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Down the paths to the past habitual: its historical connections with counterfactual pasts, future in the pasts, iteratives and lexical sources in Ancient Greek

Abstract: To complement existing synchronic typological studies of the marking strategies of (past) habituality, this paper details the diachronic paths leading to and from past habitual constructions. The rich corpus evidence from the diachrony of Ancient Greek demonstrates at least four source constructions: (1) past counterfactual mood (in optative and indicative), (2) futures in the past, (3) iteratives (with -*sk*) and (4) lexical sources with semantic affinity to habituality (volition, habit, love). It is argued that the former two acquire habitual meaning through an invited inference of epistemic certainty of the statement by the speaker: what certainly would have happened in the knowable past is implied to be characteristic of the past. The past forms with the so-called iterative -*sk* (3) suffix follow the cross-linguistically frequent evolution of pluractional constructions through a form of semantic bleaching: past iterative>frequentative>habitual>habitual imperfective. Lexical sources (4) first acquire habitual meaning in the present after which only the more heavily grammaticalized ones receive past habitual usage through semantic bleaching and generalization of usage (as reflected by host class expansions). The paper is concluded with a diachronic map of these paths into habituality and the paths leading from past habituality into other domains such as genericity.

Keywords: Ancient Greek; counterfactuality; futurity; genericity; habituality; iterativity

1 Introduction

Past habitual constructions express that a situation was the case on *several different occasions* in the past (Bybee et al. 1994: 127; Comrie 1976: 27–28). Most commonly, the difference with iterative constructions is seen as repetition on the *same* occasion such as searching for keys all morning (Bybee et al. 1994: 160). While both habituals and generic sentences present characterizing generalizations (Krifka et al. 1995: 3), they differ in their event quantification, as habituals express that events took place in the majority of different occasions entailed (e.g. *he used to run on Sunday*) whereas generic sentences entail quantification on all occasions (e.g. *Church service was/is/will be on Sundays*). As signaled by the latter example, generic statements need not be timeless, as "it is perfectly possible to claim that a characterizing property held in the past or will hold in the future, without any implication for the present" (Krifka et al. 1995: 6). Dahl (1985: 100) also already pointed out that "languages which

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mark past time reference in habitual sentences will do so also in generic sentences", which he illustrates with the following past generic *Dinosaurs ate kelp.*

Typological research into the history of habitual constructions informs us that, from a cross-linguistic perspective, habituals are typically expressed periphrastically (Dahl 1985: 96) and that diachronic paths towards past habituals exist more often than to present habituals (Bybee et al. 1994: 151). This temporal asymmetry has been explained pragmatically by Bybee et al. (1994: 155–156): "explicit mention of habitualness is less necessary in the present, where the default meaning includes habitualness, than in the past, where it does not. The higher frequency in the past led to its grammaticization, while the lower frequency in the present led to the disappearance of the construction". In fact, they go as far as suggesting that the "only way to arrive at a present habitual is by developing a progressive that cuts out part of an originally more general present and leaves the present habitual as a default reading", as the English progressive did to the English present which had default habitual and generic readings (Bybee et al. 1994: 151). In English, for example, we find several auxiliaries which are limited to past habituality, e.g. *used to* and *would* (see Tagliamonte and Lawrence 2000).[1] The use of the past futurity marker *would* for habituality is revealing of the intimate connection between habituality and futurity in the past. In fact, Ziegeler (2006, 2013) has argued that the present generic and habitual meanings of the auxiliary *will* were the historical foundation for the future use of *will* that is now very common in Modern English. Relatedly, scholars have often mentioned the overlap between counterfactual[2] and habitual constructions in conditional constructions but typically do not tread into detail about potential diachronic paths (Haiman and Kuteva 2002; Karawani 2014; Lazard 1998). For this commonality we can compare the ambiguity between a counterfactual and habitual reading without enough context in the following example from English: *If she had the time, my grandma would go to the garden, pick some apples and make us the best pie* (Karawani 2014: 118). Although such and other intimate connections of habitual constructions are known, little research has been devoted yet to corpus-based analysis of the diachronic paths leading to past habitual constructions.

Therefore, this paper aims to make a substantial contribution to this demonstrable area of interest by analyzing some major diachronic paths leading to the formation of past habitual constructions using corpus evidence from the history of Ancient Greek. To illustrate, Classical Greek had a past habitual construction, a past indicative in the imperfect or aorist with the modal particle *án* (example [1]), which is formally the same as a counterfactual construction, a past indicative in the imperfect/aorist with the modal particle (=MP) *án* (example [2] with the aorist indicative).

(1)   […]   *die:ró:to:n*   *àn   autoùs   tí   légoien* […]

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[1] Of course, in English the habitual present can alternatively be made explicit using the auxiliary *be wont to* or lexical cues such as *have/be in the habit, be accustomed*. See Hengeveld et al. (2021) for a recent overview.
[2] A sentence or clause is generally called counterfactual (or contrary-to-fact) when it is implied or assumed by the speaker that what is said does not hold in the actual world (cf. Declerck and Reed 2001: 7; Dancygier 2006: 25).

<pre>
               ask.IND.IPFV.1SG   MP they.ACC   what.Q say.OPT.3PL
</pre>

'I would ask them what they meant […]'

(Pl. *Ap.* 22b4–5)[3]

(2)   *állos   d'   homoío:s ê:lthen   àn tád'   angelô:n*

<pre>
       someone.NOM PTC   anyway come.IND.PFV.3SG   MP these.ACC report.PTCP.NOM
</pre>

'Someone else would have come anyway to bring this news.'

(A. *Ch.* 709)

Rather than deriving the habitual construction in 1 from the past counterfactual in 2 (as I aim to do), it has been contended that the habitual[4] construction in one derives from a so-called past potential use of the past indicative with the modal particle expressing something that was possible in the past. Despite the fact that this category has been convincingly explained as a relic from standard grammars of Ancient Greek as the examples have a counterfactual implicature in context (Wakker 1994: 156–166), the *communis opinio* holds that the past potential is needed diachronically to explain the creation of the past habitual construction (Wakker 1994: 161).[5] As I argue in Section 3, there are various pieces of linguistic evidence from both Archaic Greek (specifically Homer, Hesiod, the Homeric hymns and Pindar) and Classical Greek that actually confirm that the past habitual construction has the past counterfactual as its source. What might be thought to complicate the picture (but in fact does not) is that in the Ionic dialect of the Classical Greek historian Herodotus we find the use of a past indicative of a verb with the so-called iterative suffix combined with the modal particle to express past habituality (cf. la Roi 2020a: 148–152 and section 3.2 below).

(3)   […]   *klépteske   àn   periió:n*

<pre>
              steal.IND.IPFV.3SG   MP   go.round.PTCP.NOM
</pre>

'He would go around stealing.'

(Hdt. 2.174.3)

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[3] The translations are the Loeb translations available via https://www.loebclassics.com/ which were only sometimes minorly adapted if the habitual meaning was not translated explicitly. For glossing, I used the Leipzig glosses to which I had to add labels for the modal particle (MP), the particle (PTC), the pluperfect (PPRF) and the optative mood (OPT).

[4] Note, however, that earlier literature and standard grammars of Ancient Greek do not use the label iterative or habitual in the same way as done in modern linguistics, as they, for example, use the term iterative to refer to the habitual construction in (1): see Allan (2019: 31); Beck et al. (2012: 53); Crespo et al. (2003: 286); van Emde Boas et al. (2019: 415); Goodwin (1889: 56); Schwyzer and Debrunner (1950: 350); Wakker (1994: 159; 2006a).

[5] "To be sure, from a diachronic point of view, the existence of a separate category of 'past potential' is useful to explain the origin of the past-iterative interpretation of the secondary indicative with *án* (cf. n.74), but from a synchronic point of view, the secondary indicative with *án* (apart from descriptions) seems to be restricted to counterfactuality".

Finally, earlier research into the diachrony of future auxiliaries in later stages of Greek has several times found diachronic extensions of past futurity auxiliaries to past habituality, e.g. past future auxiliaries *eîkha* derived from an ability verb 'can' or *é:thela* derived from volition verb 'want' (Markopoulos 2009: 161, 215), the latter of which shows parallels to English *would* as it also derives from a volition verb. In Section 3 I tease apart the diachronic connections that past futurity has with past habituality. First, we should, as it were, set the diachronic typological scene for (past) habituality. By discussing the crosslinguistic and historical connections of habituality with other linguistic domains, the developments visible in the corpus evidence from Ancient Greek will become clearer. At the same time these developments may help carve out the specificities of the diachronic paths leading to past habituality.

As a result of the wide diachronic scope of this paper, the diachronic corpus evidence for this paper both combines earlier corpus studies and adds additional corpus material. The corpus analysis for past counterfactuals (Section 3.1) is based on a thorough analysis of the following texts: the Iliad, the Odyssey, Hesiod and the Homeric Hymns for Archaic Greek, and for Classical Greek, the histories by Herodotus, Thucydides and Xenophon, the tragedies by Aeschylus, Sophocles and Euripides, the comedies of Aristophanes, Plato's authentic philosophical works and the rhetoric by Lysias, Demosthenes, Isaeus and Isocrates. Since this data is based on collocation searches in the Thesaurus Linguae Graecae within a set distance (e.g. past indicative and *án* 5 words apart and conditional subordinator and past indicative 7 words apart) and subsequently sifting through all the cases, I cannot claim to be exhaustive for Classical Greek in its entirety. However, due to my large corpus and relatively broad distance parameters it is expected to cover the vast majority of the examples in Classical Greek. For the data on the development from iterative *sk-* and futures in the past, we can rely on extensive earlier corpus studies which I will reference accordingly and supplement with additional searches (e.g. 329 occurrences of *émell-* 'was to/would (have)' in the same corpus searched for counterfactuals). Lastly, the data and statistics on the development of past habituality from habitual auxiliaries stems from la Roi (2020a), supplemented by a diachronic review of *ethélo:* as past habitual in Post-Classical Greek.

2 Cross-linguistic and historical connections with past habituality

As mentioned above, cross-linguistic research on expressions of habituality has suggested that diachronic paths for this domain lead especially to past habituality. Typological research has also more specifically dealt with, on the hand, the form-functional connection of (past) habituality with irrealis marking across languages (Cristofaro 2004; Palmer 2001: 190–191) and, on the other hand, with conceptual similarities between habituality and larger domains such as imperfectivity (Bertinetto and Lenci 2010; Boneh and Jędrzejowski 2019). While such typological research has confirmed that the past habitual is cross-linguistically used to express various functions falling under the problematic descriptive header of irrealis, it has also shown that the forms expressing habituality and some irrealis functions display "considerable structural and functional diversity cross-linguistically" (Cristofaro

2004: 261).[6] Since the utility of the descriptive notion of irrealis has met with growing critique (Haan 2012; Sansò 2020), it would appear prudent to move away from such form-functional comparison on a larger scale and focus on the description of specific diachronic paths leading to past habituality. After all, Sansò's (2020: 24) diachronic typological survey of irrealis markers recently concluded that such synchronically multi-functional markers have undergone a long historical process whereby they obtained the different functions that fall under the irrealis label. He usefully compares their histories to the diverse diachronic paths taken by futures and modals. Similarly, identifying potential conceptual relationships with imperfectivity would create the expectation that past habituals always receive imperfective marking cross-linguistically, which is neither true cross-linguistically (cf. perfective past habituals in Polish, Sawicki 2019: 168–171) nor in Ancient Greek (see the discussion in Section 3 below).

There are, however, historical paths which have been known to lead to the creation of habitual constructions such as types of pluractional constructions (e.g. from an iterative source) or markers of past volition (e.g. English *would*). In fact, Bybee et al. (1994: 159, 170–172) had already hypothesized that iteratives formed out of reduplication may, due to a process of generalization, evolve into frequentatives and subsequently habituals. This path is conceptually well motivated as the restriction to one occasion (iterative) can be said to bleach away and generalize to frequent iteration on different occasions (frequentative) until characteristic of an extended period of time on different occasions (habitual).[7] This diachronic hypothesis also explains why we find polyfunctional markers of both iterative and habitual (Bybee et al. 1994: 162) and frequentative and habitual meanings cross-linguistically (Bybee et al. 1994: 165). Still, it has been rightly noted recently that "[t]o answer the question whether this is an established pathway of grammaticalization, diachronic data are urgently needed" (Kuteva et al. 2019: 245). Perhaps relatedly, recent research has reconceptualized these functions within the descriptive domain of pluractionality: "the morphological modification of the verb (or a pair of semantically related verbs) that primarily conveys a plurality of situations that involves a repetition through time, space and/or participants" (Mattiola 2019: 164). What is more, it has been demonstrated convincingly that the diachrony of pluractional constructions in early Indo-European languages provide confirmation of the cross-linguistic evolution of pluractional constructions (Inglese and Mattiola 2020; Magni 2016) and, for example, show changes of iterative constructions into habitual constructions.[8]

Furthermore, while the diachronic specifics of the habitual *would* in English are still obscure for now (also due to lack of historical data, see Ziegeler 2000: 83), it was already suggested by Palmer (2001:

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[6] Cf. Palmer (2001: 189) who admits that there is considerable variation among languages as to what is treated as irrealis and what is treated as realis.

[7] Cf. also Dahl (1985: 95–100) on the intimate relationship between iterativity, genericity and habituality.

[8] A very similar scenario had been offered independently for Ancient Greek by la Roi (2020a: 149–151) who suggested a similar diachronic path from iterative to habitual for verbs with the so-called iterative suffix -*sk* in Ancient Greek. I return to this issue in Section 3.2.

191) that the diachronic change from past volition to past habitual is not a major one, since a past volition verb when interpreted as 'tending' in context receives a habitual meaning. In other words, Palmer (2001) hints to an important connection of habituality with subjective epistemicity, as interpreting a speaker's volition as a speaker's subjective generalization (i.e. *s/he generally wanted to X*) entails interpreting the speaker's subjective certainty about this volition to have held for a certain time period. A similarly unknown path lets past future auxiliaries change into past habituals in Greek diachrony (i.e. the future auxiliaries *eîkha* derived from an ability verb 'can' or *é:thela* derived from volition verb 'want' mentioned above). I suspect that epistemic certainty plays a role here as well, since past futurity (even more so than futurity with respect to the present since that future is less knowable) is easily interpreted as a statement of epistemic certainty on the part of the speaker, because past tenses prototypically report known events. For a similar reason, the combination of a modal value with a past tense is said to generate a counterfactual implicature historically, since the choice to mention a past potentiality invites the interpretation that the known state of affairs was unrealizable through a quantity implicature (Wakker 2006b: 301 for Ancient Greek; Ziegeler 2000: 32–34 for English). In fact, past habituals have been viewed as a 'hybrid category' (Comrie 1985: 40; Givón 1994: 323; Palmer 2001: 191) consisting of a realis element (the past) and irrealis elements (e.g. temporally aspecific), just as counterfactuals typically combine a prototypical realis operator such as past, perfective or perfect with a prototypical irrealis operator such as future, subjunctive or conditional (Givón 1990, 2001: 333).[9] Thus, there is conceptual overlap between the past habitual and the counterfactual, but historical paths between them have not been supported by corpus evidence yet (Fleischman 1995; Haiman and Kuteva 2002: 119–120; Iatridou 2000: 262; Lazard 1998). An historical path would perhaps be even of cross-linguistic importance because there are languages which use habitual aspect to express counterfactuals e.g. in Hindi (Karawani 2014: 112), Modern Greek (Mendez Dosuna 2017: 71) or in Ute where it marks future, habitual, future in the past, counterfactual, and other functions (Givón 2011: 134; Sansò 2020). Finally, epistemic certainty also plays a role in the development of the future usage of *will*, since it passed through a similar pivotal stage where volition is interpreted as *proclivity* (Ziegeler 2006, 2013; *contra* Bybee et al. 1994: 156–158). The subsequent sections therefore aim to carve out the paths leading to and out of past habituality, paths which will be summarized in a diachronic map and hopefully can spark further research on the diachronic connections of (past) habituality.

3 The sources and paths for the past habitual constructions in Ancient Greek

In this section I offer diachronic corpus evidence for the developmental paths into past habituality from (3.1) past counterfactuality, (3.2) iterativity, (3.3) future in the past, and (3.4) lexical sources. Unfortunately, contrasting these linguistic strategies (which seem to be not very frequently used as

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[9] Note that this observation also forms the basis for the cross-linguistic typology by van Linden and Verstraete (2008), although they do not reference this testimony.

evidenced by the frequencies reported below) with the usage of bare past tenses which must have been more frequent (e.g. imperfective) lies beyond the scope of this paper (see la Roi forthcoming for an overview), but would be a relevant question for further research.[10]

3.1 From past counterfactuality to past habituality

In Archaic Greek (8th–6th century BCE), past counterfactuality could be expressed in declarative illocutions by both the optative mood and the indicative mood with one of the modal particles (*án* or *ke(n)*), the latter of which is replacing the more archaic counterfactual optative mood (la Roi 2022 for the most recent overview with references). Signs that the past indicative is the still evolving replacer are that (i) the counterfactual indicative is more frequent than the counterfactual optative in declarative illocutions in Archaic Greek, (ii) the counterfactual indicative only rarely has extended its temporal reference to the present in contrast to the older counterfactual optative, and (iii) the counterfactual indicative found side by side with the counterfactual optative with the same meaning.[11] After all, from a cross-linguistic historical viewpoint, new counterfactual constructions take part in a so-called life-cycle starting with temporal reference in the past and subsequently extending their temporal reference to the non-past (present and future) until they are replaced or strengthened in the final stages of their cycle (Dahl 1997; Yong 2018). The wide temporal reference distribution of the counterfactual optative thus counts as testimony of its old age, whereas the few temporal extensions of the counterfactual indicative attest to its young age. See the diachronic corpus data in Table 1 and the contrastive context of example (4) (where I added some context in translation to facilitate comprehension).

Table 1: Diachronic distribution of CF mood forms in declaratives.

	Counterfactual Mood forms		
	Optative	Indicative	
Main clause CF	Archaic Greek	Archaic Greek	Classical Greek
Past reference	18	146	309
Present reference	11	2	400
Future reference	11	-	2

[*As for Odysseus, he has perished far away, as you also should have perished with him*]

(4) [...]   *ouk*   *àn*   *tóssa*   *theopropéo:n*   *agóreues,*

       not   MP   much.ACC   prophecy.GEN   proclaim.IND.IPFV.2SG

oudé ke   *Te:lémakhon*   *kekholo:ménon*   *hô:d'*   *anieíe:s,*

nor   MP   Telemachus.ACC   be.mad.PTCP.ACC   thus   urge.on.OPT.2SG

sô:i   *oíko:i*   *dô:ron*   *potidégmenos,*   *aí*   *ke*

your.DAT   house.DAT   gift.ACC   await.PTCP.NOM   in.the.hope. MP

póre:isin.

provide.SBJV.3SG

'Then you would not have so much to say in your reading of signs, or be urging Telemachus on in his anger, looking for a gift for your household, in hope that he will provide it.'

(*Od*. 2.182–186)

The counterfactual imperfect indicative in (4) *agóreues* ('would say') may be said to display fake tense-aspect (cf. Iatridou 2000), since the past imperfect refers to the counterfactual present. Importantly, when the counterfactual past indicative is used to express past counterfactuality as in example (5), tense and aspect[12] are not fake as not only does the past form refer to the past but also the aspect construes the past event in the expected way: the aorist aspect zooms in on the boundaries of the event of escaping to signal the completeness of the escape.

(5)   *ei*   *dè*   *épos*   *Pe:le:ïádao*   *phúlaksen*

     if   PTC   word.NOM   son.of.peleus.GEN   escape.IND.PFV.3SG

ê: *t'*   *àn hupékphuge*   *kê:ra*   *kakè:n*   *mélanos*

PTC   PTC   MP escape.IND.PFV.3SG   fate.ACC   bad.ACC   black.GEN

thanátoio.

death.GEN

'If he had observed the word of the son of Peleus, he would surely have escaped the evil fate of black death.'

(*Il*. 16.686–687)

Furthermore, there are examples[13] of a past counterfactual habitual in Archaic Greek, where the habitual value is, as it were, added to the counterfactual value without conflict. To facilitate comprehension of the context I give the previous lines in translation as above. In this example Menelaos discusses what

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[12] For an overview of tense and aspect in Archaic Greek, see Napoli (2006), and for Classical Greek, see Allan (2017b).

[13] The other example that I found is Pi. *N*. 4.15.

he would have done for Odysseus if Odysseus had returned which he did not. Based on that counterfactual scenario of Odysseus living in Argos (see *enthád' eóntes*) he predicts that they would often have met, thereby implying that this meeting would have taken place habitually on several different occasions. Thus, the combination of the counterfactual indicative with the lexical cue often (*thám'*) generates a counterfactual habitual (for which there are typological parallels, see Karawani [2014: 77–80]).

[*And in Argos I would have given him a city to dwell in, and would have built him a house, when I had brought him from Ithaca with his goods and his son and all his people, driving out the dwellers of some one city among those that lie round about and obey me myself as their lord*]

(6) *kaí ke   thám' enthád' eóntes   emisgómeth'·   oudé   ken   hé:meas*
     and MP often here   be.PTCP.NOM   mix.IND.IPFV.1PL   nor   MP   we.ACC

     állo   diékrinen   philéonté   te   terpoméno: te
     something.else.NOM   separate.IND.PFV.3SG love.PTCP.DU   PTC   enjoy.PTCP.DU PTC

     prín   g'   hóte dè: thanátoio   mélan   néphos
     before PTC   when PTC   death.GEN   black.NOM   cloud.NOM

     amphekálupsen.
     enwrap.IND.PFV.3SG

     'Then, living here, should we often have got together, nor would anything have parted us, loving and joying in one another, until the black cloud of death enfolded us.' [*But of this, I suppose, the god himself <u>must have been jealous</u> (méllen agássasthai), who to that unfortunate man alone vouchsafed no return.*]

     (*Od.* 4.178–180)

This example suggests that the evolution from past counterfactuality to past habituality stems from their connection to epistemic assessment. In fact, as pointed out above, both meanings share the epistemic certainty with which Menelaos expresses them, that is, on the one hand, he wants the address to infer[14] that they would have met in that counterfactual past and, on the other hand, that they would have met regularly. Both are inferences for which Menelaos does not present the relevant evidence (cf. Givón [1994: 323] who notes the "lack of specific evidence" feature of the habitual). In other words, both are modal in the sense they involve an induction from limited observation about the actual world to a generalization about possible worlds (see Comrie 1985: 40). Further evidence for the epistemic certainty displayed by Menelaos is his past epistemic use of the epistemic modal auxiliary *méllo:* 'be likely' with which he infers the reason why the counterfactual past could not have happened. Note also that the imperfect aspect of the counterfactual indicative *emisgómeth'* 'get/be together' retains its aspectual

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[14] See Traugott and Dasher (2002) for many illustrations of the role played by invited inference in semantic change.

profile in presenting the event as unbounded to stress their many meetings. Examples such as (6) thus form the intermediate stage from which past counterfactuals in Archaic Greek will have changed, via an invited inference of epistemic certainty, to past habituality without counterfactual value, to which we turn next.

In the Ionic Classical Greek of Herodotus we already find the usage of the past indicative with the modal particle *án* to express past habituality, as in example (7) below, where Maeandrius would habitually offer Cleomenes to take what he liked but Cleomenes habitually refused. The use of the imperfect *ekéleue* 'would tell' thus offers an unbounded viewpoint on the past habitual action, because the offering continued without reaching a satisfactory endpoint.[15]

(7) *óko:s   dè   hídoito   ho   Kleoméne:s   tà   poté:ria,*
      when   PTC see.OPT.3SG   the.NOM   cleomenes.NOM   the.ACC   cups.ACC

    apethó:mazé   te   kai   ekseplé:sseto·   ho   dè   àn
    marvel.IND.IPFV.3SG PTC   PTC   be.amazed.IND.IPFV.3SG   he.NOM PTC   MP

    ekéleue   autòn   apophéresthai   autô:n   hósa   boúloito
    order.IND.IPFV.3SG   he.ACC   carry.off.INF   it.GEN.PL   which.ACC   want.OPT.3SG

    'Whenever Cleomenes saw them, he marvelled greatly at the cups. Maeandrius would tell him to take as many as he liked.'
    (Hdt. 3.148.7–9)

Thus, the usage of aspect in the past habitual is the same as in the past counterfactual and therefore offers support for the historical relationship. In other Classical Greek texts, we similarly observe the inherited feature of aspect in the past habitual. For example, the past habitual occurs with the aorist just as well as with the imperfect in Classical Greek, disproving a supposed intimate relationship of the imperfective aspect with the past habitual construction. In example (8), we find the aorist aspect used in the past habitual construction with a so-called ingressive reading, which is a normal effect created by the aorist when combined with stative verbs (here: the stative verb 'desire passionately').

(8) *hò   theasámenos   pâs   án   tis   anè:r*
      the.NOM   watch.PTCP.NOM   every MP   INDF   man.NOM

    e:rásthe: dáïos   eînai
    desire.IND.PFV.3SG   warlike.NOM   be.INF

    'Every single man who watched it would get hot to be warlike.'
    (Ar. *Ran.* 1022)

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[15] This aspectual usage is sometimes called 'conative', see Rijksbaron (2006: 16).

In fact, my corpus shows a rather even distribution of both aspects in the past habitual construction with 24 imperfect and 17 aorist past habitual constructions in Classical Greek.[16] Thus, my diachronic evidence confirms a synchronic hypothesis put forth by Allan (2019: 31) that in this construction "aspectual marking is used to provide information about the individual constituent events, rather than about the whole series of iterations". The imperfect 'zooms in' on the constituents and construes them as unbounded […], whereas the aorist specifies that every component event is viewed as bounded". To support this position, he provided two examples illustrating this construal, *e:ganáktoun án* 'I would be angry' (not get angry (ingressively); Lys. 7.12) and *eîpen án* 'he would say' (X. *Cyr.* 7.1.10). To illustrate further, we find perfective construal when the habitual event described is clearly bounded: ask for money (Ar. *Pl.* 984), move a resolution (D. 18.219.6), speak 12 rubbish words (Ar. *Ran.* 923), but imperfective construal when the event was clearly unbounded: possess (Ar. *Pl.* 1120), have good omens in sacrifice (Ar. *Pl.* 1181), serve (Ar. *Pl.* 979). Moreover, we find aspectual construal in instances where the speaker *chooses* to portray a past event as bounded, e.g. everyone would fall in love, i.e. ingressively (Ar. *Ran.* 1022 *e:rásthe:*), we would hear about one of your cock-ups but not stay quiet (Ar. *Lys.* 510 *e:koúsamen*) or unbounded, e.g. Socrates would cross-question someone for a long time on what they were saying (Pl. *Ap.* 22b4 *die:ró:to:n*).

What is more, the fact that the past habitual construction is limited to the aorist and imperfect can be interpreted as diachronic evidence for its development from the past counterfactual construction in Archaic Greek as well. The reason for this is that the counterfactual construction in Classical Greek uses the pluperfect which the past habitual construction does not. Its historical source construction of the past counterfactual from Archaic Greek only uses the pluperfect very rarely with 120 occurrences in the aorist, 26 in the imperfect and 3 times in the pluperfect in past counterfactual declaratives[17]). Since the use of the pluperfect in past counterfactual indicatives was an innovation with respect to the aspectual usage possible in the counterfactual optative which it was replacing and it is still infrequent in Archaic Greek texts, the past habitual construction with the modal particle must have developed before the construction also started to allow the pluperfect. Finally, another sign of the historical relationship between past counterfactual indicatives with the modal particle and the past habitual with the modal particle is that even in a contextualized past habitual example such as example (9) from Classical Greek the specific reading may be ambiguous (cf. the ambiguity mentioned above for English *would*). Pheidippides has just been given the floor to present a novel discourse, an invitation he accepts and then qualifies with the following.

(9)   *egò: gàr hóte   hippikê:i   tòn   noûn   móne:i*

| I | PTC when | horse.racing.DAT | the.ACC | mind.ACC | alone.DAT |

proseîkhon,   *oud'*   *àn*   *trí'*   *eipeîn ré:math'*

keep.ind.IPFV.1SG   not.even   MP   three.ACC   say.INF words.ACC

hoîós t'ê:n   *prìn*   *eksamarteîn·*

be.able.IND.IPFV.1SG   before   make.a.mistake.INF

'Back when I had a one-track mind for horse racing, I couldn't get three words out before I stumbled over them.' [*But now (nunì) that my adversary himself has made me give all that up, and I'm at home with subtle ideas, arguments, and contemplations, I'm sure I can demonstrate that it's right to spank one's father.*]
(Ar. *Nub.* 1401–1402)

In this example it can be argued that it is ambiguous whether he means that he was never able to get three words out before stumbling over them when focused on race-horses (i.e. a past habitual) or that he would have not been able to do so on one occasion (i.e. a past counterfactual). What both readings share is the epistemic certainty on the part of Phidippides that this would have happened in the past, something which the fact that the verbs are in the first person underlines. Note that both interpretations would also share the implicature that this past state does not continue into the present, as past habituals also often develop a so-called anti-present implicature (e.g. *That door used to be white*, i.e. it is not white anymore).[18] Instead of taking this shared characteristic as a sign of a similar historical relationship, the combination of a past with a stative situation more likely generates this implicature (e.g. that door used to *be white* vs that would have *been helpful* yesterday).[19] Summarizing, there are several pieces of diachronic evidence which show that the past counterfactual in Archaic Greek (in the aorist/imperfect) created the past habitual construction with the past and the modal particle.

Furthermore, the optative mood has a well-known usage in Archaic and Classical Greek which is traditionally called 'the iterative optative' (van Emde Boas et al. 2019: 489–499) or in an Anglo-Saxon term an 'indefinite construction' (Probert 2015: 83). It is generally held that the use of the optative in a construction such as example (10) (Archaic Greek) and (11) (Classical Greek) is the past counterpart of a similar usage by the subjunctive for future-referring situations in Archaic and Classical Greek. However, this traditional explanation prompts the question why the optative, which almost always refers

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[18] This term is used by Binnick (2005: 366) and Neels (2015). See la Roi (2020a) for the diachronic recruitment of this implicature for habitual auxiliaries in Ancient Greek.
[19] For the role of stative predicates in habitual expressions, see also Sections 3.2 and 3.4 below and on Brazilian Portuguese stative habituals, Olbertz and Serafim (2021).

to the present or future, is used to refer to the past.[20] I would like to suggest that this so-called 'iterative optative' has developed out of the past counterfactual usage of the past counterfactual optative for which we still possess some traces in the Archaic Greek of Homer, but which had been largely replaced by the counterfactual indicative (la Roi 2022).

Before discussing a potential evolutionary scenario, we should point out that the uses in example (12) and (13), which are normally subsumed under the traditional header of the 'iterative optative' are different from the canonical examples given in the literature. Whereas example (10) and (11) can be classified as past habitual (i.e. the gathering and wanting to exercise happened habitually on several different occasions), examples (12) and (13) express a past generic situation, meaning that the action in the subordinate clause was *always* carried out when the main clause action was carried out, i.e. not in the majority of the occasions as habituals indicate (cf. Dahl 1985: 97). After all, in (12) he is eager to kill every man that comes to seize the corpse, while in (13) the groaning and seeing would always go hand in hand.

(10) […] *mía*   *d'*   *oíe:*   *atarpitòs*   *ê:en*   *ep'*   *auté:n,*

     one.NOM   PTC   only.NOM   path.NOM   be.IND.IPFV.3SG   to   it.ACC

     tê:i   *nísonto*   *phorê:es*   *hóte*   *trugóo:ien*   *álo:é:n.*

     by.which.DAT   come.IND.PFV.3PL   vintagers.NOM   when   gather.OPT.3SG   vintage.ACC

     'and there was one single path to it by which the vintagers went and came when they

     gathered the vintage.'

     (*Il.* 18.565–566)

(11) *ekeînos*   *eté:reuen*   *apò híppou*   *hopóte gumnásai*   *boúloito*

     DEM.NOM   hunt.IND.IPFV.3SG   from horse.GEN   when   exercise.INF   want.OPT.3SG

     heautón

     himself.ACC

     'He used to hunt on horse-back, whenever he would want to exercise himself.'

     (X. *An.* 1.2.7)

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[20] The suggestion by Willmott (2007: 184, 190) that the optative is timeless and therefore can have past temporal reference does not offer a solution to the question why the 'iterative optative', which is only used with reference to the past in its archaic counterfactual usage, has past temporal reference.

(12)   *tòn*   *ktámenai*   *memaò:s*   *hós*   *tis*   *toû* *g'*

he.ACC kill.INF   long.PTCP.NOM who.NOM   any.NOM   the.GEN PTC

antíos *élthoi*

against come.OPT.3SG

'eager to slay any man who came to seize the corpse.'

(*Il.* 17.8)

(13)   *tè:n*   *aieì* *stenákheskh'*   *hoth'* *heòn* *phílon*   *huiòn*

she.ACC   always groan.IND.IPFV.3SG   when his.ACC loved.ACC   son.ACC

horô:ito   *érgon*   *aeikès*   *ékhonta*   *hup'* *Eurusthê:os*

see.OPT.3SG toil.ACC   unseemly.ACC have.PTCP.ACC by   eurystheus.GEN

aéthlo:n.

tasks.GEN

'At thought of her would he always groan when he saw his dear son in disgraceful toil at Eurystheus' tasks.'

(*Il.* 19.132–133)

As this generic usage still refers to past and is semantically an extension from the habitual use, I would propose that the generic usage of the optative in subordinate clause has developed out of the habitual usage through a form of semantic widening and host class expansion, thus yielding an evolutionary path of the counterfactual past optative into a habitual past-referring optative into a generic past-referring optative. In fact, we have one relic usage of the past habitual in a main clause in *Od*. 8.216 where Odysseus uses the optative *báloimi* OPT.1SG 'used to shoot' to indicate how he used to be the first one to shoot in battle. A sign of the host class expansion of the 'iterative optative' is that it has expanded to temporal clauses in Archaic Greek (occurring 54 times in Archaic Greek). For those temporal clause contexts, a past counterfactual reading is not available anymore for the optative in Archaic Greek but only habitual (e.g. *Od*. 19.49) or generic past (e.g. *Il*. 10.189) uses. In addition to the main clause relic past habitual usage, the corpus evidence from Archaic Greek optatives yields a subordinate clause context in which the optative is used for past counterfactuality as well as past habituality, namely in

relative clauses. In (14) we find an example of a past-referring counterfactual relative clause with the optative, which is an archaic feature of Archaic Greek that is being filtered out (cf. the higher frequency of 10 with the counterfactual indicative in Archaic Greek, e.g. *Il*. 4.541, than the 3 with the past-referring counterfactual optative, *Il*. 4.541, 4.541, 4.542). The past habitual usage in the relative clause in example (15) must have developed from the past counterfactual usage in (14) through an invited inference of epistemic certainty: what *certainly* would have happened in the past according to the speaker can be implied to have happened regularly in the past. In other words, that *a* creature normally would have fled (counterfactual) implies that such a creature would have done so normally according to the speaker (habitual).

(14) […] *mála*   *ken*   *thrasukárdios*   *eíe:*

             very   MP   bold-hearted.NOM   be.OPT.3SG

     hòs   *tote*   *ge:té:seien*   *idò:n*   *pónon*   *oud'*

     who.NOM   then   rejoice.OPT.3SG see.PTCP.NOM   toil.ACC   nor

     akákhoito.

     grieve.OPT.3SG

     'Bold-hearted would a man have been who then would have rejoiced at sight of such toil of war and had not grieved.'

     (*Il*. 13.343-344)

(15) *ou mèn gár*   *ti*   *phúgeske*   *batheíe:s*   *bénthesin*   *hú:le:s*

     no PTC PTC   INDF   escape.IND.IPFV.3SG   thick.GEN   depths.DAT   wood.GEN

     knó:dalon,   *hótti*   *díoito·*   *kaì*   *íkhnesi*   *gàr*

     creature.NOM which.NOM   flee.OPT.3SG   and   tracks.DAT   PTC

     perié:ide:.

     know.well.IND.PPRF.3SG

     'No creature that would flee used to escape him in the depths of the thick wood, for in tracking too he was keen of scent.'

     (*Od.* 17.316–317)

Another clue to the development from a past habitual to a past generic use is that this habitual use of the so-called 'iterative optative' is less frequent already in Archaic Greek (e.g. most relative clauses with the optative are generic and of the generic type *ós tis* whoever/anyone who). Thus, already in Archaic Greek the 'iterative optative' has been used increasingly often for a generic past. This is probably one of the factors why in Classical Greek we find the onset of the replacement of this 'iterative optative' for habitual pasts in subordinate clauses by the past indicative, see example (16).[21] Here Philoctetes discusses his habits in dealing with the struggles of being stranded on an island while wounded. The onset of the replacement of the 'iterative optative' in such past habitual subordinate clauses provides early evidence for the replacement of this 'iterative optative' by the past indicative for Post-Classical Greek as reported by grammars (Blass and Debrunner 1959: 227; Schwyzer and Debrunner 1950: 335–336).

(16)	*eí*	*t'*	*édei*		*ti*	*kaì*	*potòn*	*labeîn,*
	if	PTC	be.necessary.IND.IPFV.3SG		something	PTC	drink.ACC	get.INF
	[…],	*taût'*	*àn*	*eksérpo:n*	*tálas*			
		these.ACC	MP	struggle.PTCP.NOM	wretched.NOM			

eme:khanó:me:n·

manage.IND.IPFV.1SG

'And if I would have to get some drink also […], I would struggle

along in misery and manage it.'

(S. *Ph.* 293-295)

In fact, there is also some early evidence from Classical Greek of the same replacement in temporal clauses, for which see the temporal *hóte* 'when' clause with past habitual value preceding the main clause habitual in example (9). In sum, what has been treated as the 'iterative optative' subsumes both past habitual and past generic usages of the optative in Ancient Greek, usages which it has acquired from the source of the past counterfactual usage of the optative. The past counterfactual source thus explains the unexpected usage of optative for a past-referring state-affairs.

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[21] For the use of the 'iterative optative' for a generic past, see A. *Pr.* 478-9 'If ever anybody fell (*pésoi* OPT.3SG) ill, there was (*ê:n* IND.IPFV.3SG) no remedy 'which is discussed by Probert (2015: 83).

Finally, in Post-Classical Greek the construction with the indicative and the modal particle develops further as it starts to be used as past generic construction in subordinate clauses, to indicate that this event occurred on every occasion that the main clause occurred, as in example (17). Here the construction refers to something that occurred every time, thereby stressing how uniquely dedicated the crowd was to hear what Moses would tell them.

(17) *he:níka dè   àn   eiseporeúeto   Mo:usê:s   eis   tè:n   ske:nè:n*

     when PTC MP   go.to.IND.IPFV.3SG   moses.NOM   to   the.ACC tent.ACC

     ékso: tê:s   parembolê:s   heisté:kei   pâs   ho

     without the.GEN encampment.GEN   stand.IND.PPRF.3SG   every.NOM   the.NOM

     laòs   skopeúontes   hékastos   parà tàs   thúras

     people.NOM   observe.PTCP.NOM   every.NOM   from the.ACC   doors.ACC

     tê:s   ske:nê:s   autoû […]

     the.GEN   tent.GEN   he.GEN

‘Whenever Moses went into the tent without the camp, all the people stood, watching, each one at the doors of his tent […].’ [*and they paid attention when Moses went away until he entered into the tent.*]

(LXX *Ex.* 33.8)

This construction has been falsely called iterative before (Muraoka 2016: 261). However, it does not express event plurality on the same occasion, but rather that this happened in the same way on every occasion (*whenever*), a function which in Archaic and Classical Greek was normally expressed by the generic past-referring optative. This construction thus starts to encroach on the past generic optative in Post-Classical Greek which is either extremely rare or does not even occur at all e.g. in the Septuagint, New Testament and the papyri (Mandilaras 1973: 286; Muraoka 2016: 327; Turner 1963: 124–125).

3.2 From iterativity to past habituality

It is well-known that the so-called 'iterative'-*sk* suffix could be used in the Archaic Greek of Homer for both word formation and what have been called 'iterative' functions by our standard grammars (Goodwin 1889: 56; Monro 1891: 47). What complicates the picture for Homer is that the suffix is used to form inchoatives, causatives and zero, i.e. with no clearly added meaning (Zerdin 2002) as well as

for pasts with iterative and habitual (Daues [2009] albeit using different terminology; Pagniello 2007: 105–114; Zerdin 2002: 117–123;) and imperfective functions (called backgrounding function by Daues [2009] as the suffix also occurs with perfective aspect forms). This early wide distribution yields substantial evidence for a diachronic path from iterative to habitual, as has been suggested recently by la Roi (2020a: 148–152). As such, the past habitual usage of the past with the -*sk* suffix in Homer would seem to be the result of a similar evolution as found in Hittite and described by Inglese and Mattiola (2020).[22] There are nonetheless some differences between the developments evidenced by the Ancient Greek and the Hittite data: Hittite provides more substantial corpus evidence both for intermediate stages between iterativity and habituality such as frequentatives[23] and for a further development into the domain of genericity which the authors, however, call generic imperfectivity: "a situation that occurs always, and it can be a property or a quality of an entity or a gnomic truth, that is, it is part of the encyclopedic shared knowledge" (Mattiola 2019: 35). By contrast, the data from Archaic Greek past forms with the *sk*-suffix mostly evidences past habitual usage, with fewer examples attesting earlier stages of past iterativity (e.g. *Il.* 4.233 *tharsúneske* 'encouraged (them with words)') and past frequentativity (e.g. *Od.* 8.565 *éphaske* '(who) repeatedly told us').[24] This distributional evidence would point to an advanced stage change from iterative into habituality in Archaic Greek, also because the habitual usage of the *sk*-suffix spread already to perfective aspect in the Archaic Greek of Homer (e.g. *Il.* 2.271 perfective *eípesken* 'they would say' and Daues [2009: 94]). The latter usage is also preserved as an archaism in the Classical Greek of Herodotus (e.g. Hdt. 4.130.6 perfective *lábeskon* 'they would take').[25] A synthesis of this evidence would thus provide the following path of the *sk*-suffix: *past iterative>past frequentative>past habitual>habitual imperfective.* The development of past habituality thereby is also intimately connected to the diachrony of aspect.

A further development, as discussed in the introduction, is that Herodotus innovatively uses the iterative suffix with the modal particle to present a past habitual. Thus, not only does Herodotus have

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[22] Another aspect of the history of this construction which has received attention is whether the overlap in functions of the *sk*-suffix in Hittite and Homer could be ascribed to language contact. For a critical attitude to this suggestion, see Cotticelli-Kurras and Giusfredi (2019).

[23] Mattiola (2019: 24) defines frequentativity as follows: "the case in which the repetitions of a specific situation are performed over multiple occasions, that is, the situation is repeated, but the time that occurs between one repetition and the other is sufficiently long to be understood as different occasions".

[24] One of the reviewers suggested that we might not need to assume that past frequentative is an intermediary stage between past iterativity and habituality, but that the connection of iterativity with frequentativity is more complex and gradual. While I can imagine how an iterative (occurrences restricted to same occasion) may develop into a habitual (characteristic occurrences on different occasions) without a frequentative stage (often on different occasions), the fact remains that the intermediate frequentative stage is attested in the Archaic Greek and Hittite evidence and functional polysemies cross-linguistically seem to indicate an intimate diachronic connection e.g. markers expressing both iterative and frequentative or frequentative and habitual (Bybee et al. 1994: 170–175).

[25] Other indications of a high degree of conventionalization of the habitual meaning may be gleaned from the usage of stative predicates in past habituals already in Homer (see *ésk-* 'used to be' e.g. *Od.* 15.362 or *Il.* 3.180) and the presence of anti-present implicatures (i.e. used to in the past but not anymore), e.g. *Od.* 2.59 on what Odysseus used to be but is not anymore. After all, habitual meaning is normally first grammaticalized in non-stative predicates and the anti-present implicature is only acquired by highly conventionalized habitual markers, cf. Section 3.4 below.

bare past tenses with the so-called iterative suffix, and the past habitual with the modal particle in his repertoire for past habituals, but also a novel construction which combines the past with an iterative suffix and the modal particle (e.g. example [3] *klépteske àn periió:n* 'he would go around stealing' [Hdt. 2.174.3] and the other strategies in the same passage [Hdt. 2.174 or 4.78], both in descriptions in the voice of the Herodotean narrator). Since Herodotus already possessed the possibility of using the past indicative (in the imperfect or aorist) with the modal particle to express a past habitual, I suggest that his novel construction with an iterative suffix and the modal particle must have been created due to semantically motivated analogy, since both source constructions could already be used to express past habituality. A further sign of their complementarity is their similar use of aspect, as shown already in example (3) where the imperfect aspect profiles the unbounded activity of going round and stealing or in Hdt 3.119.11 *kláieske àn* 'she would wail' is presented as unbounded for narratorial effects in the description of her unbounded sadness.[26] Similarly for the aorist, the aorist retains the aspectual usage from its source constructions, as illustrated by (18) where the use of the aorist signifies the bounded action of taking the sheep.

(18) | *hoi* | *dè* | *àn* | *Pérsai* | *epelthóntes* | *lábeskon* | |
| --- | --- | --- | --- | --- | --- | --- |
| they | PTC | MP | persians.NOM | come.PTCP.NOM | take.IND.PFV.3PL | |
| *tà* | | *próbata* | *kaì* | *labóntes* | *epé:ironto* | *àn* |
| the.ACC | | sheep.ACC | and | take.PTCP.NOM | be.lifted.up.IND.IPFV.3PL | MP |
| *tô:i* | | *pepoie:méno:i* | | | | |
| the.DAT | | do.PTCP.DAT | | | | |

'and the Persians would come and take the sheep, and would be encouraged by this achievement.'

(Hdt. 4.130.6-7)

Finally, the novel construction is found in contexts where the other source constructions are also found, e.g. Hdt. 4.78.18, 4.42.16 or in fact example (18).

3.3 From past futurity to past habituality

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[26] Note also that it is paratactically connected to a past habitual strategy with the iterative suffix: *klaíeske àn kaì odurésketo* 'she would wail and cry' (Hdt. 3.119.11-12).

The next developmental path leads from past futurity to past habituality. Futures in the past resemble counterfactual pasts in that they predict the fulfillment of a consequence in the past. As such their use in a sentence invites the inference from the addressee that the speaker is certain that this consequence is to be fulfilled in the past, especially since past events are prototypically known events. From this inference of epistemic certainty, I argue, the meaning will be recruited that the fulfillment in the past is of more general application, i.e. the expected past fulfillment is characteristic of several occasions in which this will have happened. In the earliest example of *émellon* as past habitual auxiliary in Classical Greek, we can indeed observe contextual cues which underline this habitual interpretation of this future in the past auxiliary.[27] In the example below Thucydides characterizes the problems faced by the army when under Demosthenes' leadership. As shown by the underlined contextual cues and the previous context provided in translation, the members of the army would habitually have the enemy in their rear, wherever they turned. Even though this past habitual usage is rare in Classical Greek (4 out of the 329 past referring usages in the Classical Greek corpus that I analyzed), examples such as these show that the past future consequence has acquired a past habitual usage.[28]

[*Exposed to missiles on every side from the host of their opponents—if they attacked those in front, from those behind; if those on either flank, from those arrayed on the other*.]

(19) *kata   nó:tou   te   aieì   émellon   autoîs,   hê:i*

from   back.GEN   PTC   always   would.IND.IPFV.3PL   they.DAT   where.DAT

khoré:seian,   hoi   polémioi   ésesthai   psiloì

move.OPT.3PL.   the.NOM   enemy.NOM   be.INF   light.NOM

'And they would <u>always</u> find in their rear, <u>whichever way they moved</u>, the light-armed troops of the enemy.'

(Th. 4.32.4.1–2)

Furthermore, the same extension from future in the past to past habituality must have been responsible for the recruitment of the habitual function by other past futurity auxiliaries in the later history of Greek such as *eîkhe (ná)* in Medieval Greek. As reported by Markopoulos, its present variant had already in the first centuries AD acquired a future meaning (Markopoulos 2009: 60–65), later also developed future

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[27] This auxiliary had already recruited various future and future in the past usages in Homeric Greek. For the history of this future auxiliary, see Allan (2017a); Basset (1979); Wakker (2006c).

[28] For the other examples, see Th. 3.20.3, X. *HG* 2.3.11.4 and *An.* 4.7.16.4.

in the past usage (Markopoulos 2009: 70) and in Medieval Greek additionally acquires a past habitual use (Markopoulos 2009: 161–162).

3.4 From lexical sources to past habituality

We now turn to what seems to be the largest source of habitual markers: lexical sources with semantic similarity to habituality. Although Bybee et al. (1994: 154–160) already indicated the cross-linguistically frequent process of change whereby lexical verbs (e.g. *know, live, see, be, sit*), they immediately admit that not many specifics are known about the trajectory leading from lexical sources to habitual constructions (Bybee et al. 1994: 155; see now also Kuteva et al. 2019: 481). More recent research has, however, indicated the specific semantic and constructional changes that such lexical sources undergo in what has been called the grammaticalization of (past) habituality (for the English habitual auxiliaries see Neels 2015; Tagliamonte and Lawrence 2000). For Ancient Greek, la Roi (2020a) has applied this combined semantic and syntactic framework to the history of habitual auxiliaries in Archaic and Classical Greek. As in other languages, the lexical sources for habitual auxiliaries in Ancient Greek display clear semantic affinity with habitual meaning: *eío:tha* 'be in the habit of', *philéo:* 'love>be wont to', *ethélo:* 'want>be wont to' and *nomízo:* 'to be accustomed to'. Using the criteria of whether they have undergone a diachronic collocation shift to inanimate subjects and, subsequently, stative infinitives, and also whether they have developed past uses or acquired an anti-present implicature, la Roi provides a detailed diachronic picture of the degree of grammaticalization of the habitual meaning. To summarize his findings, I provide a table overview of his findings (see Table 2; A and B refer to the diachronic developments visible from the Classical Greek data).

Table 2: Habitual auxiliaries from lexical sources in Ancient Greek.

Diachronic criteria	Archaic Greek	Classical Greek A	Classical Greek B
Animacy of subject	Animate *eío:tha, philéo:, ethélo:, nomizo:*	Inanimate *eío:tha, philéo:, ethélo:, nomizo:*	(In)animate *eío:tha, philéo:, ethélo:, nomizo:*
Actionality of infinitive	Non-stative *eío:tha, philéo:, ethélo:, nomizo:*	Non-stative *eío:tha, philéo:, ethélo:, nomizo:*	Stative *eío:tha, philéo:, ethélo:, nomizo:*
Development of past use	-	-	*ephílei* (1x) and *eió:thei/s-* (35x)
Anti-present implicature	-	-	Implicature due to pragmatic cues *eío:th-*

The evidence from Ancient Greek past habitual auxiliaries thus confirms the suggested path that habitual expressions specialize for past habituality, as only the more heavily grammaticalized habitual auxiliary *philéo:* and *eío:tha* develop a past use later on in Classical Greek (not Archaic Greek), *eío:tha* (35 out

of 135) and *philéo:* (1 out of 58).[29] Now, the diachronic process behind the specialization of lexical sources for past habituality seems to be a combination of semantic bleaching and host class expansion, leading to a generalization of the usage characteristics of the previously lexical sources.

Finally, since *ethélo:* already developed a future usage in Classical Greek (la Roi 2020a: 152–157 with further references), one might have expected that its frequently used past form in Classical Greek was also already used to express past futurity and past habituality (as has been the hypothesized source for English *would* by Palmer 2001: 191), but it is not attested with this meaning in Classical Greek.[30] In fact, we only find examples of this past habitual usage in middle Post-Classical Greek (I-III AD)[31], e.g. in the higher register of the orator Dio Chrysostom from the first and second century.[32] Note how the past habitual *é:thelon* is aligned with two past habitual uses of the imperfect indicative (in bold).

[*For he had the reputation of having a sharp tongue and being instantly ready with an answer for his interrogators. Accordingly, just as those who know nothing of the Pontic honey try a taste of it and then quickly spit it out in disgust because it is bitter and unpleasant in taste,*]

(20) *hoúto:s kaì toû Diogénous apopeirâsthai mèn é:thelon*
so and the.GEN diogenes.GEN test.INF PTC want.IND.IPFV.3PL
dià polupragmosúne:n, elenkómenoi dè
because.of curiosity.ACC be.put.to.confusion.PTCP.NOM PTC
apestréphonto kaì épheugon.
turn.away.IND.IPFV.3PL and flee.IND.IPFV.3PL

'so people in their idle curiosity would make trial of Diogenes, but on being put to confusion by him would turn on their heels and flee.' [*They were amused, of course, when others were railed at, but on their own account they were afraid and so would withdraw out of his way. Again, when he jested and joked, as was his wont at times, they were pleased beyond measure; but when he warmed up and became serious, they could not stand his frankness.*]

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[29] After all, in the Archaic Greek of Homer *eío:tha* is only used to refer the habitual present, *Il.* 5.766 and *Od.* 17.394, whereas it refers to the present 98 times in Classical Greek and 35 times to the past. It might be countered that *philéesken* 'would host' and *ethéleskes* 'you used to want' in their expression of past habituality in Homer (e.g. resp. *Il.* 6.15 and 9.486) would be exceptions to tendencies described above, but these occur with the iterative suffix in the past and are therefore a result of the combination of the past with the iterative suffix (cf. la Roi 2020a: 149–151). After all, the use of the past with the iterative suffix to express past habituality in Homer is not limited to these verbs, cf. section 3.2 above.

[30] I checked the 132 past imperfect usages in Classical Greek (in the histories by Herodotus, Thucydides and Xenophon, the tragedies by Aeschylus, Sophocles and Euripides, the comedies of Aristophanes, Plato's authentic philosophical works and the rhetoric by Lysias, Demosthenes, Isaeus and Isocrates), but none have the habitual usage yet.

[31] I also checked the occurrence of the past imperfect in early Post-Classical Greek in Dinarchus, Menander, Herondas, Apollonius Rhodius, the Septuagint, the Book of Enoch, Polybius, Strabo, and the historical works of Dionysius of Halicarnassus. This search yielded only 19 results, of which 1 was found in Herondas, 16 in the Septuagint and 2 in the historical works of Dionysius of Halicarnassus, but no past habitual usage can be discerned for them.

[32] *Contra* Markopoulos (2009: 84), who claims that this form is not used with any TAM meanings in Post-Classical Greek until the 4th century AD.

(D. Chr. 9.7)

This past habitual usage is also found in other higher register Post-Classical literature (e.g. in the epic poems of Colluthus of the fifth century, line 49) and is well-attested in later Medieval Greek (Markopoulos 2009: 215–217). This past habitual usage probably stems from its volitional source, just as its use in the present does, since the volitional source has semantic affinity with habituality (i.e. what you wish to do implies that you would do it regularly). The past habitual usage will have coincided with habitual and future usage of the present in middle Post-Classical Greek (Lee 2010: 201; Markopoulos 2009: 77–78; la Roi 2020b: 222).

4 Concluding remarks

This paper has detailed some major diachronic paths leading to and from past habitual constructions and the varied historical processes shaping them. I have focused on four distinct but related sources of the past habitual construction in the history of Ancient Greek: (1) past counterfactual mood forms, (2), future in the pasts, (3) iteratives, and (4) lexical sources. Whereas the evolution of past counterfactuals and future in the pasts, seem to have developed their past habitual meaning through an invited inference of epistemic certainty, the paths from the iteratives and lexical sources seem to be governed by processes of bleaching or generalization (as indicated by various forms of host class expansions). Figure 1 summarizes the paths from these source constructions into past habituals.
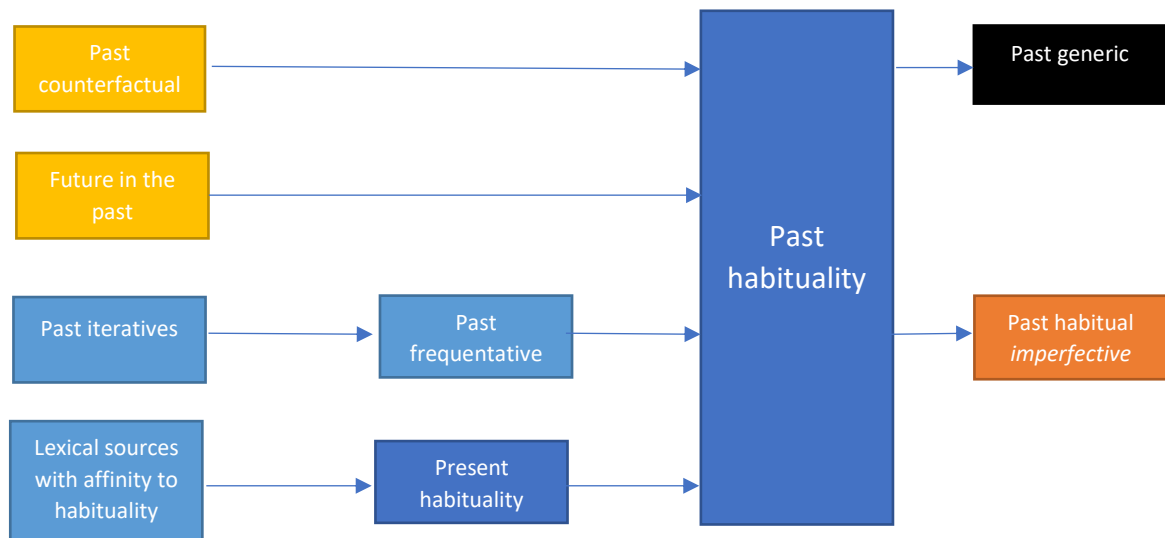

Figure 1: Diachronic map of habituality in Ancient Greek.

The colours in Figure 1 are meant to symbolize the similarity in the source constructions, e.g. the yellow ones entailing past epistemic prediction,[33] whereas the light blue ones entail a form of iteration, either implied (e.g. love to do X *implies* habitually do X) or encoded (e.g. iteration on same occasion with iteratives). At the same time, we also see the connections (to the right) that past habituality has with aspectual and generic functions since past habitual markers can develop past imperfective or past generic functions. The diachronic sources and changes behind synchronic marking strategies of past habituals in Ancient Greek thus provide support for recent critiques (see Cristofaro 2019) that linguistic typology should pay more attention to the role played by source constructions and the diachronic processes that change these constructions into their target constructions. For past habituals, for example, these diachronic explanations provide relevant details about the nature of past habituals which can complement future cross-linguistic investigations of synchronic marking strategies.

In fact, the typological and diachronic perspective could be combined in another way to increase our understanding of the nature and origin of habituals. Kortmann (2003: 249–251) for example noted how varieties of English have many relevant habitual markers which are different from the habitual markers that we know from standard English (e.g. *be, do, doz, do/does be* V(+-ing)). Coupled with Thieroff's observation (2000: 296–297) of areal differences in how habitual markers are grammaticalized, these dialectal diachronies could shed light on the role of areality and/or language contact in the development of habitual markers. Recent studies of habitual markers in translation corpora of language families such as Germanic (Gregersen et al. 2021) or Slavic (Genis et al. 2021) also support the idea that specific languages express habituals differently despite genetic similarities. The diachrony of habitual markers in specific languages therefore still has much to offer us.

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[33]Another connection of habituality with epistemicity which has been suggested in the literature is that an epistemic interpretation of possibility modal verbs ('can') may yield habitual meanings. See the discussion of examples by Holm (1988: 161) and, more recently, Narrog (2012: 273–276).

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