3)

and (apparently a novel usage) contrast:

(30d) (100~125)

δόξας οὐ τρέμουσιν βλασφημοῦντες, *όπου* ἄγγελοι ἰσχυροὶ καὶ δυνάμει μείζονες ὄντες  
 οὐ φέρουσιν κατ' αὐτῶν παρὰ Κυρίῳ βλάσφημον κρίσιν.  
 dóksas ou trémousin blasp<sup>h</sup>e:moúntes, *hórou* ággeloi isk<sup>h</sup>úí kai dunámei  
 meízdones óntes ou p<sup>h</sup>érousin kat autṓ:n parà kurío:i blásp<sup>h</sup>e:mon krísin.  
*they are not afraid to revile the glorious ones, whereas angels, though*  
*greater in might and power, do not pronounce a reviling judgement upon*  
*them before the Lord.* (NT 2 Petr 2:11)

*hórou*-clauses, like relative clauses in general, could be also enriched in other manners; for example, they could become purposive, using the future indicative:

(30e) (~65)

ποῦ ἐστὶν τὸ κατάλυμά μου, *όπου* τὸ πάσχα μετὰ τῶν μαθητῶν μου φάγω;  
 pouῦ estin tò katálumá mou, *hórou* tò pásk<sup>h</sup>a metà tṓ:n mat<sup>h</sup>e:tṓ:n mou p<sup>h</sup>ágo:?  
*Where is my guest room, where I am to eat the passover with my disciples?*  
 (NT Mc 14:14)

### 5.2.2. Pathway to relativiser

#### *Papyri*

Eventually, *hórou* became a relativiser proper; this is the development crucial to its modern functionality. However, *hórou* as a relativiser is conspicuously absent from the most vernacular texts of the period, the papyri. The following three examples have been proposed in the literature as such instances (see review in Bakker 1974:91); all of them are doubtful:

- (31a) (iii AD)  
 ἐνεβαλόμεθα εἰς τὸ πλοῖον Ἱέρακος τοῦ πολιτικοῦ τοῦ φίλου σου, ὅπου ἔμενες ἐνθάδε  
 ἄν' [ἄνω?] ἐν τῇ οἰκίᾳ αὐτοῦ, ἐλαίου βάδια τέσσαρα.  
 enebalómet<sup>h</sup>a eis tò ploïon hiérakos toû politikou toû p<sup>h</sup>íλου sou, **hórou** émenes  
 en<sup>h</sup>áde án [áno:?] en tē:i oikíai: autoû, elaiou bádia téssera.  
 we loaded four *vadia* of oil into the ship of Hierax the politician your friend,  
**where** you stayed up there in his house. (PBaden 43.6–10)

The meaning is that the addressee stayed at Hierax's house; the redundant mention of 'in his house' reinforces the locative denotation of *hórou*, and suggests that its locative meaning was becoming attenuated.

- (31b) (iii~iv AD)  
 τόπον δὲ παράσχες ποῦ μίνωσιν  
 tópon dè parásk<sup>h</sup>es **poú** míno:sin  
 And you gave them a place **where** they could stay. (PGen 75.13–15)

This is still a locative rather than a generic relativiser, but it does indicate a conflation of interrogatives and relativisers. This occurred sporadically in Ancient and Middle Greek (e.g. *tís*) (Buck 1955 §131); however, that Early Modern Greek consistently uses *opu* rather than *'pu* as a relativiser indicates that the conflation had not yet generalised.

- (31c) (vi~vii AD)  
 ἐπέτρεψ[α] τῇ ὑμετέρᾳ θεοφιλίᾳ ἤτοι καὶ ἤτησα αὐτὴν ὥστε ἀπὸ λιθοπλάκων ποιῆσε  
 τὸ ὄ[σ]πί[τι]ν σου (?) ἐμισθώσω κ(αὶ) τέκτονας βαλῖν  
 epétrēpsa tē:i humetérai: t<sup>h</sup>ēop<sup>h</sup>ilía:i étōi kai éite:sa autē:n hó:ste apò lit<sup>h</sup>opláko:n  
 poiē:se tò hospítin **sou** (?) emist<sup>h</sup>ó:so: kai téktonas balí:n  
 I gave permission to your holiness, and I requested from you that I might build  
**your** house out of stone slabs, I will rent out, and appoint architects. (PBas  
 19.2–4; emended by Kapsomenakis (1938:99))

Kapsomenakis considers the reading σου 'your' not to make sense, and reads it as being either που (*pou*) or του (*tou*), as a relativiser: 'and I requested from you that I build the house **which** I will rent out'. Kapsomenakis is inclined to accept *pou* here; but given overall usage in papyri, *tou* is far likelier.

#### *Rejected by Bakker*

The annotated list of examples below traces examples of *hórou* from the Middle Greek literary corpus identified as relativising by Jannaris (1897) and Rydén

(1963:196), but rejected in Bakker's (1974) monograph as instances where the head is the subject or direct object of the relative clause—the criterion establishing that the relativisation is no longer a semantic extension of the locative sense, but a relativiser proper.

In the first set of examples, *hórou* has moved from a broadly locative sense to a sense which is not locative, but still oblique and not subject or object—namely, the instrumental:

(32a) (vi AD)

εἶτα μετὰ τὸ καῦσαι αὐτὸν τὸν φοῦρνον οὐχ εὔρεν **ἐνθα** ὄφειλεν σφογγίσαι τὸν φοῦρνον, τῶν ἀδελφῶν τοῦτο κρυψάντων, πρὸς τὸ πειρᾶσαι αὐτόν.  
 eíta metà tò kaúsai autòn tôn p<sup>h</sup>oûrnnon ouk<sup>h</sup> heûren **ént<sup>h</sup>a** ó:p<sup>h</sup>eilen sp<sup>h</sup>oggísai tôn p<sup>h</sup>oûrnnon, tó:n adelph<sup>h</sup>ò:n toûto krupsánto:n, pròs tò peirâ:sai autòn.  
*Sed cum succendisset illum, non invenit **cum quo** deberet extergere furnum; fratres enim ipsum pannum absconderant, ut tentarent eum.*  
 After he fired up the oven he didn't find **anything with which** to wipe the oven, as the brothers had hidden it to tempt him. (Jo.Mosch Prat 2949B)

*ént<sup>h</sup>a* was a classical locative relativiser, which could be used as a hypercorrection of *hórou*. Here *ént<sup>h</sup>a* is used as a free relativiser, but the denotation is not local, but instrumental: 'something with which', not 'someplace where'. In this instance, *hórou* has escaped any semblance of a locative meaning, and is moving up the hierarchy of case roles towards SUBJECT.

(32b) (~480)

οὐδὲ γὰρ εἶχέ τιποτε τοῦ αἰῶνος τούτου ὕλην εἰ μὴ ῥαφίδα **ὅπου** τὰ θάλλια ἔσχιζεν  
 oudè gàr eíkh<sup>h</sup>é tipote toû aið:mos toútou húle:n ei mè: rap<sup>h</sup>ída **hórou** tà t<sup>h</sup>állia ésk<sup>h</sup>izden  
*He owned nothing in this world, except a knife **with which** he cut reeds*  
 (Apoth.Patr 300D)

This is another instance like (32a), where *hórou* denotes an instrument; here *hórou* appears as itself, rather than in hypercorrected guise.

(32c) (~650/xi AD)

εἰσερχόμενος διὰ τῆς πόρτης, **ὅπου πλησίον** ἐστὶν τὸ σχολίον τῶν παιδίων.  
 eiserk<sup>h</sup>ómenos dià tês pórtē:s, **hórou plesíon** estín tò sk<sup>h</sup>olíon tō:n paidíon.  
*and entered the gate, **where** there was a children's school **nearby**.* (Leont.N v.Sym 1708C=145.23)

In this example, Bakker sees *hórou* as showing "how the local sense of *hórou* could change into that of what usually is denoted by a relat. pronoun: here *hórou* is even accompanied by an adverb." The clarifying adverb *plesíon* 'nearby' is not characteristic of classical *hórou*-relativisation, and sounds disfluent in the English translation; however, it is idiomatic in Modern Greek (*opu itan koda to sxolio ton pedion*). Nonetheless, this example is still clearly local, although the adverb signals that *hórou* could no longer be considered exclusively local, and required disambiguating adverbs.

The next set of examples is ambiguous between a locative and a properly relativising function:



(33a)

(96 AD)

πόρρω γενέσθω ἀφ' ἡμῶν ἡ γραφὴ αὕτη, ὅπου λέγει· Ταλαίπωροί εἰσιν οἱ δίψυχοι  
 pórrō: genést<sup>h</sup>o: ap<sup>h</sup> he:mō:n he: grap<sup>h</sup>è: haúte:, **hórou** légei; talaíporoí eisin hoi  
 dípsuk<sup>h</sup>oi  
 Far be from us that scripture, **where** it says: Miserable are the two-souled  
*Far be from us those words of Scripture*: How miserable are the irresolute  
 (1 Clem 23:3)

Jannaris identifies this as the first instance of relativiser *hórou* ('that Scripture, **which** says...'). Now, in the New Testament and Clement, the subject of *légei* 'says' referring to Scripture can be either the author (God, a prophet), or the scripture itself. If the subject is rational, then *hórou* means merely 'in which' ('of Scripture, **in which** God/the prophet says'), and is another case of an abstract locative. So Bakker (1974:90) postulates that *hórou* cannot be a simple relativiser, because "the words *hórou légei* do not mean 'who says', but 'where it is said', or 'where the Scripture says', or 'where God says'."

If on the other hand the subject of *légei* is the same as the head of the *hórou*-clause ('the Scripture, **where** the Scripture says'), then nothing prevents a simple relativiser interpretation even though the referent is inanimate ('the Scripture **which** says'). However, a locative interpretation is possible even if 'the Scripture' is the subject of *légei*, and the inanimate subject makes it less likely the two clauses have the same subject.<sup>59</sup>

In all, (33a) is ambiguous; the lack of other clear examples from the period of relativiser-*hórou* means it is unlikely to mark the beginning of the reanalysis.

(33b)

(525–550)

καὶ εὐρέθησαν ἔγγιστα ἀλλήλων κατέναντι τῆς ἀγίας Θεκλῆς τῆς ἐν Σύκαις εἰς τὸν  
 τόπον τοῦ ρεύματος ὅπου λέγεται τὸ βυθάριν.  
 kai eurét<sup>h</sup>ēsan éggista allé:lō:n katénanti tē:s hagías t<sup>h</sup>ékle:s tē:s en súkai:s eis tòn  
 tópon toῦ reúmatos **hórou** légetai tò but<sup>h</sup>árin.  
*They drew very close to one another opposite St Thekla's in Sykai at that part  
 of the Bosphorus which is called Bytharion.* (Jo.Mal 405.4–5)

This instance is representative of several other places in Malalas where 'where it is called' (*hórou légetai* or *ént<sup>h</sup>a légetai*) is used to give a place name.<sup>60</sup> While

<sup>59</sup>A complication is pointed out by Bakker in the Latin and Coptic translations of Clement, which have a simple relativiser here (whereas the Syriac translation has a locative). The Latin translation is known to date from before 150 AD; since *hórou* was not being used as a simple relativiser in the papyri at that time, Bakker considers it impossible for this reading to be authentic. He considers it likelier that the Latin translator (or a subsequent copyist) intervened in the text to make the reference clearer than the locative would allow.

<sup>60</sup>Shortly before his death in 1995, the Danish Byzantinist Jorgen Raasted informed me by e-mail that he had found a note on a manuscript page he had dated from the eighth century, and had placed in Southern Italy, which contained the equivalent expression in Latin: **ubi dicitur Sanctus Petrus** 'where it is called St Peter'. Raasted considered this evidence of the Greek development, calqued into Latin in the Greek-speaking region.

However, Compennass (1917:117) finds instances in Late Latin of *ubi* 'where' used as the subject of a relative clause, consistently with a locative antecedent, and in exactly the same pattern as (33b), though not from Greek-speaking regions; e.g. from the *Passio Fidelis, Exanti et Carpofori* (written in Como in Northern Italy—although I have not been able to trace this work in the standard references on hagiography or mediaeval Latin): *dumque venissent in locum, ubi*

Bakker (1974:91) admits “it is striking to see how close this use of *hórou* and *ént<sup>h</sup>a* (= *hórou*) is to what is usually denoted by a relat. pronoun”, he does not consider this a certain instance of the relativisation, because it still has locative denotation.<sup>61</sup> So this is still not a certain instance of reanalysis.

(33c)

(vi AD)

τινὰ νύκτα οὖν ἔρχεται [ὁ νεκρὸς ἀναχωρητῆς] κατὰ τοὺς ὕπνους, καὶ φαίνεται τῷ νῦν πατέρι ἡμῶν, τῷ καλῷ καὶ ἀγαθῷ ποιμένι ἀββῆ. Ἰουλιανῷ, λέγων· Λάβε τινὰς, καὶ δεῦρο ἔπαρόν με ἐκ τοῦ τόπου ὅπου κεῖμαι, εἰς τὸ ὄρος τὸ λεγόμενον ἢ Ἰελαφος. λαβὼν οὖν ὁ Πατὴρ ἡμῶν, ἀνήλυθεν εἰς τὸ ὄρος **ὅπου** αὐτὸς εἶπεν.

tinà nýkta oûn érk<sup>h</sup>etai katà toùs hýpnous, kaì p<sup>h</sup>áinetai tōi nû:n patēri he:mō:n, tōi kalō:i kaì agat<sup>h</sup>ō:i poimēni abbâ:i ioulianō:i, légon; lábe tinàs, kaì deûro éparón me ek toû tōpou hórou keímai, eis to óros to legómenon he: élap<sup>h</sup>os. labōn oûn ho patēr he:mō:n, ané:lut<sup>h</sup>en eis tò óros **hórou** autòs eípen.

*Nocte vero quadam venit in somnis, et apparuit ei qui nunc est, patri nostro, bono et optimo pastori, abbati Juliano, dicens: Sume tecum aliquos, et veni, tollens me de loco ubi jaceo, in monte qui vocatur Cervus. Sumpsit igitur quosdam ex nobis Pater noster, et ascendit in montem quem ille dixerat.*

So one night [the dead anchorite] came in a dream, and appeared to our current Father, the good and noble pastor Abbot Julian, saying: “Take some men, and come take me from the place where I lie, in the mountain called The Deer.” So taking some of us along, our Father went up to the mountain **where/which** he said. (Jo.Mosch Prat 2941A)<sup>62</sup>

This instance is fully ambiguous: *hórou* could mean ‘the mountain **which** he said/spoke of’ (which is how the Latin translators in Migne’s 1860 edition interpreted it), or it could mean ‘the mountain **where** he said to go to’, retaining a locative meaning. Because a locative meaning is still possible, this is not a clear instance of reanalysis.

The final instance involves ambiguity between the locative and a different meaning *hórou* had acquired, that of circumstance.

(33d)

(~650/xi AD)

οὐ πάντας δὲ ἠσπάσατο, ἀλλ’ **ὅπου** ἢ θεοῦ χάρις ἐγνώρισεν αὐτῷ.

ou pántas dē e:spásato, all **hórou** he: t<sup>h</sup>eou k<sup>h</sup>áris egnó:risen autō:i.

*He did not kiss all of them, but only those whom the grace of God made known to him.* (Leont.N v.Sym 1717A=151.4)

While *hórou* could be interpreted here as an animate free relative (‘whomever’), Bakker feels it makes more sense to treat this as a circumstance: ‘in each case that..., whenever...’. Krueger’s translation, however, consider this an animate

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*Sylvula vocabatur non longe ab urbe Como* ‘meanwhile they arrived in a place, **where** it is called Sylvula, not long from the town of Como.’ So Raasted’s instance probably reflects an independent development in Late Latin.

<sup>61</sup>The diversity of translations of this passage is instructive: the 1831 editor of Malalas, Niebuhr, translates this as **qui** *Bytharium dicitur* ‘**which** is called Bytharium’, as do Jeffreys, Jeffreys, Scott *et al.*; but in his 1912 doctoral dissertation, Wolf (cited in Bakker) renders this as *An der Stelle des Sundes, wo man’s die kleine Tiefe heisst* ‘at the location of the stream, **where** one calls it the small deep.’

<sup>62</sup>Erroneously given in Bakker (1974) as 2914A.

referent, as does the work's editor Ryden. There is thus disagreement on whether *hórou* here is a circumstance, or a fully-fledged relativiser.

*Accepted by Bakker*

In the following instances, Bakker accepts the presence of a relativiser proper:

(34a) (~480)

καὶ μετὰ χρόνον ἦλθον οἱ γέροντες τοῦ τόπου ὅθεν ἐξῆλθε, καὶ λαβόντες καὶ τὸν ἀδελφὸν ὅπου εἶχε πρὸς αὐτὸν τὴν λύπην, ἀπῆλθον παρακαλέσαι αὐτὸν, ἵνα ἐνέγκωσιν αὐτὸν εἰς τὴν μονὴν αὐτοῦ.

kaì metà k<sup>h</sup>rónon ê:lt<sup>h</sup>on hoi gérontes toú tórou hót<sup>h</sup>en eksê:lthe, kaì labóntes kaì tòn adelp<sup>h</sup>òn **hórou** eí<sup>h</sup>e pròs autòn tè:n lúpe:n, apê:lt<sup>h</sup>on parakalésai autòn, hína enégko:sin autòn eis tè:n monè:n autoû.

*After some time the old men came from the place he had left, bringing with them the brother **who** had distressed him, to ask him to take him into his hermitage.* (Apopht.Patr 300B)

The Greek literally means ‘the brother **where** he had towards him the sorrow’; this is clearly a non-locative relativisation, as is confirmed by the equivalent use of the participle: the monk is called τὸν ἀδελφ<sup>h</sup>ὸν **ék<sup>h</sup>onta** tè:n lúpe:n ‘the brother **having** the sorrow’ in Apophth.Patr 300C, a few lines further down.<sup>63</sup>

(34b) (vi/xi AD)

ἀπερχομένων δὲ αὐτῶν ἀναπαύει καὶ λέγει ὁ ἀββᾶς Δανιὴλ τῷ μαθητῇ αὐτοῦ· Ὑπαγε βλέπε ποῦ κοιμάται ἡ μεθύστρια ὅπου εἰς τὸ μεσίαυλον ἔκειτο. Καὶ ἀπέρχεται καὶ βλέπει, καὶ λέγει αὐτῷ· Κατὰ τὴν ἔμβασιν τῶν σωτηρίων.

aperk<sup>h</sup>oméno:n de autō:n anapaúei kaì légei ho abbâ:s daniè:l tō:i mat<sup>h</sup>e:tē:i autoû; húpage blépe **poú** koimâ:tai he: met<sup>h</sup>ústria **hórou** eis to mesíaulon ékeito. kaì apérk<sup>h</sup>etai kaì blépei, kaì légei autō:i; katà tè:n émbasin tō:n so:tē:riō:n.

When they (the nuns) left, the Abbot Daniel rested and said to his disciple: “Go and see **where** the drunken woman **who** was lying in the churchyard is sleeping.” And he went and had a look, and told him: “At the Entrance of the Thanksgivings.” (V.Dan 70.1)

It is impossible for *hórou* to be a locative, specifying the location of the drunken woman, as Daniel is asking what her current location is in the same sentence. (Indeed, the woman turns out to have moved from the churchyard where she was previously lying.) There is a slight locative nuance, in that the relative clause is locative; the referent, however, is animate, and unambiguously the subject of the relative clause.<sup>64</sup>

(34c) (~650/xi AD)

τοῦναντίον κάθισον καὶ τὸν δρόμον ἡμῶν, ὅπου ἠρξάμεθα καὶ ὅπου ἐκλήθημεν ὑπὸ τοῦ θεοῦ, εἰς τὴν ἔρημον ταύτην πληρώσωμεν.

tou nantíon kát<sup>h</sup>ison kaì tòn drómon he:mō:n, **hórou** e:rk<sup>s</sup>ámet<sup>h</sup>a kaì **hórou**

<sup>63</sup>*hórou* cannot be an oblique-locative relativiser recapitulating the formally locative prepositional phrase *pròs autòn* ‘towards him’, as it is the brother who bears the grudge against the Father, rather than vice versa (??‘towards whom he bore towards him the grudge’).

<sup>64</sup>Another possible interpretation is that the *hórou*-clause is a contrastive adjunct (‘**whereas** she was lying in the churchyard’); but this seems far-fetched, and the interpretation would be extremely close to a relativisation anyway.

eklé:t<sup>h</sup>emen hupò toû t<sup>h</sup>eoû, eis tèn ére:mon taúte:n ple:ró:so:men.

*On the contrary, sit down and let us complete our course in the desert, **where** we began and **where** we were called by God. (Leont.N v.Sym 1704B=142.23)*

In this passage, Bakker interprets the first *hórou* as ‘which’ and the second as ‘on which’. But as Krueger’s translation shows, there is nothing forcing the first relative head to be an object, rather than a location: ‘the course **which** we started’ as against ‘the course **where** we began’. The second relative head is in fact unambiguously locative. So by Bakker’s strict criteria (see 33b), these should not be considered unambiguous relativisers.

(34d)

(~650/xi AD)

Ἐκεῖνος ὅπου ἐμαγεῖρευεν ἐξῆλθεν τρέχων, ἀλλὰ βλέπε μήπως φεύγων ἐστίν  
 ekeinos **hórou** emageireuen eksê:lt<sup>h</sup>en trék<sup>h</sup>o:n, allà blépe mé:po:s p<sup>h</sup>eúgo:m estín;  
*Cet homme-là **qui** faisait la cuisine est sorti en courant, mais prenez garde  
 qu’il ne soit en fuite.*

That man **who** was doing the cooking ran out, but look out he doesn’t run away. (Leont.N v.Jo.Eleem 46,18=XXI.170)

According to Bakker (1974:92), “it can by no means mean something like ‘And he left the place where he had been cooking’, *hórou* representing the phrase ‘from the place where...’.” In context, Bakker seems to be right, although his confidence is exaggerated.<sup>65</sup>

In all, we have three certain instances from Late Middle Greek, dating from ~480 AD, *vi* AD, and ~650 AD, in which *hórou* is a generic relativiser. Bakker (1974:95) has surveyed the works of the following period which admit the most elements of the spoken language—the *Paschal Chronicle* (~630), Theophanes’ *Chronicle* (~800), and Constantine VII Porphyrogennitus’ works (~950)—but has found no instances of relativiser *opu*. He interprets this by postulating “the authors of the texts written during those centuries may have suppressed it as a too vulgar form.” The other vernacular relativiser of Early Modern Greek, *to*, shows up only very rarely in the same texts.

I have similarly not found any instances of relativiser *opu* in the Proto-Bulgarian inscriptions (*viii*–*ix* AD), arguably our first Modern Greek texts. The fact, however, that there is no relativisation at all in the inscriptions (other than *opu*= ‘whence’ (35) and *i tis* (*ei tis*) = ‘if somebody’ = ‘whoever’) means that this is not conclusive evidence either way.

(35)

(~813)

κε ο κά[τ]ου τόπος (ουκ) ληθάργησεν τον τόπον τούτον, <τ> ὅπου ε[ξ]ήλθε(ν με) τον  
 όλον λαόν κε έκ(α)ψ(εν τα) χορήα ημόν<ν> α[υ]τό(ς) ό γέρον ο βασηλεύ[ς] ο φαρακλός

<sup>65</sup>The context is the following: Peter, a slave cook, runs away when recognised as an erstwhile tax official. On his way out, he restores hearing and speech to the deaf-mute porter, who exclaims (34d) to the household. Since the porter, staying by the outer gate, could not have seen Peter actually cooking before he ran out, the *hórou*-clause cannot be describing Peter’s current activity, but rather his habitual activity: ‘he habitually cooked = he was doing the cooking, he was the cook’. This stative interpretation makes a locative unlikely (‘he ran out from **where** he was the cook’), and the relativiser likely (‘he **who** was the cook ran out’). A contrastive reading of *hórou* (‘he, **whereas** he was the cook, ran out’) is unlikely for the same reason.

ke o katu topos uk liθaryisen ton topon tuton, <τ> *opu* eksilθen me ton olon laon ke ekapsen ta xoria imon aftos o yeron o vasilefs o faraklos  
*Und das Unterland (= das südliche Land) vergaß er (nicht), die Gegend von der aus der alte Kaiser selbst, der kahle, den Feldzug unternommen hatte mit seinem ganzen Heervolk und unsere Dörfer verbrannt*  
 And the Southern Country (Greece)—he (King Krum) did (not) forget that Country, **from where** the old bald emperor himself made a campaign with his entire army and burnt our villages down (ProtoBg 2)<sup>66</sup>

So while *hórou* has become a relativiser by 480, we have no testimonials on what happened to it between 650 and the next time we meet it in 980, in the satirical song against Theophano, as an animate free relative. The intervening Middle Greek Dark Ages were characterised by great turmoil in the Greek-speaking world; they included the onset of Balkan language contact, with the Slav invasions into the Byzantine Empire, and Eastern Romance becoming a language distinct from Latin, itself now abandoned by the Empire. What took place during that time, we can only reconstruct from subsequent evidence.<sup>67</sup>

<sup>66</sup>Even this instance is not certain, as the original text has *topon tuton topu* ‘this place of place’; Beševliev (1963:132) considers it likeliest that *topu* is a context-induced slip for *opu*, but presents *ton topon tuton (ke apo tutu tu) topu* ‘this place, (and from this) place’ as another possible reading.

<sup>67</sup>Wolf (cited in Tabachovitz 1943:12–13) sees in the following two examples from Malalas a development of *hót<sup>h</sup>en* ‘whence’ into a general oblique relativiser, paralleling Latin *de unde* ‘from where’ > French *dont* ‘whose; from which’ (cf. instrumental *hórou*, 32b):

(36a) (525–550)

εἶχον γὰρ πλῆθος Γότθων καὶ κόμητας καὶ ἄλλους παῖδας καὶ παραμένοντας αὐτοῖς ἀνθρώπους πολλούς. ὅθεν εἰς Γότθος τῶν διαφερόντων τῷ αὐτῷ Ἄσπαρι ὀνόματι Ὀστρυς, κόμης, εἰσῆλθεν εἰς τὸ παλάτιον τοξεύων μετὰ ἄλλων Γότθων  
 eik<sup>h</sup>on gár plê:t<sup>h</sup>os gótt<sup>h</sup>o:n kai kómētas kai állo:us paídas kai paraménontas autoís ant<sup>h</sup>ró:pus polloús. **hót<sup>h</sup>en** heís gótt<sup>h</sup>os tō:n diap<sup>h</sup>erónto:n tō:i autō:i áspari onómati óstrus, kómēs, eisē:lt<sup>h</sup>en eis tō palátion tokseúo:n metá állo:n gótt<sup>h</sup>o:n;  
*for the victims had a large band of Goths and comites (= counts) and other followers, and a large number of supporters. Then a Goth who was one of Aspar’s associates, a comes (= count) named Ostrys, entered the palace with some other Goths, shooting with their bows. (Jo.Mal 371.13)*

(36b) (525–550)

οἵτινες ἔλαβον αὐτὸ καὶ τὴν Μήδειαν, τὴν τοῦ Ἀέτου θυγατέρα, βασιλέως τῆς Σκυθίας, ἀπὸ Κολχίδος χώρας ὅθεν ἱστορεῖται τὰ κατὰ Ἰάσονα καὶ Γλαύκην  
 hoítines élabon autò kai tē:n médeian, tē:n toú aétou t<sup>h</sup>ugatéra, basiléois tē:s skut<sup>h</sup>ías, apò kolk<sup>h</sup>idos k<sup>h</sup>ó:ras; **hót<sup>h</sup>en** historeítai tà katà íasona kai gláúke:n  
*They (the Argonauts) seized it from the land of Kolchis, and also took Medeia, the daughter of Aetes, emperor of Scythia. After this comes the story about Jason and Glauke (Jo.Mal 79.13)*

Wolf interprets *hót<sup>h</sup>en* in (36a) as ‘a large band of Goths... **of whom** one Goth’, and in (36b) as ‘and Medea... **about whom** the story is told of Jason and Glauke’. If this took place, it would be a localist development parallel to the evolution of *hórou*. Tabachovitz (1943:12–13), however, regards *hót<sup>h</sup>en* here as a simple discourse connective—a view the translation cited concurs with. Similarly, Mitsakis (1967:147) sees *hót<sup>h</sup>en* as a relativiser in (36c): “undoubtedly it [*hót<sup>h</sup>en*] stands there for *hóper* [‘emphatic neuter singular relativiser’] as the object of the transitive participle *idò:n* referring to everything preceding.”

(36c) (before 556)

ἐκεῖνος δὲ αὐτὸν θεωρῶν ἐπεγέλα./ πῶς ἔτεινε παντὶ τὰς παλάμας καὶ ἤτει/ τὸν χιτῶνα κἂν μετὰ τὴν γύμνωσιν./ ὅθεν ἰδὼν ὁ φύσει συμπαθῆς ἦλθε πρὸς τοῦτον βοῶν./ “Γυμνωθέντα καὶ πῆρον δέχομαί σε”

### 5.2.3. Other pathways

The only major dissension from the account of *hópou* expounded above was formulated in 1914 by Hatzidakis (1977:193–195), who regarded the indirect interrogative as a likelier etymon of *pu*, since locative indirect interrogatives are more frequent in text than locative relativisations.<sup>68</sup> Thus (to use his Puristic-coloured illustrations), *γινωσκο **pu** ipayi aftos* ‘I know **where/that** he is going’, *γινωσκο afton **pu** ipayi* ‘I know him **who** goes/I know him, **where** he goes’, etc.

Since *hópou* was no longer an indirect interrogative in Middle Greek, this would make *pu* the reflex of *poû* (*pu*). The obvious problem with such an account is that *pu* consistently turns up in Early Modern Greek and Greek dialects as *opu*. Hatzidakis interprets this as an analogical extension from other relativisers starting with unstressed *o-* (*opios* ‘which sort’, *osos* ‘how much’ etc.), as well as conflation with extant *’opu*.

As Bakker (1974:94) counterargues, many of the examples given by Jannaris etc. are sound, contrary to Hatzidakis’ complaint; and there are no instances in Middle Greek of *hópou* being used as an indirect interrogative, to establish such an analogical extension of *poû* (although there are such instances for *hóstis* and *hópoios*.) The simplest explanation for the data remains that *hópou*, rather than *poû*, is the etymon of *pu*.

Bakker, in turn, sees the use of *hópou* as a relativiser somewhat differently; he motivates it from its use introducing circumstances, which meant that

Finally it became a connective without a clear-cut sense, used to form a connection between sentences. Having become so general in use, it could easily replace another word which connected sentences, the relat. pronoun. (Bakker 1974:89)

But this is highly unlikely. First, relative connection is a rather peripheral usage of the relativiser; it seems implausible that a locative would analogically displace a relativiser, merely on the grounds that both were used as discourse connectives. More significantly, as discussed below, Middle Greek relative connection seems to have constituted a hypercorrection, rather than a genuine vernacularism. So the pathway of development as outlined above, with the locative gen-

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ekeinós de autòn t<sup>h</sup>eo:rô:n epegéla,/ pô:s éteine pantì tàs palámas kai é:itei/ tòn k<sup>h</sup>itô:na k àn metà tèn gúmno:sin;/ **hót<sup>h</sup>en** idò:n ho p<sup>h</sup>úsei sumpat<sup>h</sup>è:s ê:lt<sup>h</sup>e pròs toúton boð:n;/ “gumno:t<sup>h</sup>énta kai pê:ron dék<sup>h</sup>omaí se”

*But the latter (God), seeing him (Adam), laughed at/ How he stretched out his hands everywhere and demanded/ His cloak—even after having been made naked./ **And so**, the One whose nature is merciful seeing this, came to him saying:/ “Though you are naked and maimed, I receive you.” (Rom.Mel 6.ii.7)*

Mitsakis interprets the *hót<sup>h</sup>en*-clause as ‘seeing **which** (=the fact that Adam was demanding his cloak), the Merciful One by nature came to him exclaiming’. But the alternative reading with *hót<sup>h</sup>en* a discourse connective, **hence**, seeing [this], the Merciful One by nature came to him exclaiming’, is still possible, as Greek transitives can have null objects.

So there is no clear evidence that the ablative locative either became a relativiser independently of *hópou*, or was a hypercorrection for *hópou* in Late Middle Greek.

<sup>68</sup>This etymology is commonly assumed by linguists not specialist in Greek, and unaware of *hópou*—e.g. Givón (1991 [1988]:262).

eralising first to abstract location, then to general oblique role, and finally to subject role with animate reference, stands as the likeliest scenario for *hópou*.

### 5.3. Ancient Greek expressions corresponding to Modern *pu*

There was a range of Ancient Greek expressions with a similar functional range or etymology to Modern *pu*. While none of them has followed exactly the same path of development as *pu*, the semantic parallels are at times striking. It is tempting to posit the influence of the withdrawing form on the emerging—a putative phenomenon here named ‘priming’. The time gaps involved probably preclude this; but the parallels can still be explained by noting that certain key features—the fluidity between noun modifiers and sentence modifiers, the analysis of causals as temporals, the tendency for relativisers to become complementisers, the persistence in erstwhile relativisers of factivity—are recurring characteristics of human language.

The equivalent expressions are sketched here only briefly, as this is an aspect of secondary importance to the account of *pu* pursued here. There are two reasons for this investigation. A minor reason is as an illustration of the cyclicity of grammaticalisation—to show the old ways of expressing notions subsequently expressed by *pu*. These developments display both similarities and dissimilarities to the subsequent development of *pu* itself. The dissimilarities show that each development was independent. The light under which the similarities are to be understood is the major reason for pursuing this line: can a functional continuity be detected between these earlier expressions and *pu*—particularly for the participle, as Papadopoulou has claimed? Our current evidence towards that question is outlined in §5.4, which gives the standing of these expressions in Middle Greek, the transition stage preceding the development of *pu*.

#### 5.3.1. *hóti*

The first of these expressions is *hóti*, the major Ancient complementiser, which survives in CSMG as *oti*. Etymologically, *hóti* is the neuter of the relativiser *hóstis*; indeed, in this function, *hóti* has also survived into CSMG, as <sup>1</sup>*oti* ‘whatever’.<sup>69</sup> (Homeric Greek also uses the neuter of the other two extant relativisers as complementisers: *hó te*, neuter of the generic relativiser *hós te*, and *hó*, neuter of the unmarked relativiser *hós*; both these had ceased to be productive by Classical Greek.) While the transition from relativiser to complementiser is commonplace in Indo-European (Holland 1984:609), it cannot be adduced to the proto-language, given that each branch of Indo-European derives its complementisers in different ways. Therefore the transition is an innovation within Greek, which may be observed in progress in Homer, and was so thorough that

<sup>69</sup>In this function, <sup>1</sup>*oti* is written as *ó,ti* to distinguish it from the complementiser. Prosodically, this <sup>1</sup>*oti* is stressed, while the complementiser is unstressed.

by Aristophanes, *hóti*-complements could follow adverbial and adjectival predicates.

In *v* BC, *hóti* also started being used to introduce complements to prepositions, as a nominaliser: *k<sup>h</sup>orís (è:) hóti* ‘separately (than) that = except that’, and *plè:n hóti* ‘except that’. The use of *hóti* in non-prepositional collocations is severely restricted in Classical Greek. The expression *ou (mónon) hóti* ‘not (only) that’ is the best example, but corresponds to ‘not only’, rather than ‘not that’/ CSMG *oxi pos*.

*hóti* also introduces adjuncts. The causal meaning of *hóti* became first apparent in Homeric emotive complements. The development of a distinct causal adjunct sense however, as opposed to one where causality results from subcategorisation, was slow; it is not certain that the process was complete in Homeric Greek. The other use of *hóti* in adjuncts is to introduce circumstances; this is frequent in Homer, but rarer subsequently.

### 5.3.2. *hos*

The other Classical word whose career parallels *pu* is *hos*. Etymologically, this is the instrumental case of Proto-Indo-European *\*yo*, and it is used accordingly from Homeric Greek on in the meaning ‘as’; its collocation with the indefinite particle *án* ‘-ever’ survives in CSMG as the word for ‘as’, *san < o<sup>1</sup>san < hos án*.

The functional range of *hos* overlaps with *pu* to an appreciable extent; it includes:

- Instrumental relative; while this usage is the original one for the particle, it was already dying out in Homer. Related to this is the use of *hos* to introduce manner complements of linguistic, perception and cognitive verbs;
- Instrumental adverb ‘as, like’;
- Equative comparative ‘just like’;
- Introductory to an appositive of quality (e.g. *sacrificing to one Heracles as to an immortal*);
- Introductory to a nominal or adjectival predicative complement ‘as’;<sup>70</sup>
- A hedge ‘a kind of; approximately’;
- A superlative introductory ‘as... as possible’ (cf. Serbo-Croatian *što pre* ‘as fast as possible’)—this usage first appears in Pindar, and is frequent in Attic;
- A purposive connective; this usage is somewhat rare in Homer (50 instances, versus 138 instances of *hína*), and seems to have been associated in Attic with high style (while *hína* was regarded as colloquial);
- An irrealis complementiser for predicates of effort (where *hópos* was more frequent)—e.g. *to try to...*;
- A particle introducing exclamatories, comparable to English *how...!*

<sup>70</sup>This construction could have led independently to complementiser usage (‘he considered them [as] slaves’ → ‘he considered that they were slaves’), but it dates only from Ionic-Attic, whereas complementiser-*hos* seems to have already been entrenched in Homeric Greek (see below). So it cannot have begotten the complementiser.



- A resultative connective. Realis resultatives were expressed in Classical Greek with finite forms, while irrealis results were expressed as infinitives. In Attic, resultative *ho:s* persisted, but was gradually displaced by *hó:ste* (*ho:s* + *te* ‘and’).<sup>71</sup>

The three major functions of *ho:s* into Attic were as complementiser, causal, and temporal—all of which it shares with *pu*. The semantic transition, however, is more characteristic of *pos* ‘how?’, which is a complementiser in CSMG and a temporal and causal in some dialects of Modern Greek.<sup>72</sup>

Of these, the complementiser meaning arises by a straightforward reanalysis of the manner-complement as an unmarked complement—as exemplified already in Homer; exclamative *ho:s* was also subject to reanalysis as a complementiser. Only in later texts is *ho:s* used as a complementiser devoid of manner connotation.<sup>73</sup> In Attic, a semantic contrast is traditionally maintained to have developed between the complementisers *hóti* and *ho:s*: *hóti* was factive, while *ho:s* was dubitative (Smyth 1959 [1920] §2579)—although not all researchers agree that any such distinction can be detected in texts (Monteil 1963:356).

*ho:s* encompasses all realis complements, just as does *hóti*. In particular, it can be used with emotive predicates:

- (38) (viii BC)  
 θαῦμά μ' ἔχει, ὥς οὔ τι πιὼν τάδε φάρμακ' ἐθέλχθης!  
 t<sup>h</sup>aûmá m' ék<sup>h</sup>ei, **ho:s** oú ti piò:n táde p<sup>h</sup>ármak' et<sup>h</sup>élk<sup>h</sup>th<sup>h</sup>es!  
 Astonishment possesses me, **that** thou wast not soothed, drinking these drugs.  
 (Od X 326)

In this, as in other complementiser strategies (*hóti*, participle) Ancient Greek does not display the differentiation between true and semi-factives so prominent in CSMG.

The causal usage of *ho:s* is still incipient in Homer, but commonplace in Attic (120 instances in Euripides, around 100 in Aristophanes). Monteil concludes this usage was a colloquialism, and that it was introduced when the increase in complementiser-*ho:s*, in competition with complementiser-*hóti*, led *ho:s* by analogy to take on the other functions of *hóti*.

<sup>71</sup>It is *hó:ste* which has been taken up by CSMG via Puristic, as the high-register resultative *oste*.

<sup>72</sup>So for example:

(37a) το πούλησε **πως** εκλότσα και τον επέταν  
 to pulise **pos** eklotsa ke ton epetan  
 He sold it **because** it kept kicking and throwing him off (Cythera; HDMS 559:133)

(37b) **Πως** κουφάθηκα, ραχάτηνα.  
**pos** kufaθika, raxatina.  
**Since** I've gone deaf (i.e. stopped heeding calls for chores), I've found rest.  
 (Adrianople, Eastern Thrace; Stamatios Psaltes, HDIC)

<sup>73</sup>Schwyzler (1950:II 664) claims *ho:s* is already devoid of manner in Od V 423, Od VIII 498, and Od XXIII 60; in all three instances, Buckley uses ‘how’ in his translation without any real stretch of meaning (*for I know how illustrious Neptune is enraged against me; I will immediately tell to all men, how a kind god has bestowed on thee divine song; for thou knowest how welcome he would appear to all in the palace, respectively.*)

As Rijksbaron (1976:112–121) finds in his monograph on Herodotus, there are several shades of function for *ho:s* intermediate between temporal and causal. The same has already been seen for temporal/causal Attic *hó pou*; the spectrum includes circumstances and justifications. In contrast to *hó ti*, which became a full causal, *ho:s* never moved substantially beyond these circumstantial usages, even though these are traditionally called ‘causal’.

The temporal usage of *ho:s* is already evident in Homer, where it arose from ambiguity with the manner connective ‘as’—as has occurred with English *as* (and arguably CSMG *etsi pu*—§7.2.2). Fully developed, temporal-*ho:s* encompasses the meanings ‘as soon as’, ‘once’, ‘since’, and ‘while’.<sup>74</sup>

As Monteil (1963:364) concludes,

one can see that *ho:s* is amongst the Greek subordinators covering the greatest range of usages [...] it seems (with some reservations in the detail) to neutralise any system of distinctiveness.

In his conclusion, he goes even further:

Without doubt to some extent we are able, in outlining additional grammatical criteria, to discern several different values of *ho:s*; yet it remains a fact that the lexical form of the subordinator does not suffice to signal at first sight the nature of the relation uniting the two phrasal units. This situation is thus almost analogous to that presented in French by the conjunction *que* (*il dit qu’il vient; qu’il vienne; le jour qu’il viendra*; etc.). And just as a ‘Basic French’ could do without almost everything but the conjunction *que*, so too in *v* BC Athens a foreigner equipped with the sole conjunction *ho:s* would have been able, in almost all circumstances, to come up with an intelligible and largely correct utterance. [Footnote: One could invoke in this regard the role of *pos* in Modern Greek.] This does not mean, of course, that *ho:s* renders the existence of other subordinators useless, nor that it tends to supplant them in each function. But it does mean that it tends to act as the most general and economical marker of dependence in Greek. (Monteil 1963:404–405)

The analogy with *pu* (not *pos*!) is clear: like *ho:s*, *pu* is the most general marker of subordination in Modern Greek, even though—again, like *ho:s*—it is far from supplanting the other subordinators of the language, and the functional range of the two is not identical (*ho:s* covers much more irrealis ground, but does not act as a general relativiser.) The tug-of-war between *hó ti* and *ho:s* as complementisers<sup>75</sup> is reminiscent of *pu/oti*, with similar factors of factivity invoked as explanations for the distribution. Humbert (1945:175) makes this correlation explicit:

It seems, in particular, that the language has retained the opposition inherent in the use of *ho:s/hó ti*, between a judgement given with reservations and a judgement

<sup>74</sup>For the first three meanings, the subordinate event takes place on the conclusion of the matrix event; indeed, Monteil (1963:362) considers ‘since’ merely a semantic variant of ‘as soon as’ and ‘once’, “with no grammatical autonomy.” The last meaning, ‘while’, is characterised by the imperfective aspect in its clause.

<sup>75</sup>This ranges from a proportion of 110:271 in Herodotus, and 12:95 in Euripides, to 79:85 in Aristophanes, and 293:135 in Lysias.

given without reservations: Modern Greek differentiates, with the same rationale, two equally neighbouring conjunctions: one says *su leo pu ine arostos* ‘I am telling you that he is sick’, but *fenete pos ine arostos* ‘it seems that he is sick’. (Humbert 1945:175)

While the particular example is problematic (*su leo pu ine arostos* would be unacceptable for many Greek-speakers), the affinity of the *hóti/hos* and *pu/pos* distinctions is clear. But it does not follow that this represents a survival, or a functional renewal. The range of usage of *pu/pos* and *hóti/hos* differ greatly; *pu* corresponds more to the Classical participle than *hóti*, and even that correspondence is not perfect. Furthermore, *hos* as a complementiser did not survive long into Middle Greek, and in many of its functions, *hos* had already fallen into disuse (§5.4.4). The striking parallels, involving underspecification in a similar way, are thus unlikely to be causal; they rather reflect generalities about human language.

### 5.3.3. *hós, hóstis*

There are parallels between *pu* and the extended usages of the Classical relativisers, *hós* and *hóstis*; for the most part, however, these are encompassed by the normal semantic extension of relative clauses, and are thus typological commonplaces. These include:

- Emotive Complement:

(39a) (~385 BC)

θαυμαστὸν ποιεῖς, ὃς ἡμῖν μὲν ταῖς καὶ ἑρία σοὶ καὶ ἄρναις καὶ τυρὸν παρεχούσαις  
οὐδὲν δίδως ὅ,τι ἂν μὴ ἐκ τῆς γῆς λάβωμεν  
t<sup>h</sup>aumastòn poieís, **hòs** hemì:n mèn taís kai ériá soi kai árnais kai turòn  
parek<sup>h</sup>ousais oudèn dído:s hóti àn mè: ek tês gês lábo:men  
*It is strange that you* (‘you do a strange thing, **who**) *give us sheep nothing but what we get from the land, though we supply you with wool and lambs and cheese* (X Mem 2.7.13)

- Causal:

(39b) (400~387 BC)

εἰπέ μοι, ἔφη, ὦ Σώκρατες, ἔστιν σοὶ Ζεὺς πατρῶος;  
—[...] οὐκ ἔστιν, ἦν δ’ ἐγώ, ὦ Διονυσόδωρε.  
—ταλαίπωρος ἄρα τις σύ γε ἄνθρωπος εἶ καὶ οὐδὲ Ἀθηναῖος, ᾧ μήτε θεοὶ πατρῶοὶ  
εἰσιν μήτε ἱερὰ μήτε ἄλλο μηδὲν καλὸν καὶ ἀγαθόν.  
eipè moi, éph<sup>e</sup>:, ô: só:krates, éstin soi zdeùs patrô:ios?  
—[...] ouk éstin, ê:n d egó:, ô: dionusódo:re.  
—talaípo:ros ára tis sú ge ánt<sup>h</sup>ro:pos eî kai oudè at<sup>h</sup>e:naïos, **hôi** mé:te t<sup>h</sup>eoí patrô:ioí  
eisin mé:te hierà mé:te állo me:dèn kalòn kai agat<sup>h</sup>ón.  
*[He...] said Socrates, have you a family Zeus?*  
*[...] I said, No, Dionysodorus, I have not.*  
*You must be some wretched outcast then and no Athenian at all, a man without family gods* (‘**to whom** there are neither gods’) *and sacrifices or anything else good and beautiful.* (Pl Euthd 302c)

- Resultative:

(39c) (375~360 BC)

τούτων δὲ τοιούτων ὄντων, τίς οὕτω μαινεται, **ὅστις** οὐ βούλεται σοι φίλος εἶναι;  
 toúto:n dè toioúto:n ónto:n, tíς hoúto: maínetai, **hóstis** ou bouleitaí soi p<sup>h</sup>ílos éinai?  
 These things being as they are, who would be so mad, **who** (=that he) would  
 not want to be your friend?  
*This being so, it would be madness not to wish to be your friend.* (X An 2.5.12)

- Purposive:

(39d) (431–400 BC)

καὶ αὐτῶν μία μὲν ἐς Πελοπόννησον ὄχητο, πρέσβεις ἄγουσα **οἵπερ** τὰ τε σφέτερα  
 φράσουσιν ὅτι ἐν ἐλπίσιν εἰσὶ καὶ τὸν ἐκεῖ πόλεμον ἔτι μᾶλλον ἐποτρυνούσι  
 γίγνεσθαι.  
 kai autō:n mía mèn es pelopónne:son oík<sup>h</sup>eto, présbeis ágousa **hoíper** tá te sp<sup>h</sup>étera  
 p<sup>h</sup>rásousin hótí en elpísín eisì kai tòn ekeí pólemon éti mǎ:llon epotrnuósi  
 gígnest<sup>h</sup>ai;  
*One of these (ships) went to Peloponnese with ambassadors to describe the  
 hopeful state of their affairs, and to incite the Peloponnesians to prosecute the  
 war there even more actively than they were now doing* (Th VII 25)

- and Conditional (where *hós* and *hóstis* are equivalent to *eí tis* ‘if someone’):

(39e) (375~360 BC)

**ὅστις** τε ζῆν ἐπιθυμεῖ, πειράσθω νικᾶν τῶν μὲν γὰρ νικόντων τὸ κατακαίνειν, τῶν δὲ  
 ἡττωμένων τὸ ἀποθνήσκειν ἐστί. καὶ **εἴ τις** δὲ χρημάτων ἐπιθυμεῖ, κρατεῖν πειράσθω.  
**hóstis** te zdē:n epit<sup>h</sup>umeî, peirást<sup>h</sup>o: nikâ:n; tō:n mèn gār nikó:mto:n τὸ katakaínein,  
 tō:n dè he:ttoménō:n τὸ apot<sup>h</sup>né:skein estí. kai **eí tis** dè k<sup>h</sup>re:máto:n epit<sup>h</sup>umeî,  
 krateîn peirást<sup>h</sup>o:;  
 And **whoever** wishes to live, let him attempt to conquer; for the victors get to  
 kill, while the defeated get to die. And **if someone** desires money, let him at-  
 tempt to dominate;  
*Or is mere living is an object with any of you, strive to conquer; if to slay is the  
 privilege of victory, to die is the doom of the defeated. Or perhaps to gain  
 money and wealth is your ambition, strive again for mastery;* (X An 3.2.39)

Another characteristic use of the relativiser in Classical Greek is ‘relative connection’—that is to say, the use of the relativiser as a discourse connective.<sup>76</sup> In this function, the relativisers seem to preserve their Homeric value as anaphors, although in Middle Greek they seem to possess this value by virtue of being relativisers alone.

(40) (~385 BC)

πῶς οὖν ἂν ἔνοχος εἴη τῇ γραφῇ; ὃς ἀντὶ μὲν τοῦ μὴ νομίζειν θεοῦς, ὡς ἐν τῇ γραφῇ  
 ἐγγράπτο, φανερός ἦν θεραπεύων τοὺς θεοὺς μάλιστα πάντων ἀνθρώπων  
 pō:s oûn ân énok<sup>h</sup>os eíe: tē:i grap<sup>h</sup>ē:i? **hós** antì mèn toû mè: nomízdein t<sup>h</sup>eoús, ho:s  
 en tē:i grap<sup>h</sup>ē:i egégrapto, p<sup>h</sup>aneròs ê:n t<sup>h</sup>erapeúo:n toùs t<sup>h</sup>eoús málista pánto:n  
 ant<sup>h</sup>ró:po:n  
*How then could he be guilty of the charges? For so far was he* (‘who was so  
 far’) *from ‘rejecting the gods’, as charged in the indictment, that no man was  
 more conspicuous for his devotion to the service of the gods* (X Mem 1.2.64)

<sup>76</sup>Cf. the linking relative in English (Reid 1997).

Finally, Classical relative clauses can take different verb moods—including the subjunctive (like CSMG) (41a) and the imperative (unlike CSMG, at least for *pu*) (41b).

(41a) (400~387 BC)

καὶ δὴ καὶ νῦν, ὦ Μένων, εἰς καλὸν ἡμῖν ἄνυτος ὄδε παρεκαθέζετο, ᾧ μεταδῶμεν τῆς  
ζητήσεως, εἰκότως δ' ἂν μεταδοίμεν  
kaì dè: kaì nû:n, ô: ménon:n, eis kalôn he:mî:n ánutos hóde pareka<sup>h</sup>ézdeto, **hō:i**  
**metadō:men** tês: zde:té:seo:s. eikóto:s d' àn metadoímen;  
But indeed now, O Meno, for our good Anytus has sat down to our side, **to**  
**whom let us give** (SUBJ) a share of our inquiry. And we would reasonably  
give that share;  
*But look, Meno, here's a piece of luck. Anytus has just sat down beside us. We*  
*couldn't do better than make him a partner in our inquiry.* (Pl Men 89d)

(41b) (v BC)

σοὶ πρῶτον, Ἰοί, πολύδονον πλάνην φράσω./ ἦν ἐγγράφου σὺ μνήμοσιν δέλτοις φρενῶν.  
soì prô:ton, ioî, polúdonon pláne:n p<sup>h</sup>rásou:./ **hèn eggráp<sup>h</sup>ou** (IMP) sù mné:mosin  
déltou:s p<sup>h</sup>renô:n.  
*First to you, Io, I shall tell the tale / of your sad wanderings, rich in groans—*  
**inscribe** ('which inscribe! (IMP)')/ *the story in the tablets of your mind.*  
(Aesch Pr 790)

In particular, Classical Greek had optative relative clauses (41c), of which *hò mè: génoito* 'which [I hope] may never happen' (with a clausal antecedent) is a common fixed expression (41d):

(41c) (467 BC)

πύργοις δ' ἀπειλεῖ δεῖν, ἃ μὴ κραίνοι τύχη  
púrgois d' apeileí deín, **hà mè: kraínoi** túk<sup>h</sup>e:;  
*Our towers he menaces with terrors—Ø Fortune/ **fulfil** them not!* (Aesch Th  
426)

(41d) (~402 BC)

εἴαν ποτε (ὄ μὴ γένοιτο) λάβωσι τὴν πόλιν, βουλεύειν ἀξιούτω.  
eán pote (**hò mè: génoito**) lábo:si tèn pólin, bouleúein aksióúto:.  
*if ever—Ø **may heaven forfend it!**—they get the city into their hands, let*  
*him claim his seat on the Council with them.* (Lys XXXI 14)

And subjunctive or optative relative clauses (the optative being equivalent to the subjunctive as an irrealis marker) were used for intensional relativisation, just like *pu na* in CSMG:<sup>77</sup>

(41e) (405 BC)

γόνιμον δὲ ποιητὴν ἂν οὐχ εὔροις ἔτι ζητῶν ἄν, ὅστις ῥῆμα γενναῖον λάκοι.  
gónimon dè poie:tèn àn ouk<sup>h</sup> heúrois éti/ zde:tô:n án, **hóstis** r̥è:ma gennaíon lákoi.  
*Search where you will, you'll never find a true/ Creative genius, **uttering***  
*('who may utter (OPT)')* *startling things.* (Rogers) (Ar Ra 405)

So although there are evocative similarities between Ancient and Modern Greek relative clauses, they are not proof of continuity: it is intrinsic to relativisation

<sup>77</sup>The use of *hóstis* here is consistent with its intensional use (defining-*hóstis*) in Ancient Greek in general.

that the relation between the relative clause and its matrix can be semantically enriched, and that the relative clause may have a modality autonomous of the matrix. Even in that regard, by allowing imperative relative clauses, there is a mismatch between Ancient and Modern Greek.

### 5.3.4. Participle

The final equivalent between a classical expression and *pu* is the participle. Unlike its Modern Greek counterpart, the Classical participle is morphologically flexible, extant as a declinable nominal in all three voices (Active, Middle, Passive), and five tenses (Present, Aorist, Present Perfect, Future, Future Perfect). The participle is characteristically used in Classical Greek in clause-chaining; being semantically underspecified<sup>78</sup> and factive, it has a wide range of syntactic and semantic functions, which substantially overlaps with *pu*. This is not an idiosyncratic development in Greek: for instance, the English participle substantially corresponds in usage to that of Classical Greek.

Thus, the three traditional divisions of the Classical participle—attributive (adjectival), supplementary (verb complement), and circumstantial (adverbial), correspond to the three major functions of *pu*, as relativiser, complementiser, and adjunctiviser. Because this equivalence has been emphasised in much of the literature, I spend a little more time on these functions.

#### *Attributive participle*

The equivalence between attributive participles and relative clauses is a commonplace of Greek grammar:

- (42a) (367~347 BC)  
 ἐν τοῦτο τιθέντα τὸ τούτων ἔκγεγον ἅπαν, γένεσιν εἰς οὐσίαν ἐκ τῶν μετὰ τοῦ πέρατος  
*ἀπειργασμένων* μέτρων.  
 hèn toũto tit<sup>h</sup>énta tò toúto:n ékgenon hápan, génesin eis ousían ek tō:n metà toũ  
 pératos *apeirgasméno:n* métro:n.  
*I am reckoning all this progeny of our two factors as a unity, and you may  
 take me to mean a coming-into-being, resulting from those measures **that  
 are achieved** (= achieved) with the aid of the limit.* (Pl Phlb 26d)

Participles are also equivalent to free relatives:

- (42b) (367~347 BC)  
 τόν τε ἐρωτῶντα καὶ τὸν ἐρωτόμενον ἱκανῶς ἂν συμφωνοῦντας ἀποφίναιεν.  
 tón te *erōtōnta* kaì tòn *erōtōmenon* hikanō:s àn sump<sup>h</sup>o:moũntas apoph<sup>h</sup>é:naien.  
*there is some prospect of the two parties to a discussion ('the **asking** and the  
**asked**') being brought to a tolerable agreement.* (Pl Phlb 124e)

<sup>78</sup>This is repeatedly pointed out by grammarians (e.g. Schwyzer 1950:II 387), and corresponds to what Ingria (in prep.) has said of *ke* in Modern Greek, and what could equally well be said of *pu*. So Smyth (1959 [1920] §2069): “The force of these circumstantial participles does not lie in the participle itself, but is derived from the context. Unless attended by some modifying adverb, the context often does not decide whether the participle has a temporal, a causal, a conditional, a concessive force, etc.; and some participles may be referred to more than one of the above classes.”

*Circumstantial participles*

When used as a sentence adjunct, the participle can serve the following functions, being semantically underspecified:<sup>79</sup>

- Temporal:

- (43a) (viii BC)  
 οὐ τις, ἐμεῦ ζῶντος καὶ ἐπὶ χθονὶ δερκομένοιο./ σοὶ κοίλης παρὰ νηυσὶ βαρείας χειρᾶς  
 ἐποίσει/ συμπάντων Δαναῶν  
 ou tis, emeu zdōntos kai epi k<sup>h</sup>t<sup>h</sup>onì derkoménoio./ soi kóile:is parà neusì bareías  
 k<sup>h</sup>eíras epoísei/ sumpánto:n danaō:n  
*no man **while I live** and **behold light** on earth shall lay violent hands upon  
 thee amid the hollow ships; no man of all the Danaans (Il I 88)*

- Causal:

- (43b) (viii BC)  
 Τυδείδη, τί παθόντε λελάσμεθα θούριδος ἀλκῆς!  
 tudeíde:, tí *pat<sup>h</sup>ónte* lelásmei<sup>h</sup>a t<sup>h</sup>oúridos alkê:s!  
 Tydeides, *having suffered* what do we forget our impetuous valour?  
 Tydeus' son, what ails us that we forget our impetuous valour? (Il XI 313)

- Conditional:

- (43c) (viii BC)  
 καὶ κεν τοῦτ' ἐθέλομι Διός γε δίδόντος ἀρέσθαι!  
 kai ken toút' et<sup>h</sup>éloimi diós ge *didóntos* arést<sup>h</sup>ai!  
*Indeed I should wish to receive this, if Jove would grant it. (Od I 390)*

- (43d) (431–400 BC)  
 Ἀθηναίων δὲ τὸ αὐτὸ τοῦτο παθόντων διπλασίαν ἂν τὴν δύναμιν εἰκάζεσθαι ἀπὸ τῆς  
 φανερώς ὄψεως τῆς πόλεως ἢ ἔστιν.  
 at<sup>h</sup>e:naíoi:n de tò autò toúto *pat<sup>h</sup>ónto:n* diplasián an tèn dúnamin eikázdest<sup>h</sup>ai apò  
 tês p<sup>h</sup>anerâ:s ópseo:s tês póleo:s è: éstin.  
 But the Athenians *suffering* the same would have seemed to have double the  
 power of the apparent view of the city  
*Whereas, if Athens were to suffer the same misfortune, I suppose that any  
 inference from the appearance presented to the eye would make her power to  
 have been twice as great as it is. (Th I 10)*

- Concessive:

- (43e) (viii BC)  
 τὸν δ' ἔκτανε νοστήσαντα./ εἰδὼς αἰπὸν ὄλεθρον, ἐπεὶ πρό οἱ εἶπομεν ἡμεῖς  
 tôn d éktane nosté:santa./ *eidòs* aipòn ólet<sup>h</sup>ron, epei pró hoi eípomen he:meís  
*and slew him on his return, although aware that utter destruction [awaited  
 himself]; since we forewarned him (Od I 37)*

<sup>79</sup>I mostly illustrate these functions with genitive absolutes, which dissociate the participial adjunct from the matrix. There are also instances in which the participle is assigned case from the matrix, as opposed to being absolute; these tend to be Attic, and later developments than Homeric.

- Purposive (where it is mostly associated with the future participle):

- (43f) (viii BC)  
 ὃ γὰρ ἦλθε θεὸς ἐπὶ νῆας Ἀχαιῶν/ *lusómenós* τε θύγατρα φέρων τ' ἀπερείσι' ἄποινα·  
 hò gàr ê:lt<sup>h</sup>e t<sup>h</sup>oàs epì nê:as ak<sup>h</sup>aiô:n/ *lusómenós* (FUT.PART) te t<sup>h</sup>úgatra p<sup>h</sup>érou:n t  
 apereísi ápoina  
*For he had come to the Achaians' fleet ships to win his daughter's freedom,  
 and brought a ransom beyond telling; (Il I 13)*
- (43g) (431–400 BC)  
 προπέμψαντες κήρυκα πρότερον πόλεμον *proeroúnta* Κερκυραίοις, ἄραντες  
 ἑβδομήκοντα ναυσὶ καὶ πέντε δισχιλίοις τε ὀπλίταις ἔπλεον ἐπὶ τὴν Ἐπίδαμνον,  
 Κερκυραίοις ἐναντία *polemésonτες*  
 propémpsanτες kériuka próteron pólemon *proeroúnta* (FUT.PART) kerkuraíois,  
 áranτες hebdomé:konta nausì kai pénte disk<sup>h</sup>ilíois te hoplítaiς épleon epì tèn  
 epídamnon, kerkuraíois enantía *polemésonτες* (FUT.PART);  
*the Corinthians sent a herald before them to declare war, and getting under  
 weigh with seventy-five ships and two thousand heavy infantry, sailed for  
 Epidamnus to give battle to the Corcyraeans. (Th I 29)*

- Adjunct of Manner or Means:

- (43h) (387~367 BC)  
 καὶ ἡ *gelásasa* Καὶ πῶς ἄν, ἔφη, ὦ Σώκρατες...·  
 kai hê: *gelásasa* kai pô:s án, ép<sup>h</sup>e:, ô: só:krates...;  
 And she, *laughing*, said 'And how, Socrates...'  
*At which she laughed, and said, Then can you tell me, my dear Socrates...*  
 (Pl Smp 202b)
- (43i) (379~370 BC)  
 εἰσὶ δὲ τινες τῶν Χαλδαίων οἱ *leizdómenoi* ζῶσι καὶ οὐτ' ἄν ἐπίσταιντο ἐργάζεσθαι οὐτ'  
 ἄν δύναιντο  
 eisì dé tines tō:n k<sup>h</sup>aldaíou:n hoì *leizdómenoi* zdô:si kai out' àn epístainto  
 ergázdest<sup>h</sup>ai out' àn dúnainto  
*but there were some of the Chaldaeans, so they said, who lived by plunder-  
 ing and would not know how to farm and could not (X Cyr 3.2.25)*
- (43j) (400~387 BC)  
 παρανομοῦσιν ἄρα Λακεδαίμονιοι οὐ *didóntes* σοὶ χρυσίον καὶ *epitrépontes* τοὺς  
 αὐτῶν υἱεῖς.  
 paranomoúsini ára lakedaimónioi ou *didóntes* soi k<sup>h</sup>rusíon kai *epitrépontes* toùs  
 hautô:n huéiς.  
*Then Lacedaemonians break the law by not entrusting their sons to you,  
 and paying you handsomely for it. (Pl (?) Hp.Ma 285b)*

### Modality and factivity of circumstantial participles

Not all these adjunct usages are factive—unlike for *pu*: the conditional and purposive usages are not factive at all. Furthermore, other usages—such as causal and manner—can be rendered non-factive by prefixing *ho:s*, here meaning 'as' (Kühner & Gerth 1963 [1898–1904] §488) (44a).

- (44a) (375~360 BC)  
 καὶ τοὺς μὲν κατακάνοντες τοὺς δὲ καταδιώξαντες αὐτοὶ ἐνταῦθ' ἔμενον ὡς τὸ ἄκρον  
 κατέχοντες. Οἱ δ' οὐ κατεῖχον, ἀλλὰ μαστὸς ἦν ὑπὲρ αὐτῶν  
 kai toùs mèn katakanóntes toùs dè katadió:ksantes autoì entaût<sup>h</sup> émenon *ho:s* tò



ákron *katék<sup>h</sup>ontes*. hoi d ou kateík<sup>h</sup>on, allà mastòs ê:n hupèr autò:n  
 and killing off these while chasing off those, they themselves remained there **as owning** the extremity. However they did not own it, but there was a breast above them...  
*and after killing some, and driving out the rest, [the party] took their places, **thinking that they were** in possession of the height. As a matter of fact they were not, for above them lay a breast-like hill (X An 4.2.5)*

This is not possible in CSMG: a *pu*-adjunct is factive, and cannot have its factivity weakened, e.g. by inserting an adjective like *taxa* ‘supposedly, allegedly’: \**katalaves tipota pu piyes taxa?* ‘what did you get out of **allegedly** going?’

The factivity and modality of participial adjuncts is even more involved than this. As established in Oguse’s (1962) monograph, when a matrix is marked for modality—as with the imperative matrices below—the participle can behave in three ways.

- (44b) (375~360 BC)  
*ἀπελθόντες* ἤδη αἰρεῖσθε οἱ δεόμενοι ἄρχοντας, καὶ ἐλόμενοι ἦκετε εἰς τὸ μέσον τοῦ στρατοπέδου, καὶ τοὺς αἰρεθέντας ἄγετε·  
*apelt<sup>h</sup>óntes* é:de: haireíst<sup>h</sup>e hoi deómenoi ár<sup>h</sup>ontas, kaì *helómenoi* hé:kete eis tò méson toû stratopédou, kaì toûs hairet<sup>h</sup>éntas ágete;  
 ‘And now,’ said he, ‘let us waste no time; **retire** at once, I beg you, **and** choose leaders where you need them. **After you have made your elections**, come back to the middle of the camp, and bring the newly appointed officers. (X An iii 1.46)

- (44c) (379~370 BC)  
 καὶ σὺ δὲ, ὦ Ἀρμένιε, ἀπάγου τὴν γυναῖκα καὶ τοὺς παῖδας μηδὲν αὐτῶν *καταθεῖς*  
 kaì sù dè, ô: arménie, apágou tê:n gunaïka kaì toûs paídas me:dèn autò:n *katat<sup>h</sup>eîs*  
 And you too, king of Armenia, may take back your wife and children without **paying** any ransom for them (X Cyr iii 1.37)

The participle may be in **modal solidarity** (*solidarité modale*), taking on the same modality as the matrix. In (44b), *apelt<sup>h</sup>óntes* (PART) *haireíst<sup>h</sup>e* (IMP) ‘departing, choose’ is imperative both in the matrix (‘choose!’) and in the participle (‘departing’ = ‘depart!’). The participle may be in **modal autonomy** (*autonomie modale*), in which case any change in the modality of the matrix leaves the participial adjunct unaffected. Again in (44b), the second matrix *hé:kete* (IMP) (‘come back!’) is imperative, but its adjunct *helómenoi* (PART) (‘when you have chosen’) is declarative.

Finally, the participle may be in **close association** (*association étroite*) with its matrix. In this case, the participle has the same modality as its matrix, but it is understood to be contingent on the matrix, rather than independently asserted. This is illustrated in (44c). Both the matrix *apágou* (IMP) (‘take back!’) and the adjunct *katat<sup>h</sup>eîs* (PART) (‘paying’) have imperative force: Cyrus wants the King of Armenia to take his wife back, and not to pay any ransom. So *katat<sup>h</sup>eîs* is not modally autonomous. But Cyrus is not independently asking the king to both take his wife and pay nothing; rather, he asks him to pay nothing, *contingent on*

his taking his wife back. The adjunct thus cannot be understood in separation from the matrix.<sup>80</sup>

In modal solidarity, the grammatical matrix and adjunct make claims which are equally important semantically; in (44b), the army is being urged to both depart and choose a leader. So semantically, modal solidarity is paratactic.<sup>81</sup> In close association, on the other hand, the adjunct is semantically subordinate to the matrix. In (44c), the core assertion made is that the king may take his wife back; that he need not pay any ransom is a claim of subsidiary importance. So close association, along with modal autonomy, involves semantic hypotaxis.

This three-way differentiation of participles has several consequences. First, finite subordinate clauses introduced by connectives are modally autonomous: their very finiteness means they can be marked for modality. So only modally autonomous circumstantial participles can be paraphrased by such finite clauses: a temporal participial adjunct is not always properly equivalent to a *when*-clause—although traditional taxonomies of participial function imply this. This is a crucial difference between the various factotum connectives in Greek—*hōs* in Attic, *hóti* in Middle Greek, *pu* in Modern Greek—and the participle: these connectives cannot introduce clauses in modal solidarity or close association.

Second, the gradual reduction in participle usage (§5.4.2) affects participle modality. In the New Testament, the three types of modal binding survive, but matrices with overt irrealis marking—conditionals and irrealis subjunctives—no longer take participial adjuncts; for non-declaratives, these are now restricted to purposives and imperatives. If there was a growing disinclination to have the participle be modally autonomous, then contexts where the participle had a highly distinct modality from the matrix would be avoided—and this is indeed the case in the New Testament: strongly irrealis matrices for participials are avoided, and as is seen later in this chapter, so are irrealis participial adjuncts.

Oguse's other contribution is investigating the behaviour of circumstantial participles under negation. As established, *pu*-adjuncts are factive: whether their matrix is negated or not, they preserve their truth. Whether the participial adjunct of a negated matrix preserves its truth in Ancient Greek depends on several factors: the relative order of the negator, matrix and participle; the modal binding of the participle; and whether the participle occurs in poetry (which was linguistically conservative) or prose. In the following, I give Oguse's

<sup>80</sup>In terms of deontic logic, for a participial adjunct *A* to an imperative matrix *B*, modal solidarity gives rise to the meaning  $\underline{A} \wedge \underline{B}$  (*A* should happen and *B* should happen); modal autonomy, to  $A \wedge \underline{B}$  (*A* happens, and *B* should happen); and close association, to  $\underline{B} \wedge (B \rightarrow \underline{A})$  (*B* should happen, and if it does happen, then *A* should happen as well.)

(In deontic logic, *A* represents a proposition, while  $\underline{A}$  represents its deontic equivalent, *Do A!* or *A should happen!*  $\wedge$  signifies *and*, and  $\rightarrow$  signifies *if*. *Mutatis mutandis*, the conclusions for deontic logic also apply for other modalities—epistemic logic, for instance.)

<sup>81</sup>Oguse (1962:66–67) presents several clear cases in which the Ancient Greeks felt parataxis with *kai* 'and' to be equivalent to participles in modal solidarity, and paraphrased them accordingly.

(1962:296) results for when a negation affects only the matrix, and does not negate the predicate or both the predicate and the matrix:<sup>82</sup>

	NPV	NVP	VNP	VPN	PNV	PVN
Solidarity	–	+	–	–	+	+
Close Assoc.	–	–	–	–	–	–
Autonomy	+	+	+	–	+	–

Table 18a. Factivity of participles in Classical poetry

	NPV	NVP	VNP	VPN	PNV	PVN
Solidarity	–	+	+	–	+	–
Close Assoc.	–	–	–	–	–	–
Autonomy	+	+	–	–	+	–

Table 18b. Factivity of participles in Classical prose

If one concentrates on the two orderings where the matrix is most clearly negated—NVP and PNV (the negator normally, though not always, precedes its argument in Greek)—a consistent pattern emerges: modal solidarity and autonomy allow factivity of the predicate, close association disallows it.<sup>83</sup>

The results are consistent. In modal autonomy, the two events are regarded as independent in modality; so they are also independent in negation. In modal solidarity, the two events are asserted independently (semantically paratactic); so they can be negated independently. It is only close association which emphasises the contingency of one event on the other; in that case, it is impossible to negate the matrix without also negating the adjunct. As the tables show, this is the case whatever the ordering of the constituents, and whether the style is poetic or prose.

This means that participles in close association are *not* factive: their truth is never preserved under negation. Even for the other two types of modal binding, factivity is contingent on syntactic and stylistic factors; and with the exception of poetic modal solidarity PVN (of which there are only two instances in Oguse's corpus), there are no instances in which a negation unambiguously affects only the matrix, rather than the matrix–participle combination.<sup>84</sup> This is not behaviour we normally describe as factive.

So while several linguists—most notably in this context Papadopoulou (1994a)—see a special relation between the factivity of the Classical participle and the factivity of *pu*, the evidence suggests that any commonality the two have is a result of linguistic commonplaces: both the participle and *pu* are time-stable nominalisation strategies (Givón 1973), which in the default case presuppose

<sup>82</sup>In the table, N stands for negator, P for participle, and V for matrix (main verb).

<sup>83</sup>Modal solidarity and autonomy do not *require* factivity: in fact, both NVP and PNV allow the matrix–predicate combination to be negated, and poetic PNV allows the predicate, rather than the matrix, to be negated.

<sup>84</sup>This is in contrast to English and Modern Greek, where the matrix–adjunct negation *I didn't talk to him coming in, because I DIDN'T come in*/δεν tu milisa pu ebena, yiati *de* bika is highly marked.

their propositions. Looked at more closely, the factivity of the two is in fact quite different, and makes any direct connection between the two unlikely.

### *Supplementary participle*

Finally, the Classical participle can be used as a factive complement. In this function, its range is considerably broader than that of *pu*. Thus, its use as a subjective predicative complement follows the use of *ho:s* to introduce nominal subjective predicative complements, and has no equivalent in *pu*:

- (45a) (442~441 BC)  
 καὶ θεῶν ἱκνοῦμαι μὴ προδοῦς ἡμᾶς γένηι.  
 kai t<sup>h</sup>eô:n hiknoûmai mē: **prodoûs** he:mâ:s génei.  
 and of.gods I.beg lest betraying us you.become  
*And by the gods I beg you, don't be our betrayer!* (Soph Aj 588)

Moreover, the participle is used in Occurrence and Action subjective predicatives (already Homeric—45b), where CSMG would use *na* or *ke* rather than *pu*, and even in some instances where English would use the infinitive rather than the participle:<sup>85</sup>

- (45b) (viii BC)  
 ἄλλ' ἐμὲ πρὶν ἀπέπεμψε· τύχησε γὰρ ἐρχομένη νηῦς/ ἀνδρῶν Θεσπρωτῶν ἐς Δουλίχιον  
 πολύπυρον.  
 all emè prîn apépempse; túk<sup>h</sup>e:se gàr **erk<sup>h</sup>oméne**: ne:ús/ andrô:n t<sup>h</sup>espro:tô:n es  
 doulík<sup>h</sup>ion polúpuron.  
*But me he sent away first; for a ship of the Thesprotians happened **to be going** to wheat-abounding Dulichium.*  
 (CSMG: *ala emena epempse proto; yati etixe **na** erxete karavi ton thesproton sto polisito dūlixio*) (Od XIV 334)
- (45c) (431–400 BC)  
 ἔτυχον γὰρ ἐν τῇ ἀγορᾷ ὀπλίται **καθεύδοντες** ὡς πεντήκοντα  
 étuk<sup>h</sup>on gàr en tê:i agorâ:i hoplí:tai **kat<sup>h</sup>eúdontes** ho:s penté:konta  
*About fifty of the Athenian heavy infantry happened **to be sleeping** in the market-place*  
 (CSMG: *dioti etixe **na** kimude stin agora kapu penida oplites*) (Th IV 113)
- (45d) (375~360 BC)  
 ἐγὼ δὲ, ὦ Κῦρε, καὶ ὧν ἐγὼ κρατῶ καὶ μενοῦμεν παρὰ σοὶ καὶ ὀρῶντες σὲ ἀνεξόμεθα  
 καὶ καρτερήσομεν ὑπὸ σοῦ **εὐεργετούμενοι**.  
 egò: dè, ô: kû:re, kai hô:n egò: kratô: kai menoûmen parà soi kai horô:ntes sè  
 aneksómet<sup>h</sup>a kai karteré:somen hupò soû euergetoúmenoi.  
*But as for me, Cyrus, I, with the men whom I command, will remain with you and endure the **sight** of you (seeing you) and tolerate your **goodness** to us (being benefitted by you).*  
 (CSMG: *ma ego, kire, ke osi eleixo ke tha minume mazi su ke tha anexomaste **na** se vlepume ke tha ipominume to **na** mas everyetis*) (X An 5.1.26)

<sup>85</sup>The verb *tugk<sup>h</sup>ánein* ‘happen to’ was already taking the infinitive and had become an impersonal verb by Hellenistic Greek (Jannaris 1897 §2119); the same occurred for the other predicates now associated with *na*-complements.

- (45e) (375~360 BC)  
 ἐγὼ μὲν τοίνυν, ἔφη, ὦ ἄνδρες, ἀπείρηκα ἤδη *ξυσκευαζόμενος* καὶ *βαδίζων* καὶ *τρέχων*  
 καὶ τὰ ὅπλα *φέρων* καὶ ἐν τάξει *ἰὼν* καὶ φυλακὰς *φυλάττων* καὶ *μαχόμενος*  
 egò: mèn toínun, éphē:, ô: ándres, apeíre:ka éide: *ksuskeuazdómenos* kaì *badízdom*  
 kaì *trék<sup>h</sup>om* kaì tà hópla *p<sup>h</sup>érom* kaì en táksei *iðm* kaì p<sup>h</sup>ulakàs *p<sup>h</sup>ulátton* kaì  
*mak<sup>h</sup>ómenos*  
*For my part, sirs, I am weary by this time of **getting** kit together and packing  
 up for a start, of **walking** and **running** and **carrying** heavy arms, and of  
**tramping** along in line, or **mounting** guard, and **doing** battle.*  
 (CSMG: *ego lipon, ipe, adres, exo varethi pia na mazevo ton eksoplismo mu ke na  
 perpato ke na trexo ke na kuvalo ta opla ke na vadizo stin taksi ke na kratao  
 skopia ke na dino maxi*) (X An 5.1.2)

This use of the participle extends to another factive (Predetermined) Action context, which also takes the participle in English, but only *na* in CSMG: phasal verbs like *árk<sup>h</sup>omai* ‘begin’, *diatelô:* ‘continue’, and *paíomai* ‘stop’:<sup>86</sup>

- (46a) (viii BC)  
 ἐγὼ δ’ ἦρχον *χαλεπαίνων*...  
 egò: d ê:rk<sup>h</sup>on *k<sup>h</sup>alepaínom*...  
*and I was first **to be angry**; (Il II 378)*
- (46b) (428 BC)  
 παῦσαι *λέγουσα*.  
 paúsai *légousa*;  
 Stop *talking*  
*You, speak no more to me.*  
 (CSMG: *papse na milas*) (Eur Hipp 706)
- (46c) (400~387 BC)  
 ἢ πόθεν ἂν ὀρθῶς ἀρξαίμεθα ἄνδρας ἀγαθοὺς *ἐπαινοῦντες*  
 è: pót<sup>h</sup>en àn orth<sup>h</sup>ôs arksaímet<sup>h</sup>a ándras agath<sup>h</sup>oús *epainoúntes*  
 Or from where will we correctly begin *praising* good men?  
*and how shall we rightly begin **the praises** of these brave men?*  
 (CSMG: *apo pu tha arxisume na penevume sosta tus yeneus adres?/ apo pu  
 pianume ke penevume sosta tus yeneus adres?*) (Pl Mx 237a)

Amongst the predicates which do take *pu*-complements in CSMG, the participle occurs with emotive predicates:

- (47a) (viii BC)  
 σοὶ μὲν *νοστήσαντι*, Διοτρεφές, ὡς ἐχάρημεν/ ὡς εἶ τ’ εἰς Ἴθάκην ἀφικοίμεθα, πατρίδα  
 γαῖαν!...  
 soì mèn *nostésanti*, diotrep<sup>h</sup>és, hò:s ekháre:men,/ ho:s éi t eis it<sup>h</sup>áke:n ap<sup>h</sup>ikoímet<sup>h</sup>a  
 patrída gaían!...  
*We so rejoice **at thy return**, O noble one, as if we had come to our paternal  
 land, Ithaca (Od X 419)*
- (47b) (387~367 BC)  
 χαίρω γε *διαλεγόμενος* τοῖς σφόδρα πρεσβύταις·  
 k<sup>h</sup>áiro: ge *dialegómenos* toís sp<sup>h</sup>ódra presbútai:s;  
*and I enjoy **talking** with the very aged. (Pl R 328e)*

<sup>86</sup>For an analysis discriminating the use of infinitive and participle after *árk<sup>h</sup>omai* in terms of factivity (the participle presupposes the completion of the action, the infinitive does not), see Rijksbaron (1986).

- (47c) (431–400 BC)  
 οὐ τοῦ πλέονος μὴ στερισκόμενοι χάριν ἔχουσιν·  
 ou tou pléonos *mè: steriskómenoi* k<sup>h</sup>árin ék<sup>h</sup>ousin;  
 they do not bear gratitude [for] **not being deprived** of most  
*makes them forget to be grateful for being allowed to retain most of their*  
*possessions* (Th I 77)
- (47d) (442~441 BC)  
 μή, πρὸς θεῶν· ἀλλ’ ἔνδον ἀρκεῖτω μένων.  
 mé:, pròs t<sup>h</sup>eō:n, all éndon arkeíto: *ménon:n*.  
 No, by the gods; but let it be enough **that he stays** inside.  
*No, no, for heaven’s sake! / I’d very much rather he stayed inside.* (Soph Aj  
 76)

However, realis and irrealis emotive complements could also be expressed in Attic as *hóti*-clauses and conditional clauses, respectively.<sup>87</sup>

- (47g) (375~360 BC)  
 ἡμεῖς δέ, ὧ ἄνδρες Σινωπεῖς, ἤκομεν ἀγαπῶντες, ὅτι τὰ σώματα διεσωσόμεθα καὶ τὰ ὅπλα·  
 he:meîs dé, ô: ándres sino:peîs, hê:komen agapôntes, *hóti* tà só:mata dieso:sómet<sup>h</sup>a  
 kaì tá hópla;  
*As to ourselves, men of Sinope, having got so far, we are well content to have*  
*saved our bodies and our arms.*  
 (CSMG: *emis, adres tis sinopis, ftanume edo pera efxaristimeni pu sosame ta kormia mas ke ta oplas mas*) (X An 5.5.13)
- (47h) (400~387 BC)  
 καὶ ὡς ἀληθῶς ἀγανακτῶ εἰ οὐτωςὶ ἂ νοῶ μὴ οἷός τ’ εἰμὶ εἰπεῖν.  
 kaì hois ale:t<sup>h</sup>ô:s aganakto: *ei* houto:sì hà noô: mè: hoîós t eimì eipeîn.  
*and I am really grieved at being thus unable to express my meaning.*  
 (CSMG: *ke sta alithia ayanakto na min boro na po afta pu exo kata nu*) (Pl La  
 194a)

Participles can also appear with predicates of perception. In Homeric Greek, the participle is limited to indirect perception (48a). This is the reverse of the status of *pu* in CSMG, and lends yet more evidence against any claim that the Modern *pu* is a continuation of the Ancient participle.

- (48a) (viii BC)  
 τοὺς νῦν εἰ πτόσσοντας ὑφ’ Ἑκτορι πάντας ἀκούσαι / πολλά κεν ἀθανάτοισι φίλας  
 ἀνὰ χεῖρας ἀείραι  
*toûs* (ACC) nû:n ei *ptó:ssontas* hup<sup>h</sup> héktori pántas akóusai, / pollá ken at<sup>h</sup>anátoisi  
 p<sup>h</sup>ílas anà k<sup>h</sup>eíras aeírai

<sup>87</sup>“In the same way verbs expressing an emotion, such as *t<sup>h</sup>aumázdein* ‘marvel’, *ák<sup>h</sup>t<sup>h</sup>est<sup>h</sup>ai* ‘be vexed’, *aganakteîn* ‘be uneasy’, *aisk<sup>h</sup>únest<sup>h</sup>ai* ‘be ashamed’, *mém<sup>h</sup>est<sup>h</sup>ai* ‘blame’, *deinòn poieíst<sup>h</sup>ai* ‘take something badly’, *deinòn esti* ‘be terrible’, *agapâ:n* ‘love’, *p<sup>h</sup>t<sup>h</sup>oneîn* ‘envy’, *aisk<sup>h</sup>rón esti* ‘be shameful’ etc. are followed by an adverbial phrase introduced by *ei* ‘if, whether’ instead of a noun phrase introduced by *hóti*, through which the object of marvelling etc. is presented not as actually existing, but as merely possible or still in question, as in *t<sup>h</sup>aumázdo:, hóti taúta gígnetai* ‘I marvel that these things are happening’ and *ei taúta gígnetai* ‘if these things are happening’. Attic urbanity, which likes to mix into its language the colour of doubt and a certain indecision, uses this form of expression quite often, even with settled and undisputed situations.” (Kühner & Gerth 1963 [1898–1904] §551.8) (This means, presumably, that *ei*-complements of emotives were moving in Attic towards becoming unmarked as to factivity.)

*If he heard now of **those that all were covering** before Hector, then would he lift his hands to the immortals (II VII 129)*

In Attic, the participle with a genitive subject indicates direct perception (48b), the participle with an accusative subject (48c) or a *hóti-* or *ho:s-* clause (48d) indicate ‘perceiving as a fact’ (i.e. they are propositional—the proposition is communicated to the subject), while an infinitive indicates inference or indirect perception (48e):<sup>88</sup>

- (48b) (385 BC)
- ἦσθησαι οὐν πάποτε μου ἢ ψευδομαρτυροῦντος ἢ συκοφαντοῦντος ἢ φίλους ἢ πόλιν εἰς στάσιν ἐμβάλλοντος ἢ ἄλλο τι ἄδικον πράττοντος;  
 é:ist<sup>h</sup>e:sai oûn pó:poté **mou** (GEN) è: **pseudomarturoûntos** è: **sukop<sup>h</sup>antoûntos** è: p<sup>h</sup>íλους è: pólin eis stásin **embállontos** è: állo ti ádikon **práttontos**?  
*Then have you ever found **me dealing** in perjury or calumny, or **stirring up** strife between friends or fellow-citizens, or **doing** any other unjust act? (X Mem 4.4.11)*
- (48c) (375~360 BC)
- Ἄβροκόμας δὲ οὐ τοῦτ’ ἐποίησεν, ἀλλ’ ἐπεὶ ἤκουσε Κῦρον ἐν Κιλικίᾳ ὄντα, ἀναστρέψας ἐκ Φοινίκης παρὰ βασιλέα ἀπήλαυεν  
 abrokómas dè ou toût’ epóie:sen, all’ epeì é:kouσε **kúron** (ACC) en kilikíai: **ónta**, anastrépsas ek p<sup>h</sup>oínike:s parà basiléa apé:launen  
*This, however, Abrocomas had not done; but as soon as he learnt (heard) **that Cyrus was in Cilicia, he had turned round and made his exit from Phoenecia, to join the king** (X An 1.4.5)*
- (48d) (375~360 BC)
- ἔπεμπον δὲ οἱ πολέμιοι ἤδη, οἱ πλησίον ὄκουν, πρὸς Ξενοφῶντα ἀκούοντες, ὅτι οὗτος πολίζει τὸ χωρίον  
 épempon dè hoi polémioi é:de:, hoi ple:síon ó:koun, pròs ksenop<sup>h</sup>ò:nta akouíontes, **hóti** hoûtos polízdei tò k<sup>h</sup>oríon  
 And the opponents who were living close by were already sending [embassies] to Xenophon, hearing **that** he was making the place a town  
*Even the hostile tribes dwelling in the neighbourhood presently began to send envoys to Xenophon. It was he who was forming the place into a city, as they understood (X An 6.6.4)*
- (48e) (384~383 BC)
- ἀκούω δ’ αὐτόν, ὃ ἄνδρες δικασταί, ἐπὶ τοῦτον τὸν λόγον **τρέπεσθαι**, ὡς ὀργισθεὶς εἶρηκε ταῦτα  
 akóo: d’ autón, ó: ándres dikastaí, epì toûton tôn lógon **trépest<sup>h</sup>ai** (INF), ho:s orgist<sup>h</sup>eis éire:ke taûta  
*I **hear**, gentlemen, that he is **resorting** to the argument that he has made these statements in a fit of anger (Lys X 30)*

And participles can appear with cognitive predicates—including *mant<sup>h</sup>áno:*, *epimant<sup>h</sup>áno:* ‘learn’, *gignó:sko:*, *oída*, *epístamai* ‘know’, *mémne:mαι* ‘remember’,

<sup>88</sup>The distinction between propositional perception and inferential perception is rather fine; Kühner–Gerth (1963 [1898–1904] §484.1) speak rather of “indirect, but certain and grounded perception” for accusative + participle, as against “news relayed only as a rumour” for the infinitive. Furthermore, the accusative/genitive participial distinction only applies for some verbs, like *akóo:* ‘hear’ and *punt<sup>h</sup>ánomai* ‘hear, learn’; for others, like *aist<sup>h</sup>ánomai* ‘sense’, the accusative is normal for direct perception.

and *epilant<sup>h</sup>ánomai* ‘forget’. The distinction between participial and *hóti*-complements of cognitive predicates, unlike that between *pu*- and *oti*-complements in CSMG, “appears to be merely formal” (Kühner & Gerth 1963 [1898–1904] §550.1 Note 2).

- (49a) (viii BC)  
 ἀλλ’ ὅτε δὴ γίνωσκε θεοῦ γόνον ἢν **έόντα**,/ αὐτοῦ μιν κατέρυκε  
 all hóte dè: gíno:ske t<sup>h</sup>eoû gónon e:ûn **éonta**,/ autoû min katérυke  
*So when the king now knew **that he was** the brave offspring of a god, he kept him there* (Il VI 191)
- (49b) (359~355 BC)  
 ἀφικνεῖται εἰς Χερρόνησον. ἦν καταμαθὼν πόλεις μὲν ἔνδεκα ἢ δώδεκα **έχουσαν**  
 aphikneîtai eis k<sup>h</sup>errónē:son. hē:n katamat<sup>h</sup>ō:n póleis mèn éndeka è: dó:deka  
**ék<sup>h</sup>ousan**  
*... arrived at the Chersonese. And when he learned **that this Chersonese con-**  
**tained** eleven or twelve towns... (X HG 3.2.10)*
- (49c) (400~387 BC)  
 μέμνημαι δὲ ἔγωγε καὶ παῖς ὄν Κριτία τῷδε **συνόντα** σε.  
 mémne:mai dè égo:ge kai paîs ò:n kritíai tō:ide **sunónta** se.  
*and I remember when I was a child **seeing you in company with** Critias here.* (Pl Chrm 156a)
- (49d) (407~405 BC)  
 ἐπιλελήμεσθ’ ἠδέωσ’/ γέροντες **όντες**.  
 epilé:lēmest<sup>h</sup> hē:déō:s/ gérontes **óntes**.  
*We sweetly forget **being** old men  
 I too feel young, young enough to dance.* (Eur Ba 189)

Cognitive predicates taking participles also include predicates of proving and declaration (*verba declarandi*), such as *deíknumi* ‘prove’, *aggéllō*: ‘announce’, and *p<sup>h</sup>aínomai* ‘be apparent’, which in CSMG usually do not take *pu*-complements. Such complements first appear in *v* BC:

- (50a) (343 BC)  
 ἐπέδειξ’ οὐδὲν ἀληθὲς ἀπηγγελκότα ἀλλὰ **φενακίσανθ’** ὑμᾶς, μάρτυσι τοῖς  
 gegene:ménois autoîs, ou lógois k<sup>h</sup>ró:menos.  
 epédeiks oudèn ale:t<sup>h</sup>ēs **apeggelkóta** allà **p<sup>h</sup>enakisant<sup>h</sup>** humâ:s, mártusi toîs  
*I have proved, not by words but by the testimony of facts, **that there was** no word of truth **in the report** of Aeschines, but **that** he successfully **deceived** you.* (Dem 19.177)
- (50b) (375~360 BC)  
 λέγων αὐτῷ, ὅτι δικαίως ἂν μοι χαρίζοιτο, ὅτι αὐτῷ Κῦρόν τε **έπιστρατεύοντα** πρώτος  
 ἤγγειλα καὶ βοήθειαν ἔχων ἅμα τῇ ἀγγελίᾳ ἀφικόμεν  
 légo:m autō:i, hóti dikaío:s àn moi k<sup>h</sup>arízodoito, hóti autō:i kû:rón te **epistrateúonta**  
 prō:tos **éggeila** kai boé:t<sup>h</sup>ēian ék<sup>h</sup>o:m háma tē:i aggelíai:i ap<sup>h</sup>ikómē:n  
*I claimed it as a favour which was fairly my due; for was it not I who first **announced** to him the hostile **approach** of Cyrus? who supported that announcement by the aid I brought;... (X An 2.3.19)*
- (50c) (387~367 BC)  
 νῦν δ’ ἐπειδὴ ἀθάνατος φαίνεται **οἶσα**, οὐδεμία ἂν εἴη αὐτῇ ἄλλη ἀποφυγὴ κακῶν



οὐδὲ σωτηρία  
 nū:n d epeidè: at<sup>h</sup>ánatos p<sup>h</sup>áinetai **oûsa**, oudemía àn eíe: autê:i álle: apophugè:  
 kakō:n oudè so:te:ría  
 but now because it is apparent **that it is** immortal, there is no other avoidance  
 of evils for it, nor salvation  
 but as it is, since the soul is clearly immortal, it can have no escape or security  
 from evil (Pl Phd 107c)

There is also limited use of participles with linguistic predicates; this is mostly found in Homer (50d), (50e) constituting a rare prose instance:

(50d) (viii BC)

γρηῦς δ' εἰς ὑπερῶ' ἀνεβήσετο καγχαλόωσα./ δεσποίνῃ ἐρέουσα φίλον πόσιν ἔνδον  
*éonta*  
 gre:ūs d eis huperō:i anebé:seto kagk<sup>h</sup>alóo:sa./ despoíne:i eréousa p<sup>h</sup>ílon pósin  
 éndon *eónta*;  
*And the old woman went up to the upper-room exulting, to tell her mistress*  
*that her dear husband was within;* (Od XXIII 2)

(50e) (359~355 BC)

καὶ εἰ μὴ Κρής θείᾳ τινὶ μοίρᾳ προσελθὼν ἐξήγγειλε τῷ Ἀγησιλάῳ *προσιὼν* τὸ  
 στράτευμα, ἔλαβεν ἂν τὴν πόλιν ὡσπερ νεοττιᾶν παντάπασιν ἔρημον τῶν ἀμυνομένων.  
 kai ei mè: krēs t<sup>h</sup>éia:i tinì moírai: proselh<sup>h</sup>ō:n eksé:ggeile tō:i age:siláo:i *prosiōn* tó  
 stráteuma, élaben àn tèn pólín hósper neottían pantápasin ére:mon tō:n  
 amunoméno:n.  
*And had not a Cretan by a kind of providential chance come and reported to*  
*Agesilaus that the army was advancing, he would have captured the city,*  
*like a nest entirely empty of its defenders.* (X HG 7.5.10)

With only a few exceptions (notably predicates of perception), *hóti*-complements and participles seem to have been interchangeable in Classical Greek. However, as with *pu* in CSMG, the participle is used with linguistic predicates only when the complement is emphasised as being given (51):

(51) (409 BC)

ΠΑΙΔΑΓΩΓΟΣ:	τέθνηκ' Ὀρέστης ἐν βραχεῖ ξυνθεὶς λέγω.
ΗΛΕΚΤΡΑ:	οἱ γὰρ τάλαιν', ὄλωλα τῆιδ' ἐν ἡμέραι.
ΚΛΥΤΑΙΜΝΗΣΤΡΑ:	τί φῆς, τί φῆς, ὦ ξεῖνε; μὴ ταύτης κλύε.
ΠΑΙΔΑΓΩΓΟΣ:	<b>θανόντ'</b> Ὀρέστην νῦν τε καὶ πάλαι λέγω.
<i>paidago:gós:</i>	tét <sup>h</sup> ne:k oréste:s; en brak <sup>h</sup> eí ksunt <sup>h</sup> eis légo:.
<i>e:léktra:</i>	oì gò: tálain, ólo:la tē:īd en he:mérai.
<i>klutaimné:stra:</i>	tí p <sup>h</sup> é:s, tí p <sup>h</sup> é:s, ô: kseíne? mè: taúte:s klúe.
<i>paidago:gós:</i>	<b>t<sup>h</sup>anónt</b> oréste:n nū:n te kai pálai légo:.
PAEDAGOGUS:	<i>Orestes is dead. There it is, in one short word.</i>
ELECTRA:	<i>O God, O God! This is the day I die.</i>
CLYTEMNESTRA:	<i>What is this you say, sir, what? Don't listen to her.</i>
PAEDAGOGUS:	<i>What I said and say now is 'Orestes is dead.'</i> (Soph El 676)

A final class of predicates taking participles is not factive: it involves predicates of attempt, such as *peirô:mai* ‘try’. Participles are infrequent in Attic (52a), but much more frequent in Herodotus (52b):<sup>89</sup>

(52a) (387~367 BC)

οὐκ ἐρῶ σοι πρὶν ἂν πανταχῆ πειραθῶ σκοπῶν.  
 ouk erô: soi prîn ân pantakhê:i peirat<sup>h</sup>ô: *skopô:n*.  
 I will not tell you before I try **looking** everywhere.  
*I will not mention them until I have tried **to look** at the question from every quarter.* (Pl Tht 190e)

(52b) (~450 BC)

διέβη ἐς Αἴγινα, βουλόμενος συλλαβεῖν Αἰγινητέων τοὺς αἰτιωτάτους· ὡς δὲ ἐπειρᾶτο  
*συλλαμβάνων*, ἄλλοι τε δὲ ἐγίνοντο αὐτῷ ἀντίξοοι  
 diébe: es aiginan, boulómenos sullabeîn aigine:téon toùs aitiotátous; ho:s dè  
 epeirâ:to *sullambánom*, álloi te dè: egínonto autô:i antíksooi  
*(He) crossed over to Aegina intending to arrest the most culpable of its people.*  
*But when he attempted **to make the arrests**, the Aeginetans opposed him*  
 (Hdt VI 50)

As with adjuncts, *ho:s* can frequently precede complement participles, although it serves not to mark the complement as non-factive, but

to mark the mental attitude of the subject of the main verb or of some other person mentioned prominently in the sentence [...]; sometimes, to denote emphasis, when that mental attitude is already clearly marked (Smyth 1959 [1920] §2120):

(52c) (409 BC)

ὡς	μηδὲν	εἰδότη'	ἴσθι	μ'	ὧν	ἀνιστορεῖς.
<i>ho:s</i>	me:dèn	<i>eidót</i>	íst <sup>h</sup> i	m	hô:n	anistoreîs.
as	nothing	knowing	know!	me	of what	you.ask

*I never knew a word of what you ask me.* (Soph Ph 253)

Indeed, the class of predicates taking *ho:s*+ predicate complements is broader than that taking predicates alone, such as *isk<sup>h</sup>urízdomai* ‘claim’ and *gnó:me:n ék<sup>h</sup>o:* ‘be of the opinion that’ (Smyth 1959 [1920] §2121–2122). This means that *ho:s* allowed non-factive predicates to take participles, although the complement did not necessarily become non-factive as a result.

So on the one hand the use of the participle as a verb complement follows factivity far more closely than *pu*-complements, or even the English participle: the Classical participle expands to Predetermined Occurrence and Action contexts, propositional perception as distinct from inferential perception, and predicates of proving and declaration.<sup>90</sup> On the other, adjunct participles are clearly

<sup>89</sup>There are up to 15 participial complements of *peirô:mai* in Herodotus against 37 infinitival complements; in Plato, by contrast, there are only two instances of participial complements (Rijksbaron 1986:190).

In his attempt to use factivity to account for the distribution of the Classical participle, Rijksbaron (1986) finds that for at least some complements of *peirô:mai*, there is no semantic difference between the participial and the normal infinitival complement.

<sup>90</sup>Rijksbaron (1986) analyses participial complements explicitly in terms of factivity, but such an analysis is anticipated in the standard Greek grammars, such as Kühner & Gerth (1963 [1898–1904]).

not always factive; they include the two basic irrealis adjuncts, conditional and purposive. And even amongst supplementary participles, *peirô:mai* forms an exception to a factive account; the exception also holds for the English participle (*try going*). A unifying factor for the functions of the participle might prove difficult to establish.<sup>91</sup>

This emphasises that, attractive as it might be synchronically, it is not always useful to subsume such a functional heterogeneity under a single ordering principle—particularly when speaking in diachronic terms, as the heterogeneity results from diachronic accretions, subsequently only partially simplified through analogy. A series of diachronic accretions—including many local reanalyses and analogies—has given rise to the predominantly factive Ancient participle. A similar *but not identical* series of accretions has given rise to the predominantly factive Modern *pu*. Their similarity is a matter of linguistic typology, and not diachrony as far as we can tell; some confirmation of this arises in looking at the status of the participle in Middle Greek.

#### 5.4. Middle Greek status quo ante

To investigate the environment in which *hórou* came to acquire its modern functions, it is useful to survey the status of its Classical equivalents—*hóti*, *hos* and the participle—as well as any new competitors such as *pos*, in the era when *hórou* was reanalysed, namely Middle Greek.

##### 5.4.1. Relativisers

In written Koine, *hóstis* is used alongside *hós* as a relativiser. From *iii* AD, in addition, the definite article is increasingly used as a relativiser in the papyri (Gignac 1981:179), following on from parallel sporadic usage in older Greek dialects:

(53a) (i~ii AD)

*τὰ* περιέκαμεν δεδώκαμεν  
*tà* periákamen dedókamen  
**what** we have received, we have given (SB 9017 (14).9)

(53b) (~296)

*τὰ* χαλκώματα *τὰ* ἔχῃς παρὰ σοί, δὸς αὐτά...  
*tà* k<sup>h</sup>alkó:mata *tà* ék<sup>h</sup>is parà soí, dós autá...  
 the copper vessels **that** you have with you, give them... (SB 7253)

<sup>91</sup>Fox (1983) identifies backgroundedness in discourse as such a factor, as confirmed by the morphological features of the participle, characteristic of background status. Thus, the participle tends not to be used to chain clauses with the same subject in a narrative, but to introduce supplementary information with novel, digressive subjects; furthermore, participials tends to be more intransitive and atelic. Fox's discussion is relatively brief, and does not substantially tackle the issue of complements. However, a discourse-based approach would encompass the irrealis adjuncts (by virtue of their backgrounded status in discourse), and would encompass the factive complements through the equation BACKGROUNDED = GIVEN = PRESUPPOSED = PREDETERMINED.

There are also sporadic instances of *to* as a relativiser in Low Literary Middle Greek:

(53c) (~480)

ἐκεῖνο **τὸ** ἐφόγομεν τῆς ἀγάπης ἦν· ἡμεῖς δὲ τὴν ἑαυτῶν νηστείαν κρατήσωμεν, τέκνον.  
 ekeino **tò** ep<sup>h</sup>ágomen tês agápe:s ê:n; he:meîs δὲ τὲ:n heautô:m ne:steían  
 kraté:so:men, téknon.

*What (=that **which**) we have eaten came through charity but, my child, let us keep our own fast.* (Aphth.Patr 408C)

(53d) (~650)

μὴ δειρήσῃ τὰ παῖδια **τὰ** φιλῶ, ὅτι μακρὰν στράταν ἔχουσιν ἀπελθεῖν.  
 mē: deirē:s tὰ paidía **tà** p<sup>h</sup>ilō:, hōti makràn strátan ék<sup>h</sup>ousin apelt<sup>h</sup>ēin.

*do not thrash the children **whom** I kiss, for they have a long way to go.*  
 (Leont.N v.Sym 1717A=151.5)

(53e) (~800)

**τὸ** μισῶ οὐ θέλω βλέπειν  
**tò** misō: ou t<sup>h</sup>élo: blépein

***what** I hate I do not want to see* (Thphn 183.31)

Bakker (1974:96) concludes *to* was a vernacular relativiser, mostly suppressed in writing; “it seems that the only reason why it is found a few times more often than *hópou* is that it was so similar to the ‘official’ pronoun *hós hé: hó.*”

Use persists of the relativisers *hós* and *hóstis* to convey sundry modal meanings, which would prepare the way for any novel relativisers being used with similar modal nuances. These include purposives with the future indicative (54a) and subjunctive (54b), resultatives (54c), causals (54d), concessives (54e), and conditionals (54f):<sup>92</sup>

(54a) (173?)

δώσω κριτὴν καὶ λογοθέτην τὸν αὐτὸν ὃς ἐξετά[σει]  
 dó:so: kritē:n kai logothēte:n τὸν αὐτὸν **hòs** eksetásei

*I will give you the same judge and legislator, **who will** examine* (PSeI 183.31)

(54b) (70~79)

συνῆλθον δὲ καὶ τῶν μαθητῶν ἀπὸ Καισαρείας σὺν ἡμῖν, ἄγοντες **παρ’** ᾧ ξενισθῶμεν  
 Mnásoní tini Kupríō, árkháíō mathētῇ.

sunē:lt<sup>h</sup>on δὲ kai tō:n mat<sup>h</sup>ētō:n apò kaisarías sùn he:mî:n, ágontes **par hō:i**  
 ksenist<sup>h</sup>ō:men mnáso:ní tini kupríō:i, ark<sup>h</sup>áío:i mat<sup>h</sup>e:tē:i.

*And some of the disciples from Caesarea went with us, bringing us to the house of Mnason of Cyprus, an early disciple, **with whom** we should lodge.*  
 (NT Ac 21:16)

(54c) (57)

τίς γὰρ ἔγνω νοῦν Κυρίου, ὃς συμβιβάσει αὐτόν;  
 tís gàr éгно: noûn kuríou, **hòs** sumbibásei autón?

<sup>92</sup>With these relativisers, as with their counterparts in Classical Greek, Modern Greek, and English, the issue of underspecification holds, as articulated by Robertson (1934 [1923]:956): “Almost any sentence is capable of being changed into some other form as a practical equivalent. The relative clause may indeed have the resultant effect of cause, condition, purpose or result, but in itself it expresses none of these things. It is like the participle in this respect. One must not read into it more than is there.”

*For who has known the mind of the Lord so as to instruct him?* (NT 1 Cor 2:16)

- (54d) (58)  
 ὅς γε τοῦ ἰδίου Υἱοῦ οὐκ ἐφείσατο, ἀλλὰ ὑπὲρ ἡμῶν πάντων παρέδωκεν αὐτόν, πῶς οὐχὶ καὶ σὺν αὐτῷ τὰ πάντα ἡμῖν χαρίζεται;  
*hós* ge toû idíou huiouî ouk ep<sup>h</sup>eísato, allà hupèr he:mô:n pánto:n parédo:ken autón, pô:s ouk<sup>h</sup>i kai sùn autô:i tà pánta he:mî:n k<sup>h</sup>arísetai?  
*He who did not even spare his own Son but gave him up on for us all, will he not also give us all things with him?* (NT Rom 8:32)

- (54e) (50~100)  
 ἄγε νῦν οἱ λέγοντες Σήμερον ἢ αὔριον πορευσόμεθα εἰς τήνδε τὴν πόλιν καὶ ποιήσομεν ἐκεῖ ἐνιαυτὸν καὶ ἐμπορευσόμεθα καὶ κερδήσομεν· οἵτινες οὐκ ἐπίστασθε τῆς αὔριον ποία ἡ ζωὴ ὑμῶν.  
 áge nû:n hoi légonτες sé:meron è: aúrion poreusómet<sup>h</sup>a eis té:nde tèn pólin kai poié:somen ekeî eniautôn kai emporeusómet<sup>h</sup>a kai kerdé:somen; *hoítines* ouk epístast<sup>h</sup>e tês aúrion poía he: zdo:è: humô:n.  
*Come now, you who say, 'Today or tomorrow we will go into such and such a town and spend a year there and trade and get gain'; whereas you do not know about tomorrow. What is your life?* (NT Jac 4:14)

- (54f) (~65)  
 ἀλλ' ὅς ἀνθέλη μέγας γενέσθαι ἐν ὑμῖν, ἔσται ὑμῶν διάκονος, καὶ ὅς ἀνθέλη ἐν ὑμῖν εἶναι πρῶτος, ἔσται πάντων δοῦλος·  
 all *hós an* t<sup>h</sup>éle:i mégas genést<sup>h</sup>ai en humî:n, éstai humô:n diákonos, kai *hós an* t<sup>h</sup>éle:i en humî:n eínai prô:tos, éstai pánto:n doúlos;  
*but whoever want to be great among you must be your servant, and whoever would be first among you must be slave of all.* (NT Mc 10:43)

The use of the relativiser as a discourse connective reaches endemic proportions in written Middle Greek—although this is likelier to reflect the officialese of the time than the vernacular, as Tabachovitz has argued:

The explanation of this fact [relative connection], it seems to me, should be sought also in this case in the ambition of the authors to write in a style distanced from the spoken language [...] Considering how frequent paratactic connection with *kai* (*ke*) 'and' was and remains in the popular language [...], one must surmise that those Byzantine authors who were not good enough stylists to make proper use of the finely nuanced particles of Ancient Greek would see in relative connection a convenient replacement for popular *kai*, which they were seeking to avoid. (Tabachovitz 1943:11).

- (55a) (70~79)  
 τὸν δὲ Ἄρχηγὸν τῆς ζωῆς ἀπεκτείνετε, ὃν ὁ Θεὸς ἤγειρεν ἐκ νεκρῶν, οὗ ἡμεῖς μάρτυρές ἐσμεν.  
 tòn dè ark<sup>h</sup>e:gòn tês zdo:è:s apekteínete, *hòn* ho t<sup>h</sup>eòs é:geiren ek nekrô:n, *hou* he:meís márturés esmen.  
*And killed the Prince of life, whom God hath raised from the dead; whereof we are witnesses.* (King James)  
*and killed the Author of life, whom God raised from the dead. Ø To this we are witnesses.* (NT Ac 3:15)

- (55b) (~800)  
 τοῦτον ἡγάπα πᾶς ὁ λαὸς οἰκοδομούμενος σφόδρα ταῖς διδασκαλίαις αὐτοῦ, οἱ δὲ ζῶντες ἀσώτως ἀπεστρέφοντο αὐτόν· οἱ καὶ εἰς τὸν κατ' αὐτοῦ πόλεμον συνήρρησαν.  
 toúton e:gápa pâ:s ho laòs oikodomoúmenos sp<sup>h</sup>ódra taís didaskalíais autoû, hoi dè

zdô:ntes asó:to:s apestré<sup>h</sup>onto autó<sup>n</sup>; **hoi** kai eis tôn kat autoû pólemon suné:rge:san.

The entire people loved this man, being greatly edified by his teachings; but those who lived dissolutely avoided him; **who** also contributed to the war against him. (Thphn 78.3)

(55c)

(~800)

διάδημα περιθέμενος πρὸ τῆς Κωνσταντίου τελευτῆς εἰς ἑλληνισμὸν ἀναιδῶς ἐξετράπη. **ὅπερ** Κωνσταντίος πλείστα μεταμελούμενος ἀπέδωκε τὸ πνεῦμα ἐπὶ τε τῷ γένους φόνῳ καὶ τῇ καινοτομίᾳ τῆς πίστεως καὶ τῇ ἀναρρήσει τοῦ ἀποστάτου.  
diáde:ma perit<sup>h</sup>émenos prò tês ko:nstantíou teleutês eis helle:nismòn anaídôs eksetrápe:. **hóper** ko:nstántios pleísta metamelóúmenos apédo:ke tò pneúma epí te tō:i génoús p<sup>h</sup>óno:i kai tē:i kainotomíai:i tês písteo:s kai tē:i anarré:sei toû apostátou.  
wearing a crown before Constantius died, he (Julian) shamelessly gave himself over to paganism. **So** Constantius gave up the spirit with great regret over the murder of his kin and the innovation in creed and the rise of the apostate. (Thphn 46.33=71.8)

In (55b) the pronominal meaning of the relativiser is so bleached that it appears in redundant combination with *kai*, a fully-fledged sentence connective. In (55c) any semblance of referentiality for the relativiser is dropped through the use of a neuter singular form (cf. Puristic-influenced Modern Greek *to opion*); the referent *konstantios* is masculine.

A particular quirk of the era (adumbrated in 55c) is the use of adjectival *hóstis* as a discourse connective (Tabachovitz 1943:13)—a trait continued in formal CSMG with *o opios* (§3.5.2):

(55d)

(525–550)

Ἐν δὲ τῇ αὐτοῦ βασιλείᾳ ἀντήρην ὁ πατρίκιος Ἰλλοῦς ὁ Ἰσαυρος, ὁ φίλος τοῦ αὐτοῦ βασιλέως Ζήνωνος, ὁ ἀναγαγὼν τὸν αὐτὸν βασιλέα Ζήωνα μετὰ βοηθείας πολλῆς τὴν δευτέραν αὐτοῦ ἐπάνοδον ἀπὸ τῆς Ἰσαυρίας, ὅτε ἔφυγεν ἀπὸ Κωνσταντινουπόλεως βασιλεύων. **ὅστις Ἰλλοῦς** ἀνήλθεν ἐν Κωνσταντινουπόλει μετὰ τοῦ αὐτοῦ βασιλέως Ζήνωνος.

en dè tē:i autoû basileía:i antē:ren ho patríkios illoûs ho ísauros, ho p<sup>h</sup>ílos toû autoû basiléo:s zdé:mo:mos, ho anagagò:n tôn autòn basiléa zdé:mo:na metà boeit<sup>h</sup>eías pollēs tē:n deutéran autoû epánodon apò tês isaurías, hôte ép<sup>h</sup>ugen apò ko:nstantinoupóleo:s basileúo:n. **hóstis illoûs** anē:lt<sup>h</sup>en en ko:nstantinoupólei metà toû autoû basiléo:s zdé:mo:mos;

And in the reign of the same, the patrician Illus the Isaurian rebelled, the friend of the same emperor Zeno, who escorted the same emperor Z. with great assistance on his second return from Isauria, when he fled from C. while reigning. **The which Illus** came up to Constantinople with the same emperor Z.

*In his reign the patrician Illus rebelled. He was an Isaurian and friend of the emperor Zeno and had escorted him back with a large force on his second return from Isauria, after he had fled there from Constantinople while emperor. Illus had returned to Constantinople with the emperor Zeno.* (Jo.Mal 385.13)

### 5.4.2. Participle

The participle remains in use in Middle Greek to express complements and adjuncts. Thus:<sup>93</sup>

<sup>93</sup>Papyrological examples from Mandilaras (1973:365–368).

The purposive function is usually expressed by a infinitive rather than a participle; participial instances in the New Testament are characterised as “remnants” (Robertson 1934 [1923]:991, 1118)—particularly the future participle. The following instances are exceptional:

- (56a) (70~79)  
 ἄφες ἴδωμεν εἰ ἔρχεται Ἡλείας **σώσων** αὐτόν.  
 áph<sup>h</sup>es ídomen ei érk<sup>h</sup>etai he:leías **só:so:n** autón.  
*Wait, let us see whether Elijah will come **to save** him.* (NT Mt 27:49)
- (56b) (248)  
 προσῆλθον αὐτῷ **αἰτήσων**...  
 prosê:lt<sup>h</sup>on autô:i **aité:so:n**...  
*they aproached him **asking**...* (PGraux 4.8–9)
- (56c) (iv AD)  
 κἂν ὡσεῖπερ μέλι σοι ἀπόστῖλόν μοί τινα ἢ Γουῦθον ἢ Ἀμμώνιον **παραμένοντά** μοι  
 ἄχρις ἂν γνῶ πῶς τὰ κατ’ αἰμαὶ ἀποτίθεται.  
 k àn ho:seíper méli soi apóstí:lón moí tina è: goúnt<sup>h</sup>on è: ammó:nion **paraménontá**  
 moi ák<sup>h</sup>ris àn gnô: pô:s tà kat aimai apotít<sup>h</sup>atai.  
*make it your business to send some one to me, either Gunthus or Ammonius,  
**to stay** with me until I know the position of my affairs.* (POxy 120.13)

On the other hand, the participle remains in full use as a temporal:

- (57a) (~67)  
 πίστει Ἰακώβ **ἀποθνήσκων** ἕκαστον τῶν υἱῶν Ἰωσήφ εὐλόγησεν  
 pístei iakò:b **apothnéskon** hékaston tō:n huiō:n io:sê:p<sup>h</sup> eulóge:sen  
*By faith Jacob, **when dying**, blessed each of the sons of Joseph* (NT Heb 11:21)
- (57b) (ii~ea. iii AD)  
 εἰς δὲ μέλλης οὕτω αὐτῷ ἐπιτιμᾶν Πτολεμαῖ[ο]ν **πέμψασα** ἀποσπάσ[ω] αὐτόν.  
 eîs dè melle:is hóito: autô:i epitimân ptolemaîon **pémpsa** apospáso: autón.  
*but if you intend to blame him in this way, **I shall send** Ptolemaeus **and** take  
 him away.* (POxy 1295.5–6)

Such instances include temporal participles ambiguous with conditionals, although purely conditional participles are restricted to stereotyped expressions in the Ptolemaic papyri (iii–i BC) (Mandilaras 1973:367):

- (57c) (ea. iii AD)  
 μνημόνευσον δὲ **ἐρχόμενος** ὧν ἔγραψά σοι πολλάκις  
 mnemónēuson dè **erk<sup>h</sup>ómenos** hō:n égrapsá soi pollákis  
*and remember **when/if you come** what I have written you about many a time*  
 (PLond Inv. No. 1575.17–18)

Conditional participles are still extant in the New Testament—although Robertson’s (1934 [1923]:1129) examples come from the literary rather than vernacular authors:

- (57d) (70~79)  
 τί γὰρ ὠφελεῖται ἄνθρωπος **κερδήσας** τὸν κόσμον ὅλον ἑαυτὸν δὲ **ἀπολέσας** ἢ  
 ζημιωθείς;

τί γὰρ οἰσθήσεται ἀνθρώπος *kerdésas* τὸν κόσμον ὅλον heautὸν δὲ *apolésas* ἐ:  
*zdemioi<sup>t</sup>eís*?

*For what does it profit a man if he gains the whole world, and loses or forfeits himself?* (NT Lc 9:25)

The participle is also in full use to denote manner, means and circumstance—

(58a) (70~79)

ἕτεροι δὲ *διαχλευάζοντες* ἔλεγον ὅτι Γλεῦκους μεμεστωμένοι εἰσίν.  
héteroi δὲ diak<sup>h</sup>leuázontes élegon hóti “gleíkou<sup>s</sup> memesto:ménoi eisín.”  
*But others mocking said, ‘They are filled with new wine.’* (NT Ac 2:13)

(58b) (70~79)

τίς δὲ ἐξ ὑμῶν *μεριμνῶν* δύναται προσθεῖναι ἐπὶ τὴν ἡλικίαν αὐτοῦ πῆχυν ἓνα;  
tís δὲ eks humō:n *merimnō:n* dúnatai prost<sup>h</sup>eínai epì tē:n he:likían autoû pê:k<sup>h</sup>un  
héna?  
*And which of you by being anxious can add one cubit to his span of life?*  
(NT Mt 6:27)

(58c) (ii AD)

γινόςκειν σε θέλω ἀφ’ ὧς ἐξῆλθες ἀπ’ ἐμοῦ πένθος ἡγοούμεν νυκτὸς *κλέων* ἡμέρας δὲ  
*πενθῶν*  
ginóskein se t<sup>h</sup>élo: ap<sup>h</sup> ho:s eksê:lt<sup>h</sup>es ap emouí pēnt<sup>h</sup>os he:goúme:n nuktòs *kléon*  
he:méras δὲ *pent<sup>h</sup>ō:n*  
*I assure you that ever since you left me I have been in mourning, weeping by*  
*night and lamenting by day* (POxy 528.8–9)

(58d) (iv AD)

ἔρ[ρ]ωσό μοι διὰ παντὸς εὖ *πράσ[σ]ουσα*  
érro:só moi dià pantòs eû *prássousa*  
Fare well for me, always **doing** well  
*Farewell; I wish you all prosperity* (POxy 120.26)

cause—

(59a) (70~79)

Ἰωσήφ δὲ ὁ ἀνὴρ αὐτῆς, δίκαιος ᾧν καὶ μὴ θέλων αὐτὴν δειγματίσαι, ἐβουλήθη λάθρα  
ἀπολύσαι αὐτήν.  
io:sē:p<sup>h</sup> δὲ ho anēr autēs, díkaios ᾧn kaì mè: t<sup>h</sup>élo:n autē:n deigmatísai, eboulé:t<sup>h</sup>e:  
lát<sup>h</sup>rai apolú:sai auté:n.  
*and her husband Joseph, being a just man and unwilling to put her to shame,*  
*resolved to divorce her quietly.* (NT Mt 1:19)

(59b) (la. v~ea. vi AD)

*θαρόν* γὰρ τῆ σὲ ἀρετῆ καὶ τῆ μεταξὺ φιλία γεγράφεκα  
*t<sup>h</sup>arón* gār tē:i sè aretē:i kaì tē:i metaksù p<sup>h</sup>ílíai: gegráp<sup>h</sup>eka  
*For I have written trusting in your virtue and our mutual friendship* (POxy  
1872.4–5)

and concession:

(60a) (70~79)

καὶ *λυπηθεῖς* ὁ βασιλεὺς διὰ τοὺς ὄρκους καὶ τοὺς συνανακειμένους ἐκέλευσεν  
δοθῆναι, καὶ πέμψας ἀπεκεφάλισεν Ἰωάννην ἐν τῇ φυλακῇ.  
kaì *lypet<sup>h</sup>eis* ho basileùs dià toùs hórkou<sup>s</sup> kaì toùs sunanakeiménous ekéleusen  
dot<sup>h</sup>ē:nai, kaì pémpsas apekep<sup>h</sup>álishen io:áne:n en tē:i p<sup>h</sup>ulakē:i.  
*And the king was sorry; but because of his oaths and his guests he com-*



manded it to be given; he sent and had John beheaded in the prison. (NT Mt 14:9)

(60b)

(iii AD)

ἐπιθυμῶν οὖν πρὸς ὑμᾶς τῷ ἀναπλόῳ κατανηῆσαι περιεκλείσθημεν ἀπὸ τοῦ δοθέντος [τῷ παι]δίῳ ὑπὸ τοῦ λαμπροτάτου ἡγεμόνος κομεάτ[ου]

*epit<sup>h</sup>umō:n* oūn pròs humâ:s tô:i anaplôo:i katantê:sai periekleíst<sup>h</sup>e:men apò toû dot<sup>h</sup>éntos tô:i paidío:i hypò toû lamprotátou he:gemónos komeátou

**I desired** then to pay you a visit on the upward voyage, **but** we were limited by the furlough granted to the boy by the most illustrious praefect (POxy 1666.11–12)

However, in Romanus the Melodist (*vi* AD), participial adjuncts are dispreferred—particularly the purposive (Mitsakis 1967:156).

So the irrealis participial usages die out in Middle Greek, while the factive usages remain intact. This makes the Middle Greek participle more closely aligned with Modern Greek adjunct-*pu* in their factivity.

As a verb complement, the participle remains in use by such authors as Malalas and Romanus the Melodist; but substitution by the infinitive and *hóti*-clauses is well underway. For example, *árk<sup>h</sup>omai* ‘begin’ already takes the infinitive instead of the participle in the New Testament, although *paúomai* ‘cease’ still takes the participle (Robertson 1934 [1923]:1121).<sup>94</sup>

Statistical evidence suggests that there was a steady drop in usage of the participle overall throughout the period. Robertson (1934 [1923]:1098–1099), using Williams’ text counts, gives the following average text counts of participles per 30-line page (which I have converted to counts per 1000 words):

<b>Genre</b>	<b>Date</b>	<b>Text</b>	<b>/page</b>	<b>%o words</b>
<b>Homeric:</b>	<i>viii</i> BC	Homer	8.2	34
<b>Tragedians:</b>	<i>v</i> BC	Sophocles	9	38
<b>Historians:</b>	<i>v</i> BC	Herodotus	17.5	74
	<i>v</i> BC	Thucydides	13	55
	<i>iv</i> BC	Xenophon	12.6	53
<b>Orators &amp; Philosoph.:</b>	<i>iv</i> BC	Plato	10.2	43
	<i>iv</i> BC	Demosthenes	10.7	45
<b>Atticists:</b>	<i>ii</i> BC	II Maccabees	23.5	99
	<i>i</i> AD	Josephus	20	84
<b>Literary Koine:</b>	<i>ii</i> BC	Polybius	17.8	75
	<i>i</i> AD	Strabo	13.5	57
	<i>ii</i> AD	Plutarch	14	59
<b>Septuagint:</b>	<i>ii</i> BC	Ex, Dt, Jud	6.2	26
<b>Papyri:</b>		(unspecified)	6.8	29
<b>New Testament:</b>	<i>i</i> AD	Acts	17.2	72
	<i>i</i> AD	Luke	16.7	70
	<i>i</i> AD	Hebrews	14	59
	<i>i</i> AD	Mark	11.7	49
	<i>i</i> AD	John	10.4	44
	<i>i</i> AD	Paul: Gal, 1 Cor, Rom	9	38
	<i>i</i> AD	Revelation	9	38
<b>Mediaeval Cypriot:</b>	<i>xv</i> AD	Chr. of Makhairas	2.6	11

<sup>94</sup>For further discussion, see below.

<b>CSMG:</b>	<i>xx AD</i>	<i>The Third Wedding</i>	1.1	4.5
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Table 19. Diachronic participle frequency counts<sup>95</sup>

The counts show that the participle was particularly widespread in formal, historical prose (34‰ in Homer against 55‰ in Thucydides, and 74‰ in Herodotus), and hypercorrectly used in Atticist Greek (99‰ in II Maccabees). However, it had fallen into less frequent use in Koine (more so in the Septuagint, because of the influence of Hebrew—26‰, as against 29‰ in the papyri), and usage in the New Testament broadly correlates with the formality of the language (38–72‰) (Paul forming an exception.)

So while the participle may not have been dying out yet, its use was clearly on the wane. This is corroborated by an increase through Middle Greek of errors in using participle case and gender, and its use in matrix clauses (Jannaris 1897 §2168). This trend continues through to Modern Greek; thirteen centuries after Revelation's 38‰, the *Chronicle of Makhairas* yields 11‰, and five centuries after that, *The Third Wedding's* 4.5‰ represents an upper limit for CSMG.

It is crucial to the question of whether the participle was involved in functional continuity with *pu*, to determine how the participle was used at the time *pu* acquired the functions characteristic of it. Unfortunately this seems to be the very time we do not have good attestation of the vernacular—the Greek Dark Ages. It is true that in Early Middle Greek the distribution of the participle became more like that of *pu*, with an increase in factivity. By Late Middle Greek, a drop in the distribution of the participle set in, and although we cannot tell how quick that drop was, by Early Modern Greek the participle was no longer an effective antecedent to *pu*. The evidence is inconclusive at this stage, but the typological plausibility of the similarities between the two strategies make it unnecessary to postulate any direct continuity.

<sup>95</sup>I am responsible for the last two text counts, based on an estimate that Williams' page measure corresponds to 238 words. There are 1164 participles in the *Chronicle of Makhairas* (107,000 words), of which 517 are past passive (adjectival) participles, 3 are aorist passive (adjectival) participles, 97 are present passive (adjectival), and 547 are active (adverbial). So there are at least 1.2 adjunct usages per page. (Adjectival participles are not sentential adjuncts.) Antiquarianism in Makhairas' text can be ruled out as a factor compelling participle use: the adverbial active participle is a late Middle Greek innovation with no Attic equivalent, and there are no instances of the Attic use of the participle as a predicate complement in the text.

There are 526 participles in *The Third Wedding* (118,000 words). (The count depends on lexicalisation judgements—not all CSMG morphological participles are lexically productive.) 395 of these are past passive (adjectival) participles, 21 are present passive (adjectival), and 110 are active (adverbial). This means that mid-*xx AD* urban written Greek has a proportion of adjunct participial usage not substantially more than 0.22 adverbial instances per page. So while the drop in adjectival participles is not significant, adverbial usage has dropped by a factor of six in six hundred years. If anything, *The Third Wedding* is probably at the higher range of contemporary Greek participial usage, as it makes more concessions to Puristic than is usual in Greek literature.

### 5.4.3. *hóti*

In Middle Greek, *hóti* remains vigorous in use; if anything, its usage is expanded, so that it supplants *ho:s* as the all-purpose connective. As Jannaris (1897 App. VI.12) argues, this was because the paradigm of complementisers and purposives was reduced from *hóti*, *ho:s*, *hós:s*, *hópo:s*, *hópo:s án*, *hína* to *hóti* and *hína*—in grammaticalisation theory parlance, the paradigm has undergone obligatorification;

this fact, besides its own significance, shows further that the conjunctions *hóti* and *hína*, having appropriated the functions of all former declarative and final particles, had become very common.

Thus, *hóti* remains in use as a causal particle, alongside the reinforced version *dióti* ‘for that’:

- (61a) (70~79)  
 ἐπιστάτα, εἶδομέν τινα ἐν τῷ ὀνόματί σου ἐκβάλλοντα δαίμονα, καὶ ἐκώλυμεν αὐτόν, **ὅτι** οὐκ ἀκολουθεῖ μεθ’ ἡμῶν.  
 epistáta, eídomén tina en tō:i onómátí sou ekbállonta daímona, kai eko:lúomen autón, **hóti** ouk akolout<sup>h</sup>eí met<sup>h</sup> he:mō:n.  
*Master, we saw a man casting out demons in your name, and we forbade him, **because** he does not follow with us.* (NT Lc 9:49)
- (61b) (525–550)  
 εἰ γὰρ συνήδει κακῶ, οὐκ ἂν ἡ δίκη ἐποίησεν αὐτόν φαγεῖν μετ’ ἐμοῦ, **ὅτι** νόμος ἐστὶν Ἑλλησι τῷ συνεσθίοντι μὴ ποιεῖν κακῶς.  
 ei gàr sunéidei kakō:i, ouk àn he: díke: epoíe:sen autòn p<sup>h</sup>ageîn met emoû, **hóti** nómos estin hélle:si tō:i sunest<sup>h</sup>íonti mē: poieîn kakō:s.  
*for if he were guilty of evil, justice would not have allowed him to eat with me, **because** it is the custom amongst the Hellenes not to harm anyone who has eaten with you.* (Jo.Mal 84.14)

*hóti* also spreads to realis resultatives; Jannaris (1897 §1757) speculates this is because of the synonymy of *ho:s* and *hóti* in Classical Greek, and may have also involved phonetic similarity between the two:

- (62a) (ii–i BC)  
 τίς εἰμι ἐγὼ **ὅτι** πορεύσομαι πρὸς Φαραῶ, βασιλέα Αἰγύπτου, καὶ **ὅτι** ἐξάξω τοὺς υἱοὺς Ἰσραήλ ἐκ γῆς Αἰγύπτου;  
 tíς eimi egō: **hóti** poreúsomai pròs p<sup>h</sup>araō:, basiléa aigýptou, kai **hóti** eksákso: toùs huiou:s israé:l ek gē:s aigýptou?  
*Who am I **that** I should go to Pharaoh, [king of Egypt], and ∅ bring the sons of Israel out of Egypt?* (LXX Ex 3:11)
- (62b) (70~79)  
 ποταπός ἐστιν οὗτος, **ὅτι** καὶ οἱ ἄνεμοι καὶ ἡ θάλασσα αὐτῷ ὑπακούουσιν;  
 potapós estin hoûtos, **hóti** kai hoi ánemoi kai he: t<sup>h</sup>álassa autō:i hupakóuousin?  
*What sort of man is this, **that** even winds and sea obey him?* (NT Mt 8:27)
- (62c) (~480)  
 ἔλεγεν ὁ ἀββᾶς Ποιμὴν διὰ τὸν ἀββᾶν Κόπριν, ὅτι εἰς τοσοῦτον ἦλθε μέτρον, **ὅτι** ἠσθένει καὶ κληνήρης ἦν, καὶ εὐχαρίσκει, καὶ ἐκώλυε τὸ ἴδιον θέλημα.  
 élegen ho abbâ:s poimē:n dià tòn abbâ:n kóprin, hóti eis tosoûton ê:lt<sup>h</sup>e métron, **hóti** e:st<sup>h</sup>énei kai kle:né:re:s ê:n, kai euk<sup>h</sup>arístei, kai ekó:lue tò ídion t<sup>h</sup>éle:ma.

*Abba Poemen said of Abba Copres that he was so holy **that** when he was ill and in bed, he still gave thanks and restrained his own will. (Apopht.Patr 252C)*

(62d)

(525–550)

τοσοῦτοι δὲ ἦσαν οἱ ἐρχόμενοι ἀγωνίσασθαι **ὅτι** οὐχ ὑπερβάλλοντο ἀριθμῶ, ἀλλ’ ὅσους συνέβη ἐλθεῖν κατὰ τάγμα καὶ εἴτε νέους εἴτε παρθένους κόρας πάντας ἐθεώρου.

tosoûtoi dè êsan hoi erk<sup>h</sup>ômenoi ago:nîsast<sup>h</sup>ai **hóti** ouk<sup>h</sup> huperbállonto arith<sup>h</sup>mô:i, all hósous sunébe: elt<sup>h</sup>êin katà tágma kaì eíte néous eíte part<sup>h</sup>énous kóras pántas et<sup>h</sup>eó:roun.

*So many came to compete **that** their numbers were unparalleled, but however many happened to arrive, whether young men or virgin girls, they were all allowed to take part in the spectacle. (Jo.Mal 289.4)*

(62e)

(~650)

κρατήσας οὖν τὸ ὠτίον τοῦ σκανδαλισθέντος δίδει αὐτῷ κόσσον τοιοῦτον, **ὅτι** ἐπὶ τρεῖς ἡμέρας ἐφαίνετο

kratésas oûn tò o:tíon toû skandalist<sup>h</sup>éntos dídei autô:i kósson toioûton, **hóti** epì treîs he:méras ep<sup>h</sup>áineto

*Thereupon he grabbed the ear of the one who had been scandalized and gave him such a blow **that** (the bruise) could be seen for three days. (Leont.N v.Sym 1721A=153.10)*

For irrealis resultatives, by contrast, Middle Greek uses *hína* alone—conflating them with purposives; there is no Middle Greek equivalent of the Modern compromise form *pu na*, or for that matter the Ancient *hóti*+ subjunctive.

(63a)

(~40)

εἰ γὰρ τοσοῦτον ἴσχυσαν εἰδέναί **ἵνα** δύνωνται στοχάσασθαι τὸν αἰῶνα, τὸν τούτων δεσπότην πῶς τάχιον οὐχ εὔρον;

eî gàr tosoûton ísk<sup>h</sup>usan eidénai **hína** dúno:ntai stok<sup>h</sup>ásast<sup>h</sup>ai tòn aiô:na, tòn toúto:n despóte:n pôs ták<sup>h</sup>ion ouk<sup>h</sup> heûron?

*for if they were so resourceful **as to** be able to infer the ‘Universe’, how is it they did not sooner discover the master of these things? (LXX Sap 13:9)*

(63b)

(90~99)

καὶ ποιεῖ σημεῖα μεγάλα, **ἵνα** καὶ πῦρ ποιῆ ἐκ τοῦ οὐρανοῦ καταβαίνειν εἰς τὴν γῆν ἐνώπιον τῶν ἀνθρώπων.

kaì poieî se:meîa megála, **hína** kaì pû:r poiê:i ek toû ouranoû katabáinein eis tèn gê:n enó:pion tō:n ant<sup>h</sup>rô:po:n.

*And he doeth great wonders, **so that** he maketh fire come down from heaven on the earth in the sight of men (King James)*

*It works great signs, even making fire come down from heaven to earth in the sight of men. (NT Apoc 13:13)*

(63c)

(~630)

ἐγὼ θέλω εὐρεῖν νεωτέρα νεομορφον πάνυ **ἵνα** τοιοῦτον κάλλος μὴ ἔχη ἄλλη γυνὴ ἐν Κωνσταντινουπόλει, καὶ ἐξ αἱματος βασιλικοῦ.

egò: t<sup>h</sup>élo: heureîn neo:téran neómorp<sup>h</sup>on pánu **hína** toioûton kállos mè: ék<sup>h</sup>e:i álle: gunè: en ko:nstantinoupólei, kaì eks haîmatos basilikoû.

*I wish to find a young woman who is exceedingly comely, **so that** no other woman in Constantinople may have such beauty, even one of imperial blood.*

*(Chron.Pasch 575.15)*

(63d)

(~950)

κλωσαι ἔχω νήματα μετὰ τῆς ἀτράκτου καὶ ἠλακάτης **ἵνα**, μέχρις ἂν ζῶσιν οἱ Ῥωμαῖοι,

μη δυνηθῶσιν ἐξυφᾶναι ταῦτα.

klô:sai ék<sup>h</sup>o: né:mata metà tês atráktou kai e:lakátē:s *hína*, mék<sup>h</sup>ris àn zdô:sin hoi romaïoi, mè: dune:t<sup>h</sup>ô:sin eksup<sup>h</sup>ânai taûta.

*I will twist you hanks with spindle and distaff **such as** the Romans shall never be able to unravel so long as they endure.* (Const.Por Adm 119.18)

As a complementiser, *hóti* is much more widespread in Middle than in Classical Greek. This is at the expense of the infinitive; while the infinitive was used in both realis and irrealis functions in Classical Greek, the realis function could already be expressed by *hóti*- or *ho:s*-clauses in Attic, and the infinitive was largely supplanted by *hóti* by 300 AD (Jannaris 1897 §2086).<sup>96</sup> Even as scrupulous an Atticist as Lucian occasionally used *hóti*-complements after weak assertives, which in Attic took only the infinitive:<sup>97</sup>

(64a) (ii AD)

οἱ μὲν πολλοὶ νομίζουσιν ὅτι ὑψοῦ τοῖσι θεοῖσιν ὁμιλεῖ καὶ ἀγαθὰ ξυναπάσῃ Συρίῃ αἰτέει, οἱ δὲ τῶν εὐχολέων ἀγγόθεν ἐπαίουσιν.

hoi mèn polloì nomízousin *hóti* hupsoû toîsi t<sup>h</sup>eoîsin homilēei kai agathà ksunapáse:i suriē:i aitéei, hoi dè tō:n euk<sup>h</sup>o:léo:n agk<sup>h</sup>ót<sup>h</sup>en epaiousin.

The many think **that** he speaks to the gods from a height, and asks for good things for all Syria, while the gods hearken to his prayers close by.

*Lewed folk trowen **that** he speketh with the goddes on highe and axeth bones for alle Surrye, and the goddes heren his preyeres fro there nyghe.* (Luc SyrD 28)

(64b) (ii AD)

τάχα δὲ καὶ Πασιφάη, παρὰ Δαιδάλου ἀκούσασα ταύρου τε πέρι τοῦ ἐν τοῖς ἄστροισι φαινομένου καὶ αὐτῆς ἀστρολογίης, ἐς ἔρωτα τοῦ λόγου ἀπίκητο, ἔνθεν νομίζουσι ὅτι Δαίδαλος μιν τῷ ταύρῳ ἐνύμφευσεν.

ták<sup>h</sup>a dè kai pasip<sup>h</sup>ae:, parà daidáλου akóúsasa taúrou te péri toû en toîs ástroisi p<sup>h</sup>ainoménu kai autê:s astrologiēs, es éro:ta toû lógu apíketo, ént<sup>h</sup>en nomízousi *hóti* daídalos min tô:i taúro:i enúmp<sup>h</sup>eusen.

*Doubtless Pasiphae also, hearing from Daedalus of the Bull that appeareth amongst the constellations and of Astrology itself, fell in love with the doctrine; whence they derive the belief **that** Daedalus conjoined her in wedlock with the bull.* (Luc Astr 16)<sup>98</sup>

(64c) (ii AD)

οἶμαι δὲ ὅτι καὶ, τοῖς ἐντυχοῦσι χρήσιμόν τι ἔχειν δόξει ἡ γραφή, τὰ μὲν διεξελέγχουσα, τὰ δὲ ἐν ταῖς τῶν εὐ φρονούντων γνῶμαῖς βεβαιοῦσα.

*oîmai* dè *hóti* kai, toîs entuk<sup>h</sup>oûsi k<sup>h</sup>ré:simón ti ék<sup>h</sup>ein dóksei he: grap<sup>h</sup>é:, tà mèn diekselégk<sup>h</sup>ousa, tà dè en taîs tō:n eû p<sup>h</sup>ronóunto:n gnô:miais bebaioûsa.

*I think too **that** to its readers the writing will seem to have some usefulness,*

<sup>96</sup>So also Jannaris (1897 App. VI 13), referring to ‘Post-Christian’ usage: “it is very doubtful indeed whether, after verbs of *saying, thinking, believing, seeing, hearing*, and the like, popular speech admitted of any other verbal complement than *hóti* with the indicative.”

<sup>97</sup>Already in the New Testament, the proportion of *hóti*-complements to infinitival complements after *nomízdo*: ‘think’ is 4:10, but of *pisteúo*: ‘believe’ 25:2 (Robertson 1934 [1923]:1422).

<sup>98</sup>In both pieces Lucian apes the already extinct Ionic dialect (as echoed charmingly in Harmon’s translation)—Herodotus in *On the Syrian Goddess*, Democritus in *Astrology*. Since Herodotus does not use *hóti* in this manner, it seems Lucian, in his effort to make the pieces sound elevated, has let a modernism removed from Atticism slip past. Such an account does not seem to hold for the instances of *hóti* with *oîmai* ‘think’ below, however.

*refuting as it does certain falsehoods and confirming certain truths in the minds of all men of sense.* (Luc Alex 61)

- (64d) (ii AD)  
 ἐκεῖνος τοῖνον ὁ Θερσίτης ὁ τοιοῦτος εἰ λάβοι τὴν Ἀχιλλέως πανοπλίαν, οἶει ὅτι  
 αὐτίκα διὰ τοῦτο καὶ καλὸς ἅμα καὶ ἰσχυρὸς ἂν γένοιτο;  
 ekeinos toinun ho thersites ho toioutos ei laboi tēn akhillēos panoplían, oíei hóti  
 autíka dià toúto kai kalòs háma kai iskḥuròs àn génoito?  
*Now then, if that man, Thersites, should get the armour of Achilles, **do you suppose that** he would thereby at once become both handsome and strong?*  
 (Luc Ind 7)

*hóti* further spread to complements of emotion (65a), perception (65b) and showing (65c), which in Classical Greek took the participle alone.

- (65a) (90~99)  
 ἐμοὶ χολᾶτε ὅτι ὅλον ἄνθρωπον ὑγιῆ ἐποίησα ἐν σαββάτῳ;  
 emoì kḥolá:te hóti hólōn ànthrō:pon hugiē: epoiē:sa en sabbátō:i?  
*are you angry with me **because** on the sabbath I made a man's whole body well?* (NT Jo 7:23)

- (65b) (iv AD)  
 Ὅτε με ἀπέστειλες πρὸς τὸν Ἰουδαῖον Ἀλέξανδρον, ἐνέτυχον τῷ Ἰησοῦ εἰσερχομένῳ  
 τὴν πύλην τῆς πόλεως καθήμενῳ ἐπὶ ὄνου· καὶ εἶδον τοὺς Ἑβραίους ὅτι ἐστρώννουσιν ἐν  
 τῇ ὁδῷ τὰ ἱμάτια αὐτῶν  
 hóte me apésteiles pròs tòn ioudaïon aléksandron, enétukḥon tō:i ie:soù  
 eiserkḥoméno:i tēn púle:n tēs póleo:s katḥe:méno:i epì ónou; kai eídon toùs  
 hebraïous hóti estró:mnuon en tē:i hodō:i tà himátia autō:m  
 When you sent me to the Jew Alexander, I came across Jesus **entering** the  
 gate to the city sitting on a donkey; and I saw **the Jews, that** they were  
 spreading out their clothes in the street (A.Pil B I:3)<sup>99</sup>

- (65c) (70~79)  
 ἀπὸ τότε ἤρξατο Ἰησοῦς Χριστὸς δεικνύειν τοῖς μαθηταῖς αὐτοῦ ὅτι δεῖ αὐτὸν εἰς  
 Ἱεροσόλυμα ἀπελθεῖν  
 apò tóte é:rksato ie:soús kḥristòs deiknúein tois matḥe:tais autoù hóti deí autòn eis  
 hierosóluma apeltḥeîn  
*From that time Jesus began to show his disciples **that** he must go to  
 Jerusalem* (NT Mt 16:21)

Complements of showing were no longer participial in the New Testament (Robertson 1934 [1923]:1035); the cognitive factive verbs *mantḥáno:* ‘learn’ and *mémne:mai* ‘remember’ likewise no longer took the participle (Robertson 1934 [1923]:1040). On the other hand, the participial/finite distinction for predicates of perception is still maintained in the New Testament (Robertson 1934 [1923]:1041).

<sup>99</sup>Example (65b) is interesting as an instance of raising in perception complements: ‘I saw the Jews, that they were laying...’. Such raising was already commonplace in Attic, where it is known as *prolepsis*; it occurred with linguistic and cognitive predicates as well (Kühner & Gerth 1963 [1898–1904] §600.4). The resemblance to Modern Greek perception complement raising is obvious, but probably represents a typological fact about perception, rather than a necessary continuity.

There persist in Middle Greek usages of *hóti* reminiscent of CSMG *pu*, which had been innovated in Ancient Greek. For example, *hóti*-complements can still follow predicative adverbs, a development Middle Greek shares with Late Latin (*vere quia* ‘true that’, *sane quia* ‘surely that’, *plane quia* ‘certainly that’) (Tabachovitz 1943:42–46; 1946:163–164):

- (66a) (~650)  
 λέγει αὐτῷ ἡ αὐθέντρια τῆς κόρης: “καλῶς, ἀββᾶ Συμεών, ὅτι ἔφθειρας καὶ ἐνεγάστρωσας τὴν δούλην μου.”  
 légei autô:i he: aut<sup>h</sup>éntria tês kôre:s; “*kalô:s*, abbâ: sumeó:n, *hóti* ép<sup>h</sup>t<sup>h</sup>eiras kai enegástro:sas tèn doule:n mou.”  
 the mistress of the girl says to him: “It’s **good**, Abba Symeon, **that** you have corrupted and impregnated my slave!”  
*the girl’s mistress said to him, “Well, Abba Symeon, so you seduced my slave and got her pregnant.”* (Leont.N v.Sym 1717B=151.16)
- (66b) (821~822)  
 πῶς ἐτόλμησας σὺ ἀλλότριον βοῦν τῷ σῷ ζυγῷ κατοχεῦσαι; ὡς ἀληθῶς ὅτι εἰς τοὺς νεκροὺς ἡμᾶς κατεψηφίσασθε τοὺς ἀπὸ τοσοῦτου πλοῦτου εἰς τοσαύτην πενίαν ἐλθόντας.  
 pô:s etólme:sas sù allótrion boûn tô:i sô:i zdugô:i katok<sup>h</sup>eûsai? ho:s *alē<sup>h</sup>ô:s hóti* eis toûs nekroûs he:mâ:s katēse:p<sup>h</sup>ísast<sup>h</sup>e toûs apò tosoûtou ploūtou eis tosaúte:n penían el<sup>h</sup>óntas.  
*Comment as-tu osé mettre sous le joug le bien d’un autre? Vraiment, on peut bien dire que vous nous comptez pour morts, nous qui, d’une telle richesse, sommes tombés dans une telle misère.*  
 How dare you bind another’s ox to your own yoke? How **true that** you treat us like the dead, as having fallen from such riches into such poverty. (Nicet v.Phil 121.23)
- (66c) (~950)  
 ἡ δὲ παιδίσκη λέγει: «Πάντως, δέσποινα, ὅτι ἐκ θελήματος θεοῦ ἔπεσε τὸ σφοντύλι ἐκ τῆς ἀτράκτου μου, καὶ κυλισθὲν εἰσηλθεν ἐν τῇ ὀπῇ ταύτῃ»  
 he: dè paidíske: légei: “*pántois*, déspoina, *hóti* ek t<sup>h</sup>elématos t<sup>h</sup>eoû épese tò sp<sup>h</sup>ontúlin ek tês atráktou mou, kai kulist<sup>h</sup>en eisē:lt<sup>h</sup>en en tē:i opē:i taúte:i”  
*The girl slave said: “Surely, lady, by the will of God, the weight fell off my spindle and rolled and dropped into this crevice”* (Const.Por Adm 261.12)
- (66d) (~950)  
 ἄβυσσος γὰρ ἐστὶ τὸ πρᾶγμα. Ἴσως γὰρ ὅτι εὐρίσκεῖς ἀβύσσου ἄκραν, καὶ πάλιν τὴν ἄνω τί ἄρα ὑπολαμβάνεις ὑπάρχειν; πάντως ὅτι ἔκταμα φοβερόν, ἔπειτα πέλαγος ἀχανὲς καὶ ἀπερίβλεπτον καὶ ἀπεριόριστον.  
 ábussos gár esti tò prâ:gma. *íso:s* gár *hóti* heurískeis abússou ákran, kai pálin tèn áno: tí ára hupolambáneis hupárk<sup>h</sup>ein? *pántois hóti* éktama p<sup>h</sup>oberón, épeita pélagos ak<sup>h</sup>anès kai aperiblepton kai aperióriston.  
*for this matter is an abyss. Even assuming that you find a limit, what do you think exists above that again? Certainly an awesome expanse, and then an immense, infinite and limitless sea!* (Niceph v.And 4298=884A)
- (66e) (~480)  
 φύσει ὅτι ἔστιν, ὃς οὐδὲν παρέχει τῷ ἐχθρῷ  
 p<sup>h</sup>úsei hóti éstín, hòs oudèn parék<sup>h</sup>ei tô:i ek<sup>h</sup>t<sup>h</sup>rô:i  
*It is true that there are some who give nothing to the enemy.* (Apophth.Patr 344A)

*plè:n hótì* ‘except that’ also remains in use in Middle Greek, and starts taking on the function of a simple connective (‘but’) (Tabachovitz 1946:164):

(67a) (65)

τί γάρ; *πλὴν ὅτι* παντὶ τρόπῳ, εἴτε προφάσει εἴτε ἀληθείᾳ, Χριστὸς καταγγέλεται, καὶ ἐν τούτῳ χαίρω  
 tí gár? *plè:n hótì* pantì trópoi, eíte prop<sup>h</sup>ásei eíte ale:t<sup>h</sup>éiai, k<sup>h</sup>ristòs kataggéletai, kaì en tóuto:i k<sup>h</sup>aíro:  
*What then? notwithstanding, every way, whether in pretence, or in truth, Chrst is preached; and I therein do rejoice* (King James)  
*What then? Only that in every way, whether in pretense or in truth, Christ is proclaimed; and in that I rejoice.* (NT Phil 1:18)<sup>100</sup>

(67b) (~650)

ἀλλ’ οἱ τρεῖς ἐξ αὐτῶν καὶ ἐμόνασαν, κατανυγέστες ἐπὶ τῇ πολιτείᾳ τοῦ Σαλοῦ. *πλὴν ὅτι* τινὶ εἰπεῖν τίποτε ἄχρις οὗ ἔζη ἐν σαρκὶ ὁ Σαλὸς οὐκ ἠδυνήθησαν.  
 all hoi treis eks autō:n kaì emónasan, katanugéste epì tē:i politeíai: toῦ saloῦ. *plè:n hótì* tini eipeîn típote ák<sup>h</sup>ris hoῦ ézde: en sarkì ho salòs ouk ēduné:t<sup>h</sup>esan.  
*and three of them became monks, spurred on by the Fool’s conduct. But while the Fool lived in the flesh, they were unable to tell anyone anything about this.* (Leont.N v.Sym 1737C=164.12)

The collocation *plè:n hótì* is joined by the new collocation *allà hótì* ‘but that’ (cf. Modern Greek *ala pu*, Arvanitika *po çë*):

(68a) (v AD)

μηδὲν μὲν ἔχουσαι μεθ’ ἑαυτῶν, ἀλλ’ ὅτι μία ἐξ αὐτῶν εἰδυῖα ὑελουργεῖν τῆς ἐφημέρου τροφῆς ἐχορήγει τὰς χρείας  
 me:dèn mèn ék<sup>h</sup>ousai met<sup>h</sup> heautō:n, *all hótì* mía eks autō:n eiduía huelourgeîn tēs ep<sup>h</sup>e:mérou trop<sup>h</sup>ēs ek<sup>h</sup>oré:gei tàs k<sup>h</sup>reías  
 having no possessions with them, **except that** one of them, who knew how to make glass, supplied them with the necessaries for their daily food (Agathan 34.97)

(68b) (~950)

<ὡς> τὰ εἰκοσιτέσσαρα στοιχεῖα τῶν γραμμάτων οὕτως τὰ νοερά τε καὶ αἰσθητὰ ἀπὸ φοβερῶς θεωρίας πνεύματος ἁγίου γινώσκειν. Ἀλλ’ ὅτι μόνῳ ἐμοί τε καὶ Ἐπιφανίῳ ὠμίλει, ἠνίκα πρὸς με ἐγένετο ἢ πάλαι πρὸς τοῦτον ἐπεδήμησεν, ἐτέρῳ δέ τι οὐδὲ κἂν ψιλὸν λόγον περὶ γραφῆς ἀπεκρίνατο.  
 ho:s tà eikositéssara stoik<sup>h</sup>eíā tō:n grammátō:n hoúto:s tà noerá te kaì aist<sup>h</sup>e:tà apò p<sup>h</sup>oberâ:s t<sup>h</sup>eo:riás pneúmatos hagíou ginóskein. *all hótì* móno:i emoí te kaì epip<sup>h</sup>anío:i ho:mílei, he:níka pròs me egéneto è: pálai pròs toúton epedé:me:sen; hetéro:i dé tini oudè k ἂn psilòn lógon perì grap<sup>h</sup>ēs apekrínato.  
*he knew the intellectual and the sensible world no less than the twenty-four letters of the alphabet. Yet it was only to me and Epiphanius he talked, the times he came to me or when he visited him, whereas he did not utter a single word on the Scripture to any other.* (Niceph v.And 4277=881B)

(68c) (before 556)

ἐμαυτὸν θρηνῶδῶ πῶς ἐχλευάσθην/ καὶ οὐκ ἤρκεσε τοῦτο μόνον εἰς αἰσχύνην μου  
 émautōn t<sup>h</sup>re:no:idō: pō:s ek<sup>h</sup>leuást<sup>h</sup>e:n;/ kaì ouk érkese toúto mónon eis aisk<sup>h</sup>úne:n mou *all hótì* kaì empaízdomai;  
*I mourn for myself and the way I am mocked./ The one thing (the*

<sup>100</sup>Some manuscripts omit (pleonastic) *hótì*.



Resurrection of Christ) *was not shame enough for me;/ but I must be jeered at.* (Rom.Mel 25.iv.2)<sup>101</sup>

And *ou (mónon) hóti* remains in use, with the new meaning ‘not that’ (69a) as well as ‘not only’ (69b) (Tabachovitz 1943:43–44):

(69a) (57)

φειδόμενος ὑμῶν οὐκέτι ἦλθον εἰς Κόρινθον. οὐχ ὅτι κυριεύομεν ὑμῶν τῆς πίστεως, ἀλλὰ συνεργοί ἐσμεν τῆς χαρᾶς ὑμῶν  
 p<sup>h</sup>eidómenos humō:n oukēti ê:lt<sup>h</sup>on eis kórint<sup>h</sup>on. *ouk<sup>h</sup> hóti* kurieúomen humō:n tē:s písteo:s, allà sunergoí esmen tē:s k<sup>h</sup>arā:s humō:n;  
*it was to spare you that I refrained from coming to Corinth. Not that we lord it over your faith; we work with you for your joy* (NT 2 Cor 1:24)

(69b) (~650)

καὶ ἔκτοτε οὐ μόνον ὅτι εἶχεν αὐτὸν ὁ κάπηλος παρ’ ἑαυτὸν ἀλλὰ καὶ εἰ ἄλλου τινὸς ἤκουεν λέγοντος “ὄτως τάχα ἑαυτὸν ποιεῖ ὁ ἀββᾶς οὕτως,” εὐθέως ἔλεγεν αὐτῷ “ὄτως δαιμονίαρις ἐστὶν καθαρὸς”  
 kai éktote *ou mónon hóti* eík<sup>h</sup>en autòn ho kápe:los par heautòn allà kai ei álloú tinòs ékouen léγοντος; “ónto:s ták<sup>h</sup>a heautòn poieí ho abbā:s hóito:s,” eut<sup>h</sup>éos élegen autō:i; “ónto:s daimoniáris estin kat<sup>h</sup>arós”  
*And from that moment, not only did the tavern keeper think that he was beside himself, but if he heard someone else saying, “Perhaps Abba Symeon pretends to be like this,” immediately he answered, “He is completely possessed.”* (Leont.N v.Sym 1712C=148.6)

In fact, *ou mónon hóti* was paralleled by its affirmative counterpart *mónon hóti* ‘only’ in Leontius of Neapolis (cf. CSMG *mono pu* ‘it’s just that’):<sup>102</sup>

(69c) (~650)

εἴκοσι νυχθήμερα ἠρμενίσαμεν σφοδρῷ ἀνέμῳ μὴ δυνηθέντες ὄλως γνωρίσαι τὸ ποῦ ὑπάγομεν μήτε ἀπὸ ἀστρου μήτε ἀπὸ τόπου. μόνον δὲ ὅτι ἐθεώρει ὁ κύβερνος τὸν πάπαν σὺν αὐτῷ κρατοῦντα τὸν αὐχένα καὶ λέγοντα αὐτῷ «Μὴ φοβηθῆς, καλῶς ἀρμενίζεις.»  
 eíkosi nuk<sup>h</sup>t<sup>h</sup>é:mera ērmenísamen sp<sup>h</sup>odrō:i anémo:i mē: dune:t<sup>h</sup>éntes hólo:s gno:rísai tò pou̇ hupágomen mé:te apò ástrou mé:te apò tópu. *mónon* dē *hóti* etheó:rei ho kúbernos tòn pápan sùn autō:i kratōúnta tòn auk<sup>h</sup>éna kai léγονta autō:i; “mē: p<sup>h</sup>obe:t<sup>h</sup>ē:is, kalō:s armenízdeis.”  
*We sailed for twenty days and nights, and owing to a violent wind we were unable to tell in what direction we were going either by the stars or by the coast. But the only thing we knew was that the steersman saw the Patriarch by his side holding the tiller and saying to him: ‘Fear not! You are sailing quite right.’* (Leont.N v.Jo.Eleem 19.10=VIII 38)

(69d) (~650)

εἶχεν οὖν ὁ ἔχων αὐτὸν πορτάρην μογγὸν καὶ κωφὸν ἀπὸ γεννήσεως. μόνον δὲ ὅτι διὰ νεύματος αὐτῷ ἔλεγαν αὐτῷ «Κλείσον» καὶ ἔκλειεν καὶ πάλιν «Ἄνοιξον» καὶ ἤνοιγεν.  
 eík<sup>h</sup>en oún ho ék<sup>h</sup>on autòn portárin moggòn kai ko:p<sup>h</sup>òn apò genné:seo:s. *mónon* dē *hóti* dià neúmatos autō:i élegan autō:i; “kleíson” kai ékleien kai pálin “ánoikson”

<sup>101</sup>Mitsakis (1967:138) believes this is a scribal error, involving either a misplacement of *hóti*, or a mistake for *éti* ‘still’; but the other instances in late Middle Greek confirm the manuscript reading as valid.

<sup>102</sup>*mónon (mono)* by itself is also used as a connective, both in Middle Greek (Tabachovitz 1943:65–68) and Modern Greek.

καὶ ἐνοίγειν.

*Le maître de Pierre avait un portier sourd-muet de naissance. C'est par signe seulement qu'on lui disait «Ferme», et il fermait, ou à l'inverse «Ouvre,» et il ouvrirait.*

And the man who owned Peter had a porter who was deaf-mute from birth.

**Only** by signs did they tell him 'Close!' and he would close and again 'Open!' and he would open. (Leont.N v.Jo.Eleem XXI 157)

*oti* survived well into Modern Greek, particularly as a temporal and causal marker. It is possible that *oti* as a complementiser passed out of currency some time this millennium, and was revived by Puristic; Jannaris (1897) certainly believes *oti* was in the process of being displaced by low-register *pos* in the vernacular. That *oti* has been borrowed by Macedonian Slavonic, however, suggests that, if indeed *oti* did lose out in competition with *pos*, it was later rather than sooner.

So Middle Greek *hóti* had moved substantially closer to the functional range of Modern *pu*, particularly in its collocations and adjunct usage. The latter came at the expense of the participle and *ho:s*, which begin retreating at this time. The case for a functional continuity here is much stronger than for the participle: the overlap between *oti* and *pu* has been carried forward into modern times, involving as it does adjuncts and collocations as well as complements, and thereby exploiting the commonality of the two expressions as nominalisers.

#### 5.4.4. *ho:s*

The use of *ho:s* became severely restricted in Middle Greek. As a causal and purposive, *ho:s* had died out by *ii* BC (Jannaris 1897 §1740, §1761); this is confirmed by the great popularity, in reaction, of purposive *ho:s* amongst Atticists like Lucian and Arrian (Hult 1990:77).

The same fate befell resultative *ho:s*: it is rare or absent in Hellenistic prose (Polybius, the Ptolemaic Papyri, the Septuagint, the New Testament.) However, a reanalysis of *hō:ste* = *héo:s hóte* 'until when' (according to Jannaris' (1897 §1757b) analysis) gave rise to *ho:s* as a resultative again, in late Middle Greek.<sup>103</sup> That this particle shows up in the later vernacular Middle Greek texts (the Apostolic Fathers, the Christian Apocrypha, the Alchemists, the *Apophthegmata Patrum*) (70a, 70b), while entirely absent in the New Testament, suggests it is an independent phenomenon to Attic resultative *ho:s*.

(70a)

καὶ παρὰ τοῦ Θεοῦ, τοῦ καὶ τὸ λέγειν καὶ τὸ ἀκούειν ἡμῖν χορηγοῦντος, αἰτοῦμαι  
δοθῆναι, ἐμοὶ μὲν, εἰπεῖν οὕτως ὥς μάλιστα ἂν ἀκούσαντα σε βελτίονα γενέσθαι, σοί  
τε οὕτως ἀκούσαι ὥς μὴ λυπηθῆναι τὸν εἰπόντα.  
καὶ παρὰ τοῦ ἰεοῦ, τοῦ καὶ τὸ λέγειν καὶ τὸ ἀκούειν ἡμῖν κῆρογοῦντος, αἰτοῦμαι

(120~200)

<sup>103</sup>There is some corroboration lent to this hypothesis by the fact that *héo:s* was also in use as a purposive at the time (Ljungvik 1932:43–46). According to Hatzidakis (1990 [1907]:470) (refuting Meyer), it is as a reflex of *héo:s* rather than *ho:s* that Modern Greek *os* 'until, up to' survives—although in its function 'as, when' it probably represents a continuation of *ho:s*. *ho:s* was already being used instead of *héo:s*, meaning 'until', in Sophocles (Aj 1117) (Schwyzer 1950:II 650).

dot<sup>h</sup>ē:nai, emoì mèn, eipeîn hoúto:s **ho:s** málista àn akoúsanta se beltíona genést<sup>h</sup>ai, soí te hoúto:s akoúsai **ho:s** mè: lupe:t<sup>h</sup>ē:nai tòn eipónta.  
*and I pray God, the Author of both our speech and hearing, to grant me such use of my tongue **that** you may derive the fullest benefit from listening to me, and to you such use of your ears **that** I may have no cause to regret having spoken.* (Diogn 1)

(70b)

(~480)

τοσαύτη τῷ ποιμένι προσῆν ὀσιότης ὡς ἀξιωθῆναι αὐτὸν καὶ ἀνθρώπων ποιμένα γενέσθαι.  
 tosaúte: tō:i poiméni prosê:n hosióte:s **ho:s** aksiot<sup>h</sup>ē:nai autòn kaì ant<sup>h</sup>rō:po:n poiména genést<sup>h</sup>ai.  
*he took care of his flock of sheep with such great holiness **that** he was judged worthy to be a shepherd of men too.* (Aphth.Patr 417C)

This finding is corroborated by Hult, who finds that *ho:s*+ infinitive is the normal resultative in *v* AD, for both Atticist and vernacular writers: “If consecutive *ho:s* earlier had an Atticist colouring, it seems to have lost it by this time and become neutral as to style” (Hult 1990:140).<sup>104</sup>

Complementiser-*ho:s* was dying out by early Middle Greek; Jannaris (1897 §1753b) gives the following counts:

Author	Date	<i>ho:s</i>	<i>hóti</i>	<i>dióti</i>	<i>hóti</i> + <i>dióti</i>	% <i>ho:s</i>
Thucydides	la. <i>v</i> BC	130	223	0	223	37
Xenophon <sup>105</sup> (An i–iii)	ea. <i>iv</i> BC	22	111	0	111	17
Polybius i–v	<i>ii</i> BC	45	87	60	147	23
Diodorus Siculus i	<i>i</i> BC	8	36	9	45	13

There are only two instances of complementiser-*ho:s* in Malalas (*vi* AD) (Weierholt 1963:57), and Robertson (1934 [1923]:1032) finds “no clear instance of *ho:s* in this sense” in the New Testament.

Although *ho:s* by itself had died out as a complementiser, Middle Greek innovated the double-barrelled complementiser *ho:sóti* around *i* BC, which remained in use throughout Middle Greek (Jannaris 1897 §1754).

<sup>104</sup>To explain the phenomenon, Hult prefers to point out that, of the two Attic resultatives, *hó:ste* had become associated with the indicative, and *ho:s* with the infinitive (so in the prose of St Basil the Great (*iv* AD), and Attic use of resultative *ho:s* was predominantly infinitival). The Attic status of the infinitive as the unmarked mood in the resultative was extended in Hellenistic Greek: the infinitive occurs 85% of the time in Polybius, and in all but two instances in both the Septuagint and the New Testament (Hult 1990:123). So Hult suggests that the hypercorrection of *ho:s*, used to match the extended use of the infinitive, became entrenched usage by *v* AD. A hypercorrection passing into colloquial usage seems unlikely, however, and this may be an instance instead of *hó:ste* remodelled after *hé:os*, as Jannaris suggested.

Since *ho:s* became consistently used with the infinitive, there was no way of distinctly expressing irrealis results with *ho:s*. Increasingly, the irrealis resultative was expressed instead with *hína*, as discussed above, and conversely, *hó:ste* was used as a purposive (Ljungvik 1932:46–49).

<sup>105</sup>Xenophon travelled widely, so his dialect is not pure Attic, and his prose frequently anticipates Hellenistic Koine.

- (71a) (57)  
κατὰ ἀτιμίαν λέγω, ὡς ὅτι ἡμεῖς ἡσθηθήκαμεν.  
katà atimían légo:, **hos hóti** he:meis e:st<sup>h</sup>enékamen.  
*To my shame, I must say, Ø we were too weak for that!* (NT 2 Cor 11:21)

- (71b) (~650)  
τὸν κύριον προβαλλόμενος τῶν λεγομένων μάρτυρα, ὡς ὅτι οὐδὲν κατὰ προσθήκην  
ἐπέγραψεν τῷ διηγήματι ἀλλὰ μᾶλλον καὶ τὰ πλεῖστα ἐκ τοῦ χρόνου ἐπελάθετο.  
tòn kúriον proballómenos tῶn legoménō:n mártura, **hos hóti** oudèn katà  
prost<sup>h</sup>é:ke:n epégrapsen tō:i die:gé:mati allà mǎ:llon kai tà pleísta ek tou k<sup>h</sup>rónou  
epelát<sup>h</sup>eto.  
*calling on the Lord as witnesses to his story, that he had written nothing to  
add to the narrative, but rather that since that time he had forgotten most  
things.* (Leont.N v.Sym 1677A=125.23)

The particle competing with *hóti* as a complementiser was no longer *ho:s* by late Middle Greek, but *pô:s* (*pos*) ‘how?’—the interrogative counterpart to *ho:s*. Interrogatives had displaced \**yo* + \**kwo* particles as indirect interrogatives—a process already underway in Classical Greek (Smyth 1959 [1920] §2664); so *pô:s* as a complementiser reflects exactly the same semantic development as *ho:s*.<sup>106</sup> Elsewhere (Nicholas 1996) I evaluate the evidence for the reanalysis of *pô:s*; there are no unambiguous instances of *pô:s* as a complementiser in surviving texts of Middle Greek, but the weight of evidence suggests that the reanalysis had taken place, if not by *ii* AD, certainly by *vi* AD.

There are a few functions where *ho:s* remains active in Middle Greek. *ho:s* is the dominant comparative particle in Malalas (Weierholt 1963:66). Furthermore, *ho:s* remained in use as a particle introducing causal participles—in fact, the full functional range of participles in the New Testament (Robertson 1934 [1923]:1140)—and equative and predicative complements. And *ho:s* is “common” as a temporal in the New Testament (Robertson 1934 [1923]:974) (72a). Malalas uses *ho:s* as a temporal some 40 times, with the meaning ‘while’ (72b), as distinct from *hóte* (45 times), which denotes punctual time, even when the *hóte*-verb is imperfective (72c) (Weierholt 1963:60):<sup>107</sup>

- (72a) (~65)  
πόσος χρόνος ἐστὶν ὡς τοῦτο γέγονεν αὐτῷ;  
pósos k<sup>h</sup>rónos estin **hos** toúto gégonen autῶ:i?  
*How long is it ago since this came unto him?* (King James)  
*How long has he had this?* (NT Mc 9:21)

- (72b) (525–550)  
καὶ ἔμεινεν ἔσω, καὶ ἐβρύσθη θανάτου. καὶ ὡς ἔστιν ἐκεῖ, ἐδήμειυσεν αὐτὸν ὁ βασιλεὺς  
Ζήνων.  
kai émeinen éso:, kai ebryúst<sup>h</sup>e: t<sup>h</sup>anáτου. kai **hos** éstin ekeí, edé:meusen autòn ho  
basileùs zdé:no:n.

<sup>106</sup>Indeed, there are some passages of the New Testament where *pô:s* and *ho:s* are alternative readings in the manuscripts (Robertson 1934 [1923]:1032).

<sup>107</sup>In Romanus the Melodist, by contrast, “the domain of *ho:s* is extended at the expense of clarity and it often appears where another temporal conjunction would be expected (i.e. *en hô:i* ‘while’, *héoi:s* ‘until’, *hóte* ‘when’)” (Mitsakis 1967:145).

*He stayed inside, and escaped death. While he was there, the emperor Zeno confiscated his property.* (Jo.Mal 390.20)

(72c)

(525–550)

καὶ ὅτε μὲν ὁ κληῖρος ἐκάλει τὸν Οἰνόμαον ἀγωνίσασθαι ὑπὲρ τοῦ Ποσειδῶνος, ἐφόρει σχῆμα ἱματίων κυανῶν

καὶ *hóte* mèn ho klê:ros ekálei tòn oinómaon agonísast<sup>h</sup>ai hupèr toû poseidô:mos, ep<sup>h</sup>orei sk<sup>h</sup>ê:ma himatío:n kuanô:n

*When the lot summoned Oinomaos to compete on behalf of Poseidon, he wore a blue costume* (Jo.Mal 173.18)

The surviving temporal use of *ho:s* naturally spills back over into ambiguity with a causal interpretation:

(72d)

(90~99)

ἐπὶ δὲ τὸν Ἰησοῦν ἐλθόντες, ὥς εἶδον ἤδη αὐτὸν τεθνηκόντα, οὐ κατέαξαν αὐτοῦ τὰ σκέλη

epì dè tòn ie:soûn elt<sup>h</sup>óntes, *ho:s* eîdon é:de: autòn tet<sup>h</sup>ne:kón:ta, ou katéaksan autoû tà skéle:

But coming to Jesus, **as** they saw that he was already dead, they did not break his legs

*but when they came to Jesus and saw that he was already dead, they did not break his legs* (NT Jo 19:33)

In all, *ho:s* in Middle Greek loses its status as a universal particle—at the same time as *hóti* comes close to gaining this status. *ho:s* is no longer causal, purposive, or a complementiser; its use as a resultative is of uncertain origin, and may well involve homonymy with *héoi:s* ‘until’.

The only function in which *ho:s* remains vigorous is as a temporal (independent of *héoi:s*) and a comparative. In these functions, *ho:s* > *os* survives into Modern Greek dialects, as does *san* < *ho:s án*, the CSMG word for ‘as’—although the latter may be an independent innovation. This early retreat in functionality of *ho:s*, and its explicit survival as a temporal, makes it unlikely that the functional ranges of *ho:s* and *pu* are causally related—notwithstanding the suggestive commonalities between the two.

#### 5.4.5. Parataxis

A feature that comes to the fore in Middle Greek is the substantial use of parataxis, with *kaí* ‘and’ in particular but also zero-coordination replacing the older subordinators (Ljungvik 1932:54–102).<sup>108</sup> This use of parataxis expands

<sup>108</sup>Parataxis is a salient feature of Middle and Modern Greek, and is typically remarked upon by scholars as

the disinclination natural to popular speech for a periodic structure involving mental strain, and the decided preference for parataxis (§1930). In other words, the leading peculiarity of popular Greek, as that of all popular languages, has been to place in the simplest way of juxtaposition, that is in the form of little independent clauses, the several parts of a narrative which in the more reflective literary style are generally subordinated either to a leading sentence or to each other by means of conjunctions of more specific meaning, thus forming a complex whole (Jannaris 1897 §1703).

That this is an overhasty conclusion should be clear to linguistically informed readers.

on usage already in place in Classical Greek (Smyth 1959 [1920] §2169). The post-classical usages of *kai* are illustrated below:

- (73a) (90~99)  
 ἐζήτουν οὖν αὐτὸν πιάσαι, **καὶ** οὐδεὶς ἐπέβαλεν ἐπ' αὐτὸν τὴν χεῖρα, ὅτι οὐπω  
 ἐληλύθει ἡ ὥρα αὐτοῦ.  
 ezdê:toun oûn autòn piásai, **kai** oudeîs epébalen ep autòn tèn k<sup>h</sup>eîra, hóti oûpo:  
 ele:lú<sup>h</sup>ei he: hó:ra autoû.  
*So they sought to arrest him, but no one laid hands on him, for his hour had  
 not yet come.* (NT Jo 7:30) (Contrast)
- (73b) (iv AD)  
 καὶ τοῖς δούλοις αὐτοῦ ἐπίστευεν **καὶ** μοὶ οὐκ ἐπίστευεν  
 kai toîs doulois autoû episteuen **k** amoî ouk episteuen  
*he trusted his slaves but would not trust me.* (POxy 903.16) (Contrast)
- (73c) (~65)  
 ἦν δὲ ὥρα τρίτη **καὶ** ἐσταύρωσαν αὐτόν.  
 ê:n dè hó:ra tríte: **kai** estaúro:san autón.  
*And it was the third hour, when they crucified him.* (NT Mc 15:25) (Temporal)
- (73d) (iii AD)  
 πᾶν οὖν πυήσης, κυρεία μου μήτρη, μὴ ἀμελήσῃς τῆς θυγατρὸς σου ὅ γὰρ ἀδελφός  
 μου προσέειπε ψεῖ τὸν πῶλον. δεῖ σε αὐτὸν προσέειπεν, **καὶ** οὐκ ἐδυνήθη  
 ἀνελεῖν.  
 pân oûn pué:se:is, kureía mou mé:tre:, mè: amelê:se tês t<sup>h</sup>ugatrós sou. ho gàr  
 adelphós mou proséripse tòn pō:lon. deî se autòn prosék<sup>h</sup>ein, **kè** ouk edunê:t<sup>h</sup>e:n  
 anel<sup>h</sup>eîn.  
*Be sure, my lady mother, not to neglect your daughter; for my brother turned  
 the colt loose (?); you ought to beware of him, and (=as) I could not come.*  
 (POxy 1678.11) (Causal)
- (73e) (70~79)  
 οὐδὲ καίουσιν λύχνον καὶ τιθέασιν αὐτὸν ὑπὸ τὸν μόδιον, ἀλλ' ἐπὶ τὴν λυχνίαν, **καὶ**  
 λάμπει πᾶσιν τοῖς ἐν τῇ οἰκίᾳ.  
 oudè kaiousin lúk<sup>h</sup>non kai tit<sup>h</sup>éasin autòn hupò tòn módion, all epì tèn luk<sup>h</sup>nían,  
**kai** lámpei pâ:sin toîs en tē:i oikíai:i.  
*Nor do men light a lamp and put it under a bushel, but on a stand, and it  
 gives light to all in the house.* (NT Mt 5:15) (Resultative)
- (73f) (ii AD)  
 καλῶς [ποιή]σεις, ἀδελφέ, μὴ ἀμελήσῃς τοῦ κλήρου τοῦ στρατηγικοῦ ἀλλ[ὰ] ὡς ἔθος  
 ἐστὶ σοὶ ἀντιλαβῶν ἣν ἐξουσίαν ἔχεις, **καὶ** δύνασαι τὸν μερισμὸν τῆς Φιλ[ο]π[ά]το[ρο]ς  
 ἔχειν  
 kalô:s poié:se:is, adelph<sup>h</sup>é, mè: amelé:sas toû klé:rou toû strate:gikoû allà ho:s ét<sup>h</sup>os  
 estí soi antilabō:n hē:n eksousían ék<sup>h</sup>e:is, **kai** dúnasai tòn merismòn tēs p<sup>h</sup>ilopátoros  
 ék<sup>h</sup>ein  
*You would do well, brother, not to neglect the General's ballot, but as is your  
 wont claim the authority you have, and you can have Philopator's share.  
 You will do well, brother, not to neglect the ballot for strategus, but, as is your  
 custom, using all the influence you have and can get (?), take care to secure  
 the share of Philopator.* (PFay CXXV) (Resultative)
- (73g) (ii BC)  
 καὶ εἶπα **καὶ** ἔκλεισαν τὰς πύλας, καὶ εἶπα ὥστε μὴ ἀνοιγῆναι αὐτὰς ἕως ὀπίσω τοῦ  
 σαββάτου.  
 kai eîpa **kai** ékleisan tàs pýlas, kai eîpa **hó:ste** mè: ανοιγῆ:nai autàs héo:s opíso: toû

sabbátou;

*I commanded **that** the doors should be shut and gave orders **that** they should not be opened until after the sabbath. (LXX Neh 13:19=2Esd 23:19) (Purposive)<sup>109</sup>*

- (73h) (70~79)  
 τί θέλετέ μοι δοῦναι, κἀγὼ ὑμῖν παραδώσω αὐτόν;  
 tí t<sup>h</sup>életé moi doûnai, **k** agò: humí:n paradó:so: autón?  
*What will you give me **if** I deliver him to you? (NT Mt 26:15) (Purposive)*
- (73i) (346)  
 ἔπιτα γράφω τῇ σῇ χρηστότητι, ὅπως σπουδάσης καὶ συμβουλεύσης τῷ πραιποσίτῳ  
 épita gráp<sup>h</sup>o: tē:i sē:i k<sup>h</sup>re:stóte:ti, hópo:s spoudáse:is **kaì** sumbouleúse:is tō:i  
 praiposito:i  
*Then I am writing to your excellency, that you should make haste **and** advise the prefect (PLond II 409) (Phasal verb complement)*
- (73j) (~65 AD)  
 καὶ ὄφθη αὐτοῖς Ἠλείας σὺν Μωϋσεῖ, καὶ ἦσαν συνλαλοῦντες τῷ Ἰησοῦ.  
 kaì ó:p<sup>h</sup>t<sup>e</sup>: autoís he:leías sùn mo:useî, **kaì** ê:san sunlaloûntes tō:i ie:soû.  
*And Elijah with Moses were seen by them, **and** they were conversing with Jesus.  
 And there appeared to them Elijah and Moses; **and** they were talking to Jesus. (NT Mc 9:4) (Perception verb complement)*
- (73k) (710?)  
 ἐπετρέψαμεν γὰρ τῷ παρόντι ἀποστόλῳ ἡμῶν μὴ ἀποστῆναι ἐκ σοῦ καὶ ἔστι διὰ σοῦ τί  
 pote tò kat<sup>h</sup>ólou ἐν λοιπάδει  
 epetrépsamen gár tō:i parónti apostólo:i he:mō:n mè: apostê:nai ek soû **kaì** ésti dià soû tí  
 soû tí pote tò kat<sup>h</sup>ólou en loipádei  
*for we have instructed the present messenger not to depart from you **if** you are in arrears with even anything at all (PLond 1393) (Conditional)<sup>110</sup>*
- (73l) (iii AD)  
 ἔχω ἐν Ἀλεξ[α]νδρείᾳ ἀναγκαῖον φίλον καὶ τὰ πάντα μεταδώσι ἡμῖν  
 ékh<sup>o</sup>: en aleksandreía:i anagkaíon p<sup>h</sup>ílon **kaì** tà pánta metadó:si he:mí:n  
*I have in Alexandria a friendly relative, **and** he will transfer everything to us (BGU II 625) (Relativiser)*

Parataxis is a prominent mechanism of clause combination through Middle and Modern Greek, and indeed throughout the Balkans; its use is much more wide-ranging than, say, in English—particularly in complementation, although its use is still largely consistent with ‘and’ (e.g. *thelo ke to kano* ‘I want [to] **and** I do it; I want to do it (FACTIVE).’) Nevertheless, parataxis belongs to a different paradigm than the subordination in which *pu* participates; so it is unlikely that there was any direct influence between the two means of expression.

#### 5.4.6. Diachronic complementation systems

In conclusion, by way of comparison, I present in graphical form the complementation systems of Attic, Hellenistic Koine (as represented by the usage of

<sup>109</sup>Note that *kaì* is used in the same way as the immediately ensuing classical purposive/resultative, *hó:ste*.

<sup>110</sup>Ljungvik (1932:85) suspects Arabic influence here.

the more vernacular authors of the New Testament), and Modern Greek, following the format of §4. A more detailed, statistical presentation of the complementation systems of various authors is beyond the scope of this work. Usage which was only occasional, or which ranged over only some of the predicates in a given class, is shown as light gray. Because of a relative paucity of examples, Future Truth Information Modality has been omitted.

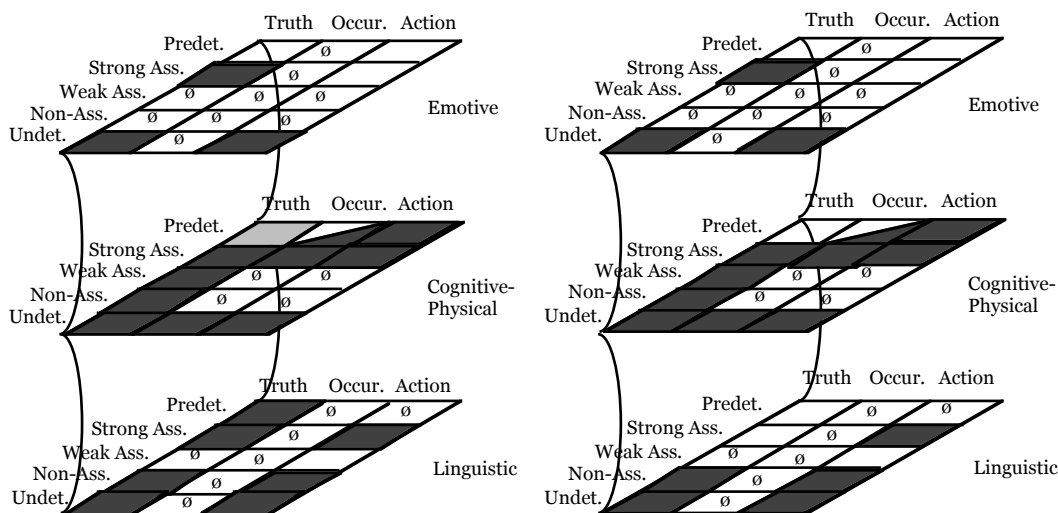


Figure 11. Attic infinitive; Koine infinitive

The retreat of the infinitive from the predetermined cognitive and the linguistic domains represents the beginning of the demise of the realis infinitive, supplanted by *hóti*. The irrealis infinitive is still healthy in Early Middle Koine, but as the following figure shows, the particle that was eventually to displace it, *hína*, was already encroaching on its territory:

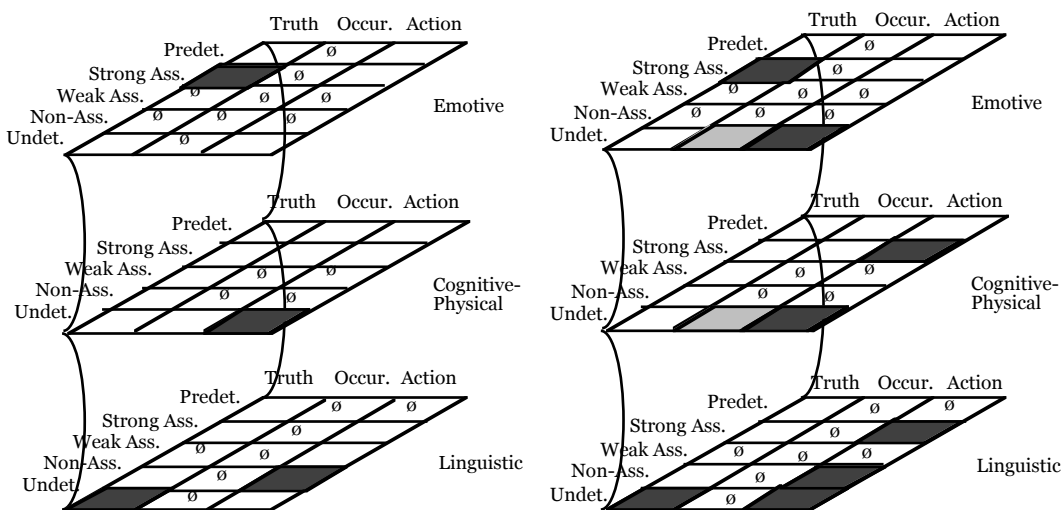


Figure 12. Attic *hína/hópo:s*; Koine *hína/hópo:s*

This process has run to completion in Modern Greek, with *na* largely covering the domain of the Ancient/Middle irrealis infinitive:



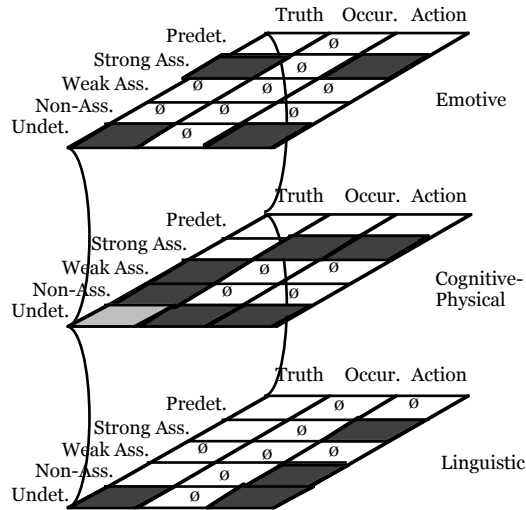


Figure 13. Modern *na*

While *hóti* was already established in Classical Greek as a realis complementiser, it spread at the expense of the realis infinitive in Early Middle Greek, taking over weak assertives and linguistic predicates. Its distribution has remained basically the same since, except that it has been curtailed in the emotive predetermined domain by *pu*, and that it has become entrenched in Undetermined Truth contexts.

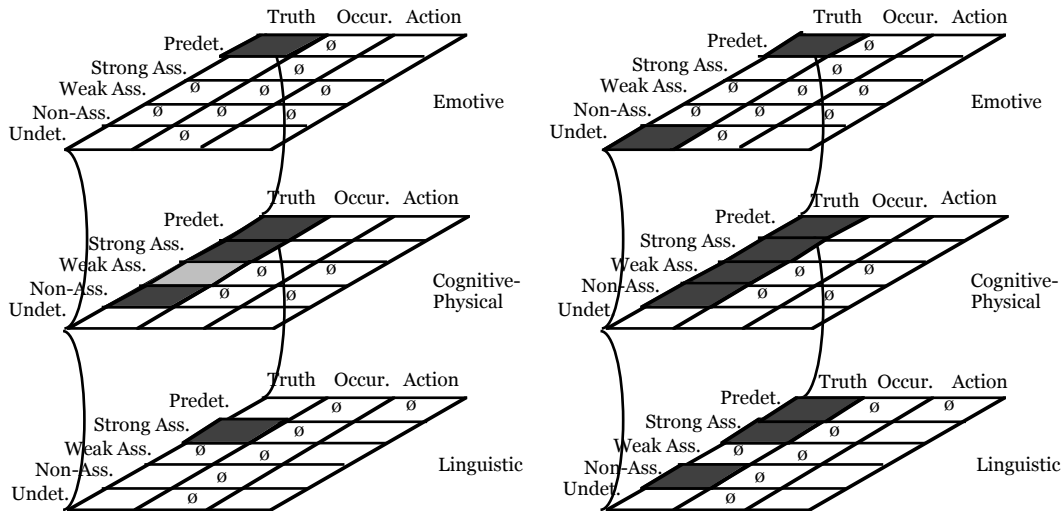


Figure 14. Attic *hóti/hos*; Koine *hóti*

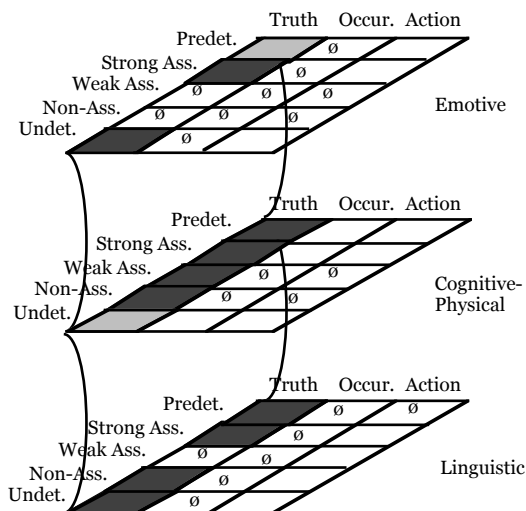


Figure 15. Modern *oti/pos*

The retreat in the supplementary participle between Ancient and Early Middle Greek is noticeable; its non-factive use has been dropped, and its non-Truth usage curtailed.

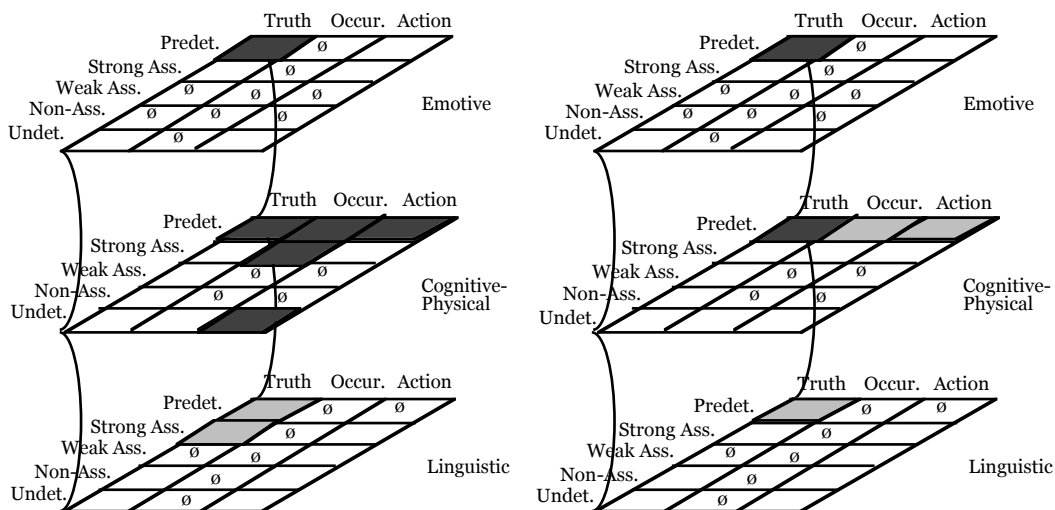


Figure 16. Ancient participle; Koine participle

If *pu* is taken as continuing the functionality of the supplementary participle, this retreat can be said to have gone further: *pu* is restricted to Predetermined Truth, and marked for all but Emotive complements. The use of *ke*, on the other hand, is much closer to that of the Ancient participle—although there can be no question of continuation here, as participial and paratactic complementation are quite distinct.

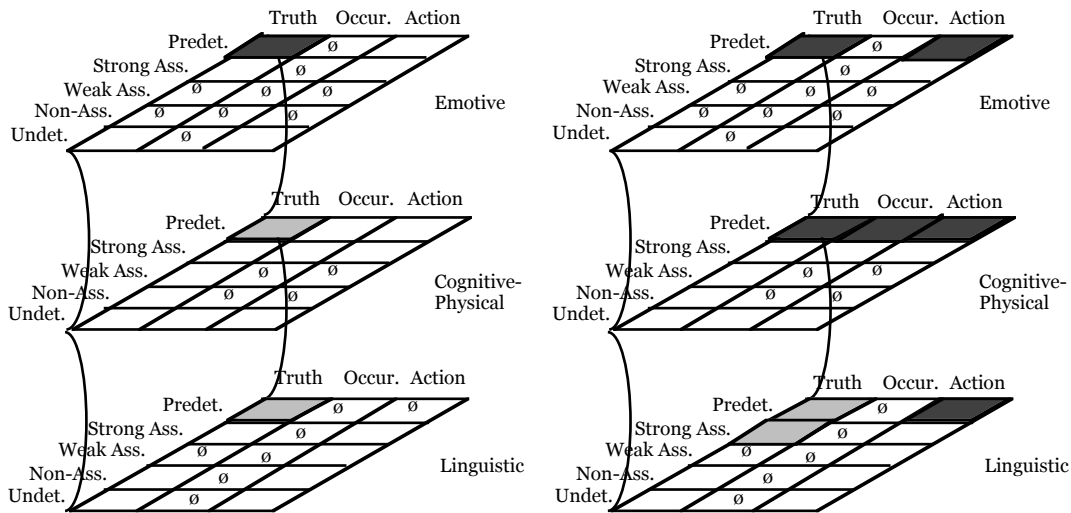


Figure 17. Modern *pu*; Modern *ke*

Even for *pu*, it is by no means certain that one can speak of a continuity between the general factive Middle participle and the Modern largely-true factive *pu*. The dialectal data (§6) is decisive in this regard: it shows some dialects in which the participle has not died, and others in which there is no participle—but neither is there complementiser-*pu*: *oti* does all realis complementation. This shows the participle and *pu* to be unrelated and temporally separated developments.

### 5.5. Tzartzanos’ internal reconstruction

Tzartzanos (1991 [1946, 1963]) lists not only the various meanings and functions of the Greek ‘introductory’ particles, but also, in endnotes, how the particle came to have that meaning. Tzartzanos elucidates the diachrony of these particles by internal reconstruction, based on cases where constructs in Modern Greek are ambiguous between two meanings.

Such ambiguities are commonplace in Modern Greek, not only for *pu*, but also for *na*. The boundaries between the various fields into which these particles have grammaticalised are still very fluid. As a result, internal reconstruction is a valid way to go about tracing the grammaticalisation process for these particles—particularly since much of the reanalysis of (*o*)*pu* may have taken place during the Dark Ages, for which we have no documentary evidence.

However, Tzartzanos’ account is not satisfactory, for several reasons. Tzartzanos’ analysis is not complete—several meanings of *pu* and *na* are not given a diachronic account, and many functions of *pu* discussed in §3 are not identified by Tzartzanos. However much information Greek of the last century (the source for most of Tzartzanos’ examples) gives us, internal reconstruction should be based on texts that are as old as possible—and supplemented by direct diachronic research where available. Finally, Tzartzanos’ account was not done in the light of any cross-linguistic generalisations.

Tzartzanos’ account of the diachrony of *pu* may be summarised in the following diagram:

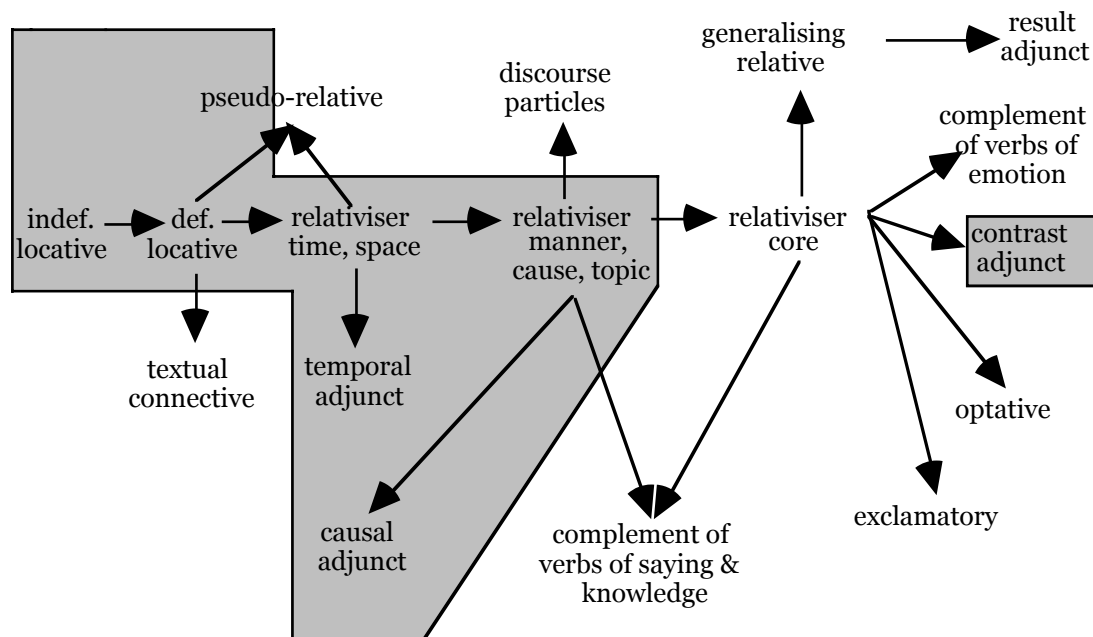


Figure 18. Tzartzanos' account of *pu*. Shaded functions are known to have been extant for *hórou* in Classical and Early Middle Greek.

The initial meaning of *'opu* (*hórou*), as Tzartzanos notes, was as a relative locative adverb—first indefinite (§3.1.1), then definite (§3.1.2). Tzartzanos gives the definite locative as a possible origin for the use of (*o*)*pu* as a textual connective (§3.5), noting the ambiguity in (74):

- (74) Ἀρπάζει ένα μπουκούνι και κατέβηκε. Πάει στο καλύβι της. **Οπού** σε λίγο νά σου το βασιλόπουλο μέσα.  
 arpazi ena bukuni ke katevike. pai sto kalivi tis. **opu** se liyo 'na su to vasilopulo mesa.  
 She grabbed some dough and got out. She went to her hut. **But/Where** [in the hut], in a little while, in comes the prince. (MinA 428)

Tzartzanos slices up the domain of the relativiser *pu* (§3.2) into a temporal/locative relativiser (75a, 75b); a relative adverb denoting manner, cause or topic (75c, 75d, 75e); and a relative pronoun (75f).

- (75a) oblique (locative): Φτάσαμε στο σπίτι **που** καθόταν ο ποιητής.  
 ftasame sto spiti **pu** kathotan o piitis.  
 We reached the house **in which/where** the poet stayed. (Mack 249)
- (75b) oblique (temporal): Δε ζούμε πια στην εποχή **που** δεν μπορούσες να κάνεις μπάνιο γυμνός.  
 de zume pia stin epoxi **pu** den boruses na kanis banio gymnos.  
 We no longer live in the age **when** one couldn't go swimming in the nude. (Mack 249)
- (75c) oblique (manner): Ο τρόπος, **που** θα τη φορούσα την εσάρπα, θα συμπλήρωνε τη σημασία του χρώματος.  
 o tropos, **pu** tha ti forusa tin esarpa, tha siblirone ti

simasia tu xromatos.

The way [**that**] I'd wear the shawl would complete the colour's meaning. (Tz §282 LXXXIV i 3 b: Drosinis)

(75d) oblique (causal):

Θα μου πεις την αιτία, **που** εγελούσε.

tha mu pis tin etia, **pu** egheluses.

You will tell me the reason **why/for which** you were laughing.

(75e) oblique (topic):

Είναι η δόξα, **που** του είχαν πει.

ine i doksa, **pu** tu ixan pi.

That is the glory **which** they had told him **about**. (Tz §282 LXXXIV i 3 b: Papantoniou)

(75f) subject:

Ο άνθρωπος **που** ήρθε είναι ο θείος μου.

o anthropos **pu** irthe ine o thios mu.

The man **who** came is my uncle. (Mack 249)

Tzartzanos does not give an account for the temporal/locative relativiser (including the pseudo-relative—§3.2.2), but they are obviously intended to be derived directly from the definite relative locative. Tzartzanos also derives the temporal subordinater *pu* (§3.4.6) from the temporal relativiser, based on the following ambiguous examples:

(76a) Στον καιρό του παππού μου, **που** ήμουν μικρό κορίτσι...

ston kero tu papu mu, **pu** imun mikro koritsi...

In my grandfather's time, **when/during which** I was a little girl... (Tz §282 LXXXIV iii 1 a)

(76b) Την εκλείδωνε λοιπό πάντα στο σπίτι τη γυναίκα του, από την αυγή, **που** έφευγε να πάη στη δουλειά του, ως το βράδυ, **που** εγύριζε.

tin ekliðone lipo pada sto spiti ti yineka tu, apo tin avgi, **pu** efevge na pai sti ðulia tu, os to vraði, **pu** eghirize.

So he always locked his wife up at home, from dawn, **when/on which** he would leave to go to work, till the evening, **when/on which** he would return. (MinB 450)

Tzartzanos likewise gives no account for the manner/cause/topic relativiser *pu*, although it is reasonable to treat it as an extension of the temporal/locative meaning.

The remainder of the uses of *pu* Tzartzanos considers to be derived from the relative pronoun *pu*—namely, *pu*-constructions where the head noun is not oblique with respect to the relative clause. Of these, he considers it possible that the complementiser use of *pu* (barring emotives, which he considers causal) may have originated from the locative adverb 'οpu, as well as the relativiser proper. His examples, it is worth noting, are of perception predicates, which with their raising are not characteristic of *pu*-complements overall:

- (77a) Εμείς εψές τον είδαμε στον άμμο, *που* κοιμότουν.  
emis epses ton idame ston amo, *pu* kimotun.  
we last.night him saw on.the.sand *pu* he.was.sleeping  
Last night we saw him sleeping on the sand.  
(Last night we saw him on the sand, **that** he was sleeping/Last night we saw him on the sand, **where** he was sleeping/Last night we saw him, **who** was sleeping, on the sand.) (Tz §282 LXXXIV iii 6 c; Passow)
- (77b) Είδα τον ήλιο *που* έλαμπε  
ida ton ilio *pu* elampse  
I saw the sun *pu* it.shone  
I saw the sun shine/I saw the sun, **which** shone. (Tz §282 LXXXIV iii 6 c)
- (77c) Εκοίταζαν τον Καραβέλα *που* εμασούσε με περίσσιαν όρεξη  
ekitazan ton karavela *pu* emasuse me perisian oreksi  
They looked at Karavelas **eating** with appetite to spare/They looked at Karavelas, **who** was eating with appetite to spare (Tz §282 LXXXIV iii 6 c)

For the remaining usages of *pu* considered, Tzartanos gives the following ambiguous examples as derivations:

Complementiser after verbs of emotion (§3.3.2) and causal subordinator (§3.4.1):

- (78a) Η κόρη, *που* ήταν φρόνιμη, τους κράζει και τους λέει  
i kori, *pu* itan fronimi, tus krazi ke tus lei  
the maiden *pu* was prudent calls them and tells them  
The maiden, **who** was prudent, calls them and tells them/**Because** the maiden was prudent, she calls them and tells them. (Tz §282 LXXXIV iii 2; Passow)
- (78b) Μια περδικούλα κάθονταν ψηλά σ' ένα λιθάρι· περιγελάει τον κυνηγό, *που* δεν την ντουφεκιάει  
mia perdikula kathodan psila s ena lithari; periyelai ton kiniyo, *pu* den tin dufekai.  
A partridge sat high on a rock; she mocks the hunter, **who** does not shoot her/she mocks the hunter **for** not shooting her. (Tz §282 LXXXIV iii 2)

Resultative subordinator (§3.4.3) (derived from the generalising relativiser: §3.7.1):

- (79a) Τι μαύρα μοιρολόγια από την Πάργα βγαίνουνε, *που* τα βουνά ραγίζουν  
ti mavra mirologia apo tin parga vgenune, *pu* ta vuna ragizun  
Oh, the black complaints that come out of Parga, **which are such that** the mountains crack (relative clause)/**so that** the mountains crack (result clause) (Tz §282 LXXXIV iii 3)
- (79b) Μου 'δωσε τόσα χρήματα, *που* θα μου φτάσουν να περάσω όλο το μήνα  
mu dose tosa xrimata, *pu* tha mu ftasun na peraso olo to mina.  
He gave me so much money, **as much as** would be enough to last me through the entire month (relative clause)/He gave me so much money, **that** it will be enough to last me through the entire month (result clause) (Tz §282 LXXXIV iii 3)
- (79c) Να τον πάτε σε μιαν ερημιά, *που* να μην εύρη στράτα  
na ton pate se mian erimia, *pu* na min evri strata  
Take him to a wasteland, **such that** he will not be able to find a way out (relative clause)/**so that** he will not be able to find a way out (result clause) (Tz §282 LXXXIV iii 3)

## Contrastive subordinator (§3.4.4):

- (80a) Αυτό δα το καταλαβαίναμε ως και μεις, *που* ήμασταν παιδιά  
afto ða to katalavename os ke mis, *pu* imaste pedia  
Even we, **who** were children, understood that/Even we understood that,  
**though** we were children (Tz §282 LXXXIV iii 4)
- (80b) Το λένε οι άλλοι, να το λέτε και σεις, κύριε Αγγελή, *που* με γνωρίζετε από τόσο δα  
κοριτσάκι;  
to lene i ali, na to lete ke sis, kirie ageli, *pu* me gnorizete apo toso ða koritsaki?  
The others say so, but for you to say so as well, Mr. Angelis, **who** have known  
me since I was a little girl!/even though you have known me since I was a  
little girl! (Tz §282 LXXXIV iii 4)

## Optative subordinator (§3.7.5), derived from optative relative clauses:

- (81) Να μπήξω το μαχαίρι στο λαιμό του ανδρός μου, *που να* τον πάρη ο διάολος!  
na bikso to maxeri sto lemo tu andros mu, *pu na* tone pari o diaolos!  
If I could only stick a knife in my husband's throat, **whom may** the devil  
take/If I could only stick I knife in my husband's throat—[and] **may** the devil  
take him! (Tz §282 LXXXIV iv)

## Exclamatory subordinator (§3.7.6), derived from relativisations of interrogatives:

- (82a) Τι είν' το κακό, *που* γίνεται στη μέση στο Λεβίδι  
ti in to kako, *pu* yinete sti mesi sto levidi?  
what is the bad thing  
What is the disaster **which** is happening in the middle of Levidi? (Pol 68)
- (82b) Τι είν' το κακό, *που* πάθαμε οι μαύροι οι Λαζαίοι!  
ti in to kako, *pu* paθame i mavri i lazei!  
What is the disaster **which** has befallen us poor members of the Lazos  
clan?/What a disaster **to** have befallen us poor members of the Lazos clan!  
(Pol 212)
- (82c) Για ιδές καιρό *που* διάλεξε ο Χάρος να σε πάρη!  
gia ides kero *pu* dialekse o xaros na se pari!  
go on! see (IMPERP) time *pu* Death has chosen to take you  
See a time **which** Death has chosen to taken you!/Look, what a time ∅ Death  
has chosen to take you! (Tz §282 LXXXIV iv b)

Tzartzanos derives the typical exclamatory clauses in §3.7.6 from these clauses by dropping, first the main verb, and then the *ti*, “without the meaning of the sentence changing at all, or the exclamatory intonation of the expression losing anything.” (Tzartzanos 1991 [1946, 1963] §282 LXXXIV iv b): so in (82a), *ti in to kako pu paθame!* > *ti kako pu paθame!* > *kako pu paθame!* So Tzartzanos derives the exclamatory cleft from an interrogative (pseudo-)cleft.

One remaining issue arises from Figure 18. As is clear, the contrast adjunct function was present in Early Middle Greek (30d), but is derived from the Late Middle Greek relativiser by Tzartzanos. There is a way Tzartzanos could be right; namely, that the contrastive connective was innovated twice in Greek—once from *hόπου* as a locative, and once from *pu* as a relativiser.

Both pathways are plausible. The semantic enrichment characteristic of relativisation can be contrastive in nature; e.g. *o yianis, pu itan ftochos, tora ine plusios* (*John, who was poor, is now rich*). As for a locative engendering a contrast marker, we need go no further than the reinforced Modern Greek locative expression, the pseudo-relative *eki pu* ‘there that’:

(30d) (100~125)

δόξας οὐ τρέμουσιν βλασφημοῦντες, ὅπου ἄγγελοι ἰσχύϊ καὶ δυνάμει μείζονες ὄντες  
οὐ φέρουσιν κατ’ αὐτῶν παρὰ Κυρίῳ βλάσφημον κρίσιν.

dóksas ou trémousin blasph<sup>h</sup>e:moúntes, **hópu** ággeloi isk<sup>h</sup>úi kai dunámei  
meízdones óntes ou p<sup>h</sup>érousin kat autô:n parà kurío:i blásp<sup>h</sup>e:mon krísin.

*they are not afraid to revile the glorious ones, whereas angels, though  
greater in might and power, do not pronounce a reviling judgement upon  
them before the Lord.*

(CSMG: *den tremun na vlasfimun tis dokses, eki pu i ageli, pu ine meyaliteri stin  
isxi ke ti dinami, den ekdilonun vlasfimi krisi yi aftus ston kirio*) (NT 2 Petr 2:11)

The consequence is noteworthy: different stages of a grammaticalisation, bearing different meaning components, can generate the same grammatical functions over time, with the latter instance overriding its predecessor. Indeed, if divergence has occurred in the grammaticalisation, and the two stages are synchronically distinct, the two instances may even coexist in the language—which is what seems to have happened with the use of both *'opu* and *pu* as discourse connectives in Modern Greek (§3.5).

This means that identifying early instances of novel functions of a grammaticalising word, as done in this chapter, is not sufficient. One must also ascertain whether the grammaticalising word could at that time have engendered the function now in current use. For example, identifying Attic temporal *hópu* is not sufficient to account for Modern Greek temporal *pu*. One must also determine whether Modern Greek temporal *pu* can constitute a continuation of Attic temporal *hópu*, or represents a novel development from, say, the Late Middle Greek relativiser. The clues that can be conscripted to working this problem out can involve either the syntactic behaviour of the two words (if the syntactic scope of the etymon has changed over time), the lexical form of the words (given lexical/phonological attenuation), or the connotational meaning of the words (given semantic enrichment or blanching).

## 5.6. Conclusion

The findings in this chapter on the diachrony of *hópu* are summarised in Figure 19.

The investigation of the diachrony of *hópu*, and the search for parallels of *pu* in Ancient and Middle Greek, have yielded some interesting results:

- *hópu* does not originate in the reduction of a lexical form to grammatical, as is typical of grammaticalisation. Indeed, in the strict sense, *hópu* did not originate as a grammaticalisation at all; everything about the form is analogical:



- The prefixing of *ho-* to *\*k<sup>w</sup>o* words in Greek is an analogical development, imitating *hóstis*; it is for this reason that *ho-* in these words is indeclinable.
- The semantic shift of originally indirect interrogative *\*yo + \*k<sup>w</sup>o* words to indefinite and thence definite relatives is also by analogy to *hóstis*.
- The genitive ending on *hópou* is a schematic innovation of Proto-Ionic; it was applied to the *hopo-* stem by analogy with spatial partitive genitives in nominals.
- In the absence of a nominative *\*hópos* in Proto-Ionic, the genitive form *hópou* cannot have existed independently of this specific innovation—which is why *hópou* is unattested in *any* function outside Attic-Ionic. The *-ou* ending of *hópou* thus exists only by virtue of analogical extension.

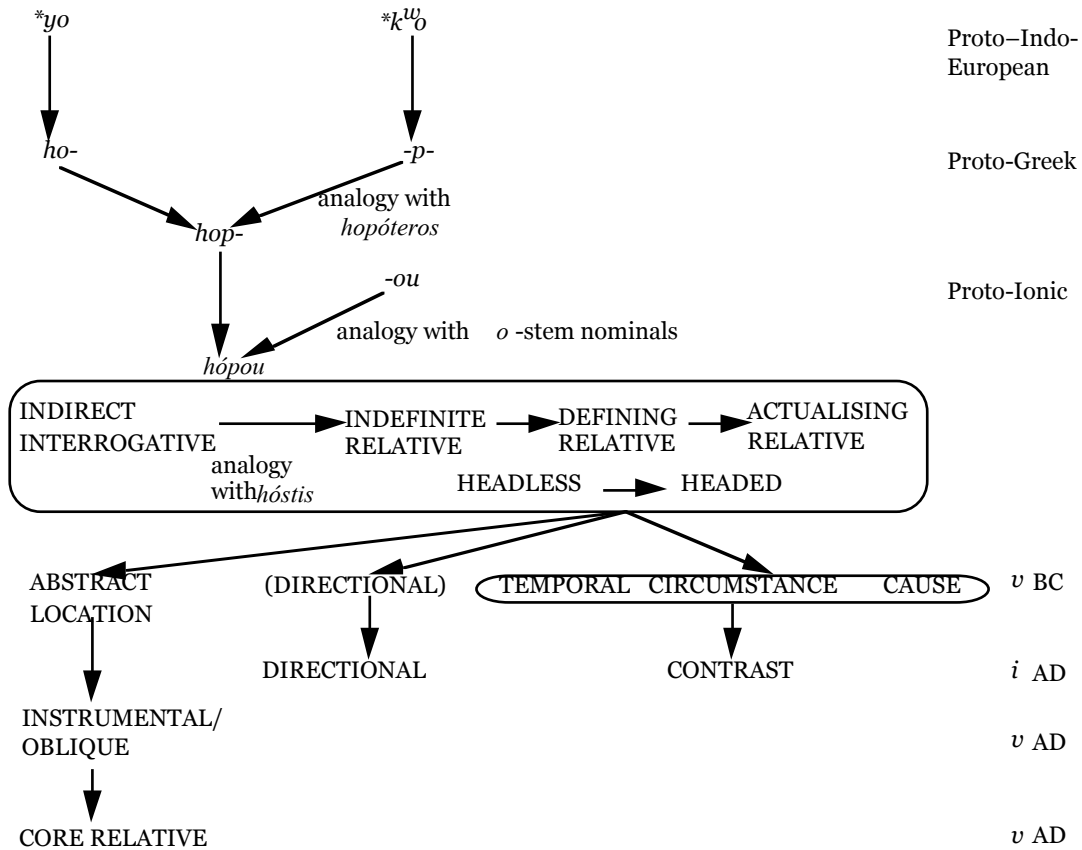


Figure 19. The diachrony of *hópou*

- The locative *hoû*, which is derived from a productive nominative *hós*, is an innovation restricted to Attic, and thus subsequent to *hópou*. So *pace* Monteil, *hópou* was not mechanically modelled on *hoû*; the genitive ending has nothing to do with analogy with other pronouns, and is purely an analogy with other *o*-nominals—namely, analogy on the most abstract, declensional level.

These findings corroborate Joseph's (1997) critique of grammaticalisation theory: grammaticalisation has nothing to do with the origin of *hórou*. However, *pu* is an uncharacteristic ('late') grammaticalisation, moving from the grammatical to the more grammatical rather than from the content word to the grammatical; so this need not rule out the role of grammaticalisation in general in the origin of grammatical forms. And grammaticalisation has a lot to do with what subsequently happened to *hórou*. So whatever the importance of grammaticalisation in accounting for the origin of grammatical forms, what matters here is how it describes the further career of these forms, as a process.

- Work on the diachrony of *pu* by Christidis (1982; 1986) and Papadopoulou (1994a; 1994b) has placed much store on the contrast between stationary *hórou* and directional *hína*; it is this contrast, they have argued, which determined the functional range of their modern reflexes, factive *pu* and irrealis *na*. Closer inspection of the diachronic data shows that this contrast is illusory. It seems *hína* was originally not a locative at all, but an instrumental; and *hína* was primarily stationary rather than directional in early Greek. Directionality cannot be invoked as an explanatory parameter in accounting for the career of *hína*; the particle was a purposive before it became a directional, and the development towards modern *na* can be explained solely in terms of the purposive. Since *na* does not admit a localist account, the case for a localist account of *pu*—involving paradigmatic contrast—is weakened.
- A comparison between *hórou* and Ancient Cretan *hópai* delivers further counterevidence to a localist account. Both particles are derived from locatives; there is no evidence from Greek that the Proto-Greek locative was ever directional as well as stationary. Yet while *hórou* has only held factive values in Greek, *hópai* developed into a purposive in Cretan. The distinction between the two lies, not in their etymology, but in the grammatical system *hópai* found itself in; thanks to phonological merger, *hópai* was reanalysed as an instrumental, giving rise to a manner reading. This manner reading led to the purposive just as it did with *hína*.

Traugott's (1988; 1991 [1988]) research into grammaticalisation has emphasised that grammaticalisation involves not isolated words, but words in their discourse context. The corollary established by *hópai* may be obvious, but bears telling anyway: grammaticalisation involves not isolated words, but words in their *grammatical* context. The phonological merger of *\*āi* (locative) and *\*āē* (instrumental) or *\*āej* (dative) in Proto-Greek was enough to steer *hópai* into territory the explicitly stationary *hórou* did not venture. Ultimately, more important for the careers of *hína* and *hópai* than their etymologies was their reanalysis to certain key functions. For both, the crucial step was the reanalysis MANNER ADVERB > PURPOSIVE. Once this took place, the irrealis role of the particles was guaranteed. Although *pu* has some limited

manner-relativiser use, this reanalysis has not taken place; and that has kept it away from the irrealis sphere.

- Some other Ancient Greek locatives—notably *ê:* and *hópai:*—emulate the developments in *hópou*. *ê:* took the path INSTRUMENTAL > LOCATIVE > TEMPORAL > CIRCUMSTANCE, while *hópai:*, reinterpreted as a manner adverb (and also in use as a directional), became not only a temporal but also a purposive, as already mentioned.
- *ho:s*, like *pu*, seems to have been a linguistic factotum; however, by Late Middle Greek, it was extinct in all but resultative and temporal usages. The early attrition of *ho:s* means that it cannot have been continued in Modern Greek.
- The relativiser *hós* had a range of functional meanings comparable to that of *pu*, and indeed of most relativisers. That these enriched relativisers are so pervasive implies that these values for *pu* need not represent a continuation of the values for *hós*, but may be independent innovations. The same holds for the cross-linguistically less widespread use of modal relativisers, although the parallel between Ancient and Modern optative relativisers, and intensional irrealis relativisation, is striking.
- *hóti* had come to cover its current range of functions by the beginning of Middle Greek. Although it is used to introduce realis complements and factive adjuncts, its main functional overlap with *pu* is in introducing collocations. The two most striking similarities date from Late Middle Greek: *allà hóti*, corresponding to Modern *ala pu* ‘but that = but’, and *mónon hóti*, corresponding to Modern *mono pu* ‘it’s just that’. In this case, there is a distinct possibility of continuation, with *pu* analogically displacing *oti* by virtue of being factive. Yet collocations are a minor facet of the general semantics of *pu*; and overall, the links between *hóti* and *pu* are tenuous; *pu* was more prominent in displacing *hóti* (particularly in complementation) than in continuing on from *hóti*.
- It is the participle that displays the greatest functional overlap with *pu*, as first noted by Sofianos (1977 [1544]:244). The distribution of the participle was largely factive in Ancient Greek (although this was a development which largely crystallised in Attic, the Homeric participle being more functionally restricted), and became consolidated in its factivity in Middle Greek. Thus, the non-factive usages of the participle, the conditional and purposive adjuncts and the complement after verbs of effort, were amongst the first to go. Still, the participle was clearly on the wane in Middle Greek, not only as an irrealis, but in the totality of its functions; between Early Middle and Early Modern Greek, its textual frequency drops by a factor of three.

Priming between the participle and *pu* cannot be ruled out: the participle may still have been extant in enough functions in Late Middle Greek to have facilitated the analogical extension of the relativiser *opu*, whose participial equivalent, the attributive participle, had survived into Middle Greek. Yet it is un-

necessary to postulate this, as the semantic extension of the participle could have been duplicated independently by the relativiser.

It should also be noted that the participle differs from *pu* in some crucial ways: it allows as modal bindings modal solidarity and close association, whereas *pu* only allows modal autonomy; and in close association, it does not preserve its truth under negation—so, under the prevalent definition, it is not factive.

- The same semantic innovation can take part several times in the career of a grammaticalising morpheme, particularly if it is a linguistic commonplace (such as LOCATIVE > TEMPORAL). So the innovations in Attic *hórou* may be distinct in origin from corresponding innovations in Modern *pu*, and this distinction is evident in the linguistic behaviour of the respective morphemes.