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REVIVING PAST POTENTIALS IN CLASSICAL GREEK*

ABSTRACT

This article argues that there are two different types of 'past potential' relevant to the Classical Greek tense and mood system. First, the past-tense indicative with ἄν can signal that a designated past event was once possible but not realized (retrospective root potential: ἐποίει ἄν 'could have done'). Second, the optative with ἄν can express uncertainty about whether a designated past event actually occurred (retrospective epistemic potential: ποιοῖ ἄν 'may have done'). While such usages are recognized in the traditional grammars, they have been dismissed in modern discussions. The article presents a detailed theoretical argument, backed up by both close readings of individual passages and broader discussions of corpus data, in favour of establishing these past potential usages as an integral part of Classical Greek grammar.

Keywords: modality; potentials; counterfactuals; conditionals; tense; Greek

1. INTRODUCTION

Potentials are linguistic expressions that construe an event or situation as being in the realm of possibility.[1] The aim of this article is to show that the Classical Greek language could express potentiality when referring to the past not only by lexical but also by grammatical means. In order to clarify this claim it is necessary to first make a distinction between two types of potentiality.[2]

Root potentiality involves expressions that signal that the state of the world is such that it allows for the designated event to occur. This means that the relevant agent has the ability, means, opportunity or licence to carry out what is described by the verb phrase. Examples (1) and (2) illustrate the expression of ability and license, respectively:

1) Though I **am able** to move my hands and lift my arms now, . . .[3]

* The help of *CQ*'s reader has been invaluable in sharpening the argument made in this article. I also thank the members of the Amsterdamse Hellenistenclub for discussing an earlier draft with me, and Sami Aslan for helping with the editing.

[1] I will make repeated reference to the following: R. Kühner and B. Gerth, *Ausführliche Grammatik der griechischen Sprache. Zweiter Teil: Satzlehre, Erster Band* (Hannover and Leipzig, 1898); G.C. Wakker, *Conditions and Conditionals: An Investigation of Ancient Greek* (Amsterdam, 1994); G.C. Wakker, '"You could have thought": past potentials in Sophocles?', in A. Rijksbaron and I.J.F. de Jong (edd.), *Sophocles and the Greek Language* (Leiden, 2006), 163–80; E. van Emde Boas, A. Rijksbaron, L. Huitink and M. de Bakker, *The Cambridge Grammar of Classical Greek* (Cambridge, 2019) [= *CGCG*]; E. la Roi, 'Interlocked life cycles of counterfactual mood forms from Archaic to Classical Greek: aspect, actionality and changing temporal reference', *IF* 127 (2022), 235–81.

[2] For an overview of different ways in which modal meanings have been categorized see P. Portner, *Modality* (Oxford 2009), 133–44; J. Nuyts, 'Analyses of the modal meanings', in J. Nuyts and J. van der Auwera (edd.), *The Oxford Handbook of Modality and Mood* (Oxford, 2014), 31–49. For the bipartite division adopted here (to avoid complicating the issue beyond what is necessary for the present discussion) see A. Kratzer, *Modals and Conditionals* (Oxford, 2012), 49–55.

[3] Unless otherwise indicated, all English examples are taken from the *Corpus of Contemporary American English* (*COCA*), https://www.english-corpora.org/coca.

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2) Do I **have permission** to speak freely?

In these examples, potentiality is expressed through lexical means ('am able', 'have permission'), but it can also be expressed grammatically:

3) So am I, but I **can** move my feet.

4) **May** I speak freely?

Here the auxiliary modal verb 'can' expresses ability and 'may' expresses license. The following examples show how the Classical Greek language is similar in this respect:

5) ὃ γὰρ ἄνευ μοχλοῦ κινεῖν οὐ **δύνατάί** τις, ...
For what one **is** not **able** to move without a lever ... ([Arist.] *Mech.* 847b)

6) ἀναλαβών τι τοιοῦτον οἵῳ **κινήσαις ἂν** τὴν ῥῖνα, πτάρε.
Take some such object with which you **can** stir the nose and sneeze. (Pl. *Symp.* 185e)

Both examples concern the subject's ability to move/stir (κινεῖν) something by means of another object. In (5), root modality is conveyed by the lexical verb δύναμαι, while in (6) it is expressed by the optative κινήσαις with ἄν.

Epistemic potentiality involves expressions by which the speaker signals that they entertain the possibility that some event or situation is real. This is illustrated by the following examples:

7) **It's quite possible** that you are right.

8) **Perhaps** you are right.

9) You **may** be right.

Again, epistemic potentiality can be expressed by both lexical ('it is possible', 'perhaps') and grammatical means (the modal auxiliary verb 'may'), and this applies to Greek as well:

10) **ἴσως** μέντοι τὶ λέγεις, ὦ Ἑρμόγενες. σκεψώμεθα δέ.
Perhaps you do in fact have a point, Hermogenes. Let us consider. (Pl. *Cra.* 385a)

11) ἴσως γὰρ ἐγὼ οὐ μανθάνω ἅττα ποτ' ἔστιν ἃ λέγεις, σὺ δὲ τάχ' **ἂν** ὀρθῶς **λέγοις**.
For perhaps I don't understand what it is you are saying, and you **may** well **be right**. (Pl. *Cra.* 430b)

In (10), epistemic potentiality is conveyed solely by the adverb ἴσως, while in (11) we find the potential optative λέγοις with ἄν in collocation with τάχα (and note ἴσως in the preceding sentence).

Potential expressions are also used when talking about the past. Here we need to make another type of distinction. On the one hand, a potential expression may be anchored in a past viewpoint. This use is typical in indirect speech representation:

12) Marvin believed it **might** be drugs but didn't say that to anyone.

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The construction 'might be' signals epistemic potentiality as seen from Marvin's past viewpoint: his direct thought would have been 'it may be drugs'.[4] The shift in viewpoint may also be more implicit:

13) It hurt like hell, but she **could** still move her arm.

Here the adverb 'still' is a signal that we are to conceptualize the described situation from a viewpoint that is internal to the situation. In this situation, the subject had the ability to move her arm.

Distinct from these 'viewpointed' past potentials are *retrospective* potentials. In the case of root potentials, this concerns instances where the speaker describes a past opportunity that, from their present viewpoint, they know to be lost. Consider the following example:

14) With over a decade of retrospect, we can see how a system like that **could have** worked.[5]

The speaker is arguing that the implemented system was a failure, but in retrospect one can see what conditions would have enabled it to work. This illustrates how the construction 'could have' typically signals that something was possible at some point, but this possibility failed to materialize.[6] Retrospective epistemic potentials, on the other hand, have no such counterfactual meaning. In 'You **may have** been right', the construction 'may have' signals that it is the speaker's current estimation that it is possible that the described situation in the past did occur.

With these preliminaries stated we can return to the aim of this article. It is uncontroversial that the Classical Greek language can express past potentiality by lexical means, as illustrated by the following examples:

15) ἔθαπτον δὲ ὡς ἕκαστος **ἐδύνατο**.
They buried their dead as each **was able** to. (Thuc. 2.52.4)

16) ἀδίκημά του γυναικὸς ἐγενόμην **ἴσως**.
Perhaps my birth was the fruit of a wrongful act done to some woman. (Eur. *Ion* 325)

Also, in indirect speech representation the optative with ἄν can be used to express 'viewpointed' past potentiality:

17) οἱ δὲ Κυρηναῖοι πρὸς τὴν καταλαβοῦσαν συμφορὴν ἔπεμπον ἐς Δελφοὺς ἐπειρησομένους ὅντινα τρόπον καταστησάμενοι κάλλιστα **ἂν οἰκέοιεν**.

The Cyrenaeans sent envoys to Delphi, in view of the misfortune that had overtaken them, to ask the oracle by means of what political arrangement they **might** best **live**. (Hdt. 4.161.4)[7]

[4] A complication is that 'might be' can also refer to the present, signalling a greater degree of epistemic uncertainty than 'may be': R.W. Langacker, 'The English present: temporal coincidence vs. epistemic immediacy', in R.W. Langacker (ed.), *Investigations in Cognitive Grammar* (Berlin and New York, 2009), 185–218.

[5] From a YouTube video titled 'Diablo III: a cautionary tale' (https://www.youtube.com/watch?v=GCRzuvwMDUs&t=3337s).

[6] A complication is that in English the 'could have'-construction can also be used in a non-counterfactual sense to express incredulity, as in 'How could I have been so blind?' Here the speaker actually believes that they were in fact blind to something. Such incredulous questions may also be represented indirectly, and in fact example (14), on its face, might be understood in this way ('now we can see how, unbelievable as it was at the time, the system did work'); the context makes clear, however, that this is not what the speaker means. In any case, this issue does not seem relevant to the Greek material. On the counterfactuality of retrospective root potentials see section 2.3.

[7] See also 1.67.2 γενοίατο, 5.92 ἐπιτροπεύοι.

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However, conveying retrospective potentiality by grammatical means, as English does with 'could have' and 'may have', would seem to be difficult. The Greek verbal mood system has no distinct forms for present and past time reference, so that there is no past optative. Nevertheless, I aim to show that grammatical retrospective past potentials do exist in Greek. Specifically, retrospective root potentiality is conveyed by the past-tense indicative with ἄν (ἐποίει ἄν 'could have done'), while retrospective epistemic potentiality is conveyed by the optative with ἄν (ποιοῖ ἄν 'may have done'), although this latter use seems limited in terms of dialect and/or genre.

While traditional grammars allowed for such usages,[8] they have been rejected in modern discussions.[9] This is especially true with respect to retrospective root potentials, as I will explain in section 2; however, epistemic past potentials have also been overlooked (section 3). It seems that modern scholars prefer to explain away putative past potentials in the interest of descriptive economy. In my view, this results in an inadequate picture of the cognitive reality underlying the Classical Greek language. Even if there are no distinct grammatical forms to express retrospective potentiality, I believe it can be shown that certain instances of the past-tense indicative or optative with ἄν require a past potential interpretation to make sense, and that this must have been registered as a distinct meaning by the Greek language user.

2. RETROSPECTIVE ROOT POTENTIAL

In this section I argue that the past-tense indicative with ἄν can express past time reference in combination with root potentiality and counterfactuality (ἐποίει ἄν 'could have done'). More typically, this grammatical form is used to express counterfactuality in conditional statements ('would have done'). In fact, in many cases where a potential interpretation has been advocated, a simple counterfactual interpretation will often work just as well, and this has led modern scholars to argue that there is in fact no meaningful distinction between the two interpretations. This may be illustrated by expressions of the type εἶδες ἄν 'you could/would have seen', ἔγνως ἄν 'you could/would have noted' and ἔφης ἄν 'you could/would have said', as in the following example:

18) **ἐπέγνως** δ' **ἂν** ἐκεῖ οὐδένα οὔτε ὀργιζόμενον κραυγῇ οὔτε χαίροντα ὑβριστικῷ γέλωτι.

> There you **would** not **have noted** anyone screaming in anger or laughing with wanton pleasure. (Xen. *Cyr.* 8.1.33)

As Wakker points out, the pragmatic difference in such examples between 'You could have noted' and 'You would have noted' is hard to pin down. In both cases the subject did not in fact note a certain situation, as they were not present (and the point in [18] is that there was nothing to see in the first place). Wakker came to the general conclusion that 'it seems impossible to prove that post-Homeric Greek had a clear separate category of "past potential"'.[10] Duhoux calls the idea of a past potential 'superfluous', based on an

[8] See Kühner and Gerth (n. 1). They acknowledge the use of the past-tense indicative with ἄν 'als sogenannter Potential der Vergangenheit' (at 212–14) as well as the (Herodotean) use of the optative to convey a 'gemilderten Behauptung, indem der Redende vom Standpunkte der Gegenwart aus eine Vermutung über Vergangenes ausspricht' (at 232–3). Fuller references at Wakker (n. 1 [2006]), 164 n. 6.

[9] A prominent exception is K.L. McKay, 'Repeated action, the potential and reality in ancient Greek', *Antichthon* 15 (1981), 36–46.

[10] Wakker (n. 1 [1994]), 166.

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'illusion'.[11] la Roi argues that 'we do not need a category of "past potential" often mentioned by our grammars, since such a category could only exist if the past were not known'.[12] The *Cambridge Grammar of Classical Greek* (*CGCG*) states that '[t]here is no real difference between such cases [that is, cases where the translation 'could have' is felicitous] and other counterfactual statements'.[13]

To show why I believe this scepticism is mistaken, it will be necessary to investigate the relationship between potential modality, conditionality and counterfactuality. I will argue that there are three ways in which retrospective root potentials (RRP) are distinct from simple past counterfactuals (SPC):

a) RRPs are not necessarily conditional while SPCs always are.
b) RRPs only signal existential quantification over possible worlds while SPCs typically signal universal quantification.
c) Both positive and negated RRPs imply that the described event did not actually occur; in the case of SPCs the counterfactual implication is sensitive to changes in polarity.

These points will be discussed in sections 2.1 to 2.3. Then I will show how these criteria can be applied to specific examples of the past-tense indicative with ἄν to determine whether it is an RRP or an SPC. These examples fall into two categories of expressions: one in which it is emphasized that no alternative course of action was available (2.4) and another in which the speaker suggests that some hypothetical scenario was impossible (2.5). The discussion of evidence will be based on examples cited in the relevant literature, on corpus searches in texts of the Classical period for particular kinds of expressions (such as πῶς γὰρ ἄν), and on examples I encountered during more informal reviews of texts (reviewing every single instance of ἄν in the corpus would have required an effort that is beyond the scope of the present argument).

2.1 Conditionality

The first crucial difference between RRPs and SPCs is that the latter are always conditional, whereas the former do not have to be. Consider the two examples below:

19) If I had been there, I **would have said** something probably, or gotten up and left.

20) FRASIER: Listen, it's not your fault.
KATE: I **could have said** something.
FRASIER: Well, it doesn't matter.

In (19) the expression 'I would have said something' is part of a conditional period. With the conditional clause, the speaker invites us to imagine a world in which he was present at the scene. This world is counterfactual: the speaker was not in fact present. This hypothetical world forms the context for the action described in the main clause.[14] In (20), by contrast, the past potential expression is based in the actual world: there was in fact a situation in which Kate and Frasier were present and Kate had the opportunity to say something, but she didn't.

[11] Y. Duhoux, *Le verbe grec ancien. Éléments de morphologie et de syntaxe historiques* (Louvain-la-Neuve 2000), 202–3.
[12] la Roi (n. 1), 242.
[13] *CGCG* (n. 1), 443.
[14] The role of imagining contrary-to-fact situations in human reasoning is explored in R.M.J. Byrne, *The Rational Imagination: How People Create Alternatives to Reality* (Cambridge, MA, 2005); see also J. Pearl, *The Book of Why: The New Science of Cause and Effect* (New York, 2018).

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It is true that both (19) and (20) are counterfactual in the sense that neither speaker said something (more on this in section 2.3), but the difference with respect to conditionality yields very different pragmatic effects. In (19) the speaker cannot be blamed for not saying anything, as he did not have the opportunity. In (20), by contrast, the speaker in fact blames herself because she should have spoken and actually had the opportunity to do so. Note how her interlocutor seeks to assuage her feeling of guilt ('it's not your fault' and 'it doesn't matter').

Discussions of the Greek RRP tend to regard it as similar to the SPC with respect to conditionality.[15] Wakker suggests that under a past potential interpretation, the particle ἄν expresses 'under some circumstances', which implies that past potentials evoke a different set of circumstances than the ones that were real.[16] Similarly, in *CGCG* (n. 1), 443 the argument for regarding the SCP and RRP as basically identical is that in both cases, 'the conditions under which a certain action would or *could* occur are not realized'. Example (20) shows that this is not necessarily true for past potentials: the conditions under which the described action could occur were in fact realized. Thus, the absence of a conditional clause is an indication that we may be dealing with an RRP, although it is true that in certain cases a conditional clause can be argued to be implicit.

2.2 Quantification

When we are dealing with a conditional construction we need to turn to other criteria for distinguishing between an RRP and an SCP. The first pertains to quantification over possible worlds. Conditional expressions of the type 'If *p*, then *q*' typically signal that *p* is a sufficient condition for *q* to occur.[17] In the case of an SPC, *p* consists of a particular set of circumstances in a hypothetical, non-actual world. From the vantage point of this hypothetical world, a number of possible worlds are accessible, which is to say that there is a number of ways in which this hypothetical world might conceivably evolve. An SPC signals that, in all possible worlds that are accessible from the virtual world in which *p* is the case, *q* is also the case. This is called universal quantification over possible worlds. RRPs, by contrast, have existential scope over possible worlds. That means that, in a limited subset of possible worlds accessible from a world in which *p* is the case, *q* is also the case.[18] Simply put, the difference is that SPCs typically signal that *p* necessarily leads to *q* while RRPs merely signal that *p* is conducive to *q*.[19]

[15] Again, McKay (n. 9) is the exception.

[16] Wakker (n. 1 [2006]), 164.

[17] The semantic and pragmatic mechanisms that impose this interpretation are discussed by R. Declerck and S. Reed, *Conditionals: A Comprehensive Analysis* (Berlin and New York, 2001), 421–45. They note that allowance must be made for the pragmatic presupposition that all relevant conditions other than *p* are fulfilled; see also Kratzer (n. 2), 86–110. For example, suppose someone says: 'If I had left five minutes earlier, I would have caught the train.' Someone might reply: 'Not necessarily. You might have had an accident on the way.' The second speaker is denying the validity of the universal quantification implied by the first speaker, but has to come up with a rather unlikely scenario to make this objection. We should imagine the first speaker to depart from the assumption that, in the hypothetical world in which they left five minutes earlier, nothing extraordinary was going to happen.

[18] See Portner (n. 2) on the possible-worlds analysis of modals. Technically, existential quantification requires only that the event marked as potential occurs in a single possible world. However, that would mean that this event would be a freak occurrence, while normally a potential is understood to signal that there is a reasonable-to-good chance that the event will occur. Therefore I speak of a 'limited subset' of possible worlds, which may consist of only one possible world but will more usually consist of a more substantial number. Compare Portner (n. 2), 201–3.

[19] An example where the element of logical necessity is foregrounded in an SPC is Hdt. 2.22 εἰ τοίνυν ἐχιόνιζε καὶ ὅσον ὧν ταύτην τὴν χώρην δι' ἧς τε ῥέει καὶ ἐκ τῆς ἄρχεται ῥέων ὁ Νεῖλος, ἦν

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The difference can be seen in the following example (a conditional clause is added between square brackets, a natural enough supplement in this context):

21) If President Obama had been allowed to run for a third term, he **would have won** that election. Absolutely. Joe Biden **might have won** that election [if he had run].

First, the author evokes a hypothetical world in which President Obama was allowed to run for a third term. The SPC ('would have won') signals that all possible worlds accessible from the virtual world evoked in the conditional clause are worlds in which President Obama wins the election. That is, if Obama had been allowed to run, he certainly would have won. On the other hand, a Biden win is presented as a mere possibility given the hypothetical world in which Biden ran (which he did not do in 2016): he might also have lost.

Unfortunately, it is often difficult to determine for instances of the past-tense indicative with ἄν in Greek whether the speaker or author aims at universal or existential quantification. Consider the example of ἐπέγνως ἄν 'you would have noted' in (18). Is the speaker saying that, if his addressee had been there, he would certainly have noted an absence of disorderliness, or that he would have merely had the opportunity to note this? The second interpretation leaves room for the possibility that the addressee, even when present at the scene, might not have been interested in observing the situation, or even might not have been astute enough. There seems to be no way to establish that such a nuance was intended, and the main point made by the speaker remains the same: there was no disorderliness to be seen. Nevertheless, this criterion of quantification will turn out to be of some relevance in section 2.5.

2.3 Polarity

The main reason for downplaying the relevance of a 'past potential' category has been the observation that RRPs have a counterfactual meaning.[20] The idea is that the difference between 'would have' and 'could have' is irrelevant, because both constructions imply that what is described by the verb-phrase did not occur. However, the mechanism behind the counterfactuality of RRPs is different from that of SPCs, and this has an important consequence for determining which interpretation is most fitting in a certain context.

In the case of an SPC, it is technically only the condition (*p*) that is marked as contrary to fact. However, this typically implies that the main clause assertion (*q*) is also contrary to fact.[21] When we imagine a hypothetical set of circumstances, we usually want to consider how those circumstances would have led to a different result than the actual one. When the main clause assertion *q* is negated, then the implication is that *q* is factual ('not-*q*' did not obtain). Consider the following example:

22) While the scandal has focussed attention on the influence of expensive private college coaches and consultants, the role of psychologists has drawn less scrutiny. But without their blessing, Singer's scheme **would not have worked**.

ἄν τι τούτων οὐδέν, ὡς ἡ ἀνάγκη ἐλέγχει ('Now, if any amount of snow fell in the area through which the Nile flows and from which it springs, none of those things would be the case, as necessity proves').

[20] Barring instances of the type mentioned under note 6. Portner (n. 2), 226 discusses the difficulty of explaining this counterfactual meaning. He points out that, if it were a mere implicature (as Wakker [n. 1, 2006] and la Roi [n. 1] argue), then one would expect it to be cancelable, which does not seem right: 'He could have won, and in fact he did' is infelicitous. Nevertheless, for lack of a better alternative I will continue to talk about the counterfactual 'implication' of RRPs.

[21] See Declerck and Reed (n. 17), 103–5, 107–8, 257–75. See below on exceptions to this principle.

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The expression 'without their blessing' may be interpreted as a conditional clause: 'if they had not given their blessing'. The psychologists did in fact give their blessing, according to the author. The negated counterfactual 'would not have worked' implies that scheme worked, which again is the author's view.[22]

The counterfactuality of RRPs, by contrast, is not dependent upon conditionality. Rather, the combination of past potentiality and a retrospective viewpoint implies that the designated event did not occur. Pointing out that, in hindsight, something was possible at one point implies that it was not actually done: if it had been done, the speaker would have just said that. The interesting point is that the counterfactual implication remains intact even when the RRP is negated:

23) These policies **could not have worked** because they were never scientific in nature. And indeed, they did not work.

Unlike 'would not have worked' in (22), the expression 'could not have worked' here is felicitous even though the policies did not work as it is. This is because the negation has scope over the potential operator. That is, 'X could not have worked' means 'It was not possible for X to work'. Because the possibility did not exist, the event did not occur. It would be different if we understood the negation to have scope over the described situation, as in 'It was possible for X not to occur'. But this is not a natural reading of the construction used in (23), and in Greek a negation modifying a potential optative always has scope over the potential operator.[23] So both positive and negated RRPs have the same counterfactual implication that the described situation did not occur, and this means that distinguishing between a SPC and a RRP will be easier in the case of negative statements.

There is a complication, however. While a counterfactual assertion usually implies that *q* is contrary to fact, there are cases where this interpretation is blocked. These, however, are special cases and do not necessarily detract from the point that, in the default scenario, a counterfactual implies that *q* is contrary to fact.[24] First, the presence of scalar focus markers modifying either clause reverses the polarity of the counterfactual implication of *q*:

24) The remarkable thing here is that even if Rove really was planning to steal Virginia, Ohio and Florida, Romney still **would not have won** the electoral college.

The expressions 'even (if)' and 'still' signal that the imagined circumstances in the hypothetical world are more extreme than the ones that were actual. When the main clause is negated, this means that the hypothetical world would have been more conducive to the main clause event occurring than the actual world. Even under the more conducive *p*, however, *q* still would not have occurred. This automatically implies that *q* did not occur as it is, as the actual circumstances were less conducive. Note that in this type of context, the SPC still yields an implication that is normally non-cancellable. The difference is that the polarity is reversed: 'Romney would not have won' implies

[22] On polarity reversal in counterfactuals and other constructions in Greek see E. la Roi, 'Polarity reversal constructions and counterfactuals in ancient Greek: between implicature and conventionalization', *Journal of Historical Linguistics* 14 (2024), 335–75.

[23] This issue does not apply to SCPs because of their expressing universal quantification: there is no relevant difference between 'there is no possible world in which X occurred' and 'in every possible world, X did not occur'.

[24] Compare Declerck and Reed (n. 17), 107: '[I]t is actually only by implicature that Q is interpreted as counterfactual when P is. However, this implicature is a strong one, which is blocked or cancelled only in explicit contexts.'

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'Romney did win', but 'Romney still would not have won' implies 'Romney did not win as it is'.[25]

Second, in certain thought experiments the condition could not possibly be fulfilled, or the possibility of its fulfilment is irrelevant to the point that is made. For example, Declerck and Reed (n. 17), 269 point out that counterfactual conditionals of the type 'If I were you' implicate nothing about the truth of the main clause assertion, because such conditions are wholly imaginary. I believe that expressions of the type εἶδες ἄν 'you would have seen' are comparable. The implied condition is 'if you had been present'. However, when it is not realistic that the addressee really might have been present, or when their actual presence or absence would have had no impact on the situation, the polarity of the assertion becomes indifferent. *CGCG* (n. 1), 442–3 cites σίγησε δ' αἰθήρ … | … θηρῶν δ' οὐκ **ἂν ἤκουσας** βοήν 'the air fell silent, and you **would** not **have heard** the shout of animals' (Eur. *Bacch.* 1084–5). The polarity of the main clause assertion is irrelevant here because the counterfactual statement is not really concerned with what might have gone differently under different circumstances. The presence or agency of the subject is irrelevant: what the speaker is saying is simply that, in the actual past world, no animal made a sound.

In sum, RRPs are immune to polarity reversal with respect to their counterfactual implication while SPCs generally are not. Exceptions to this should be considered special cases and can be diagnosticized on the basis of the presence of scalar focus markers ('even'—καί in Greek—or 'still'), or on the basis of the subject not having a relevant role to play in the imagined situation.

2.4 Type I: 'There was nothing X could have done/What could X have done?'

Let us now apply the criteria discussed above to specific Greek examples. Consider the following passage from Demosthenes' speech *On the Crown*. Here Demosthenes discusses what happened after Philip of Macedon destroyed Phocis. While the Thebans and Thessalians where pleased with Philip's actions, the Athenians were vexed. Nevertheless, they continued to respect the peace treaty they had made with Philip:

25) ὑμεῖς δ' ὑφορώμενοι τὰ πεπραγμένα καὶ δυσχεραίνοντες ἤγετε τὴν εἰρήνην ὅμως· οὐ γὰρ ἦν ὅ τι **ἂν ἐποιεῖτε**.

Despite your suspicion and annoyance at what had been done, you still observed the conditions of the peace; for there was nothing you **could have done**. (Dem. *De cor.* 43)

Here a potential interpretation of ἐποιεῖτε ἄν is inescapable, in my view. The clause introduced by γάρ 'for' aims to explain why the Athenians did not take action, even though they were not happy with the situation. The explanation is that the Athenians did not have any options, given the conditions at the time.

First, note the absence of a conditional clause, which is natural for an RRP: Demosthenes is talking about the lack of alternatives given the actual past circumstances.

[25] This reasoning would apply to Aeschin. *In Tim.* 85 cited in *CGCG* (n. 1), 442–3, which is used to illustrate the point that the main clause assertion of a counterfactual period does not need to be contrary to fact; this does not seem to be a legitimate example, however (the particle καί does not modify the conditional genitive absolute clause but rather connects the two periods that are dependent on οὐκοῦν ἄτοπον εἰ 'surely it would be strange if'). However, see Hdt. 7.3 δοκέειν δέ μοι, καὶ ἄνευ ταύτης τῆς ὑποθήκης ἐβασίλευσε ἂν Ξέρξης ('As it seems to me, Xerxes would have become king even without that advice').

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If (25) were an SPC we would have to supply a conditional clause. The problem with this is that, if the conditions at the time had been different, the Athenians surely would have done something because they were not happy with the situation. So if we supply 'even if you had wanted to' or 'even if you had had the opportunity', that gives the wrong impression that the Athenians were unwilling to act. Besides, reading an implicit conditional clause with focussed information status into the text seems to me an act of special pleading.

If we accept that this example is not conditional, the criterion of quantification becomes irrelevant. We may, however, say something about polarity reversal. Under a simple counterfactual interpretation, 'There was nothing you would have done' would normally imply that the Athenians did in fact do something, which is not the case. As argued in 2.3, this implication can be avoided in the presence of a focussed conditional clause or if the Athenians were not relevant actors, but these do not apply here.

The expression 'There was nothing (else) X could have done' can also be formulated as a rhetorical question: 'What (else) could X have done?' We find the counterfactual past potential in such an expression as well:[26]

26) ἐπειδὴ τοίνυν οὔτ᾽ ἐξάγεσθαι ἤθελεν ὑπὸ τοῦ Πρώτου οὔτ᾽ εἰς τὴν Σικελίαν ἀναπλεῖν ἐπὶ τὰ δίκαια, προειδώς θ᾽ ἅπαντ᾽ ἐφαίνετο, ἃ ὁ Ἡγέστρατος ἐκακούργει, λοιπὸν ἦν ἡμῖν τοῖς ἐνθένδε μὲν πεποιημένοις τὸ συμβόλαιον, παρειληφόσι δὲ τὸν σῖτον παρὰ τοῦ δικαίως ἐκεῖ πριαμένου, ἐξάγειν τοῦτον. τί γὰρ **ἂν** καὶ ἄλλο **ἐποιοῦμεν**;

Now, when he refused either to be dispossessed by Protus or to sail back to Sicily in the interest of a just settlement, and it was clear that he had known all about Hegestratus' devious plans in advance, the remaining course of action for us, who had made the deal here [at Athens] and had gotten the grain from the person who justly bought it there [in Sicily], was to dispossess that man [Zenothemis]. For what else **could** we even **have done**?' (Dem. 32.20–1)

The point the speaker makes here is that there was no other course of action that was open to him: note λοιπὸν ἦν 'the [only] remaining course of action'. A simple counterfactual interpretation of τί γὰρ ἂν καὶ ἄλλο ἐποιοῦμεν 'for what would we even have done' is nonsensical as it would suggest that the speaker would not have been prepared to take another course of action under any conceivable circumstances. To say 'I did Y and would not have done anything else' is hardly a valid defence of having done Y, but to say 'I did Y because I had no other options at the time' is.

To further corroborate the points made with regard to these examples we may compare the use of similar expressions in references to the present, because here the difference between potential and simple counterfactual is morphologically codified in the verb. A proximity search in the *Thesaurus Linguae Graecae* on [οὐ . . . + ὅ τι + ἄν] in the Classical Greek corpus up to Dinarchus (the latest Attic orator) yielded 5 relevant instances, all with reference to the present. In all cases the optative is used, as in οὐδὲν γὰρ ἔσθ᾽ ὅ τι μεῖζον ἂν ὑμᾶς ἀδικήσειέ τις ἢ ψευδῆ λέγων 'for there is no greater harm that one can inflict on you than speaking falsehood' (Dem. 19.184).[27]

[26] I owe the parallel to H. Wankel, *Rede für Ktesiphon über den Kranz* (Heidelberg, 1976), on *De cor.* 43. Wankel also points to two Latin parallels. In *Pis.* 13, Cicero writes *quid enim facere poteramus?* 'For what could we have done?' Here the verb *posse* is necessary to express the potential modality, for the past subjunctive in Latin cannot carry this value by itself; when referring to the present, however, the subjunctive suffices: *quid enim faciat?* 'For what can/must he do?' (*Har. resp.* 46).

[27] The other cases are Antiph. 5.72 οὐ γὰρ ἔστιν ὅ τι ἂν ὀργιζόμενος ἄνθρωπος εὖ γνοίη, Antisth. *Decl.* 14.5 ὃ μὲν γὰρ οὐκ ἔστιν ὅ τι ἂν δράσειε φανερῶς, ἐγὼ δὲ οὐδὲν ἂν λάθρᾳ τολμήσαιμι

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Similarly, a *TLG* search on [τί + ἄν + ἄλλο] yielded 22 relevant instances. In 21 cases, the verb refers to the present, and the optative is used in 20 of these cases.[28] Often it concerns expressions of the type 'What else can one say', as in τί γὰρ ἂν ἄλλο εἴπαιμεν 'for what else can we say?' (Pl. *Soph.* 240d)[29] We find the simple counterfactual in one instance:

27) εἰ δὲ ὑῶν πόλιν, ὦ Σώκρατες … κατεσκεύαζες, τί **ἂν** αὐτὰς ἄλλο ἢ ταῦτα **ἐχόρταζες**;

> If you were establishing a city of swines, Socrates, what else **would** you **feed** them than that? (Pl. *Resp.* 372d)

This example corroborates my argument that a simple counterfactual needs a conditional clause. Here we find such clause: the speaker is evoking a hypothetical, non-actual world in which Socrates is establishing a city of swines. In that scenario, Socrates would certainly give the swines the same food he is now giving to the citizens of the incipient ideal state. This contrasts with examples (25) or (26), where there is no indication that the speaker is evoking an alternative scenario.

2.5 Type II: 'How could X have done Y?'

There is a particular construction in Greek of the potential optative with a negation to emphatically express that something will not happen.[30] This is illustrated by the following example:

28) οὐκ **ἂν μεθείμην** τοῦ θρόνου, μὴ νουθέτει.
There is no way **I am going to let go of** the throne—don't try to tell me. (Ar. *Ran*. 830)

To add another layer of rhetoric to such an assertion, the speaker may turn it into a question, as follows:

29) πῶς γὰρ **ἄν** τις **ὑπερβάλοιτο** Γοργίαν τὸν τολμήσαντα λέγειν ὡς οὐδὲν τῶν ὄντων ἔστιν;

> For **how could** anyone **outdo** Gorgias, who dared to state that none of the things that are exist? (Isoc. *Hel.* 3)

The question 'How could X do Y?' has the import of a negative assertion: 'X could not do Y'. In this section I argue that when such questions concern the past ('How could X have done Y?'), they are RRPs. I will distinguish between two more specific rhetorical tropes: first, the idea that something was impossible and therefore did not occur, and second, that nothing could have been more extreme than what actually occurred.

Orators sometimes use πῶς ἄν in questions with a past-tense indicative to imply that the designated event was impossible and therefore did not occur. Let us reconsider a well-known example:[31]

30) οὕτως, ὦ ἄνδρες, ἐκεῖνος τούτων ἔτυχεν ὥνπερ οἱ νόμοι κελεύουσι τοὺς τὰ τοιαῦτα πράττοντας, οὐκ εἰσαρπασθεὶς ἐκ τῆς ὁδοῦ, οὐδ' ἐπὶ τὴν ἑστίαν καταφυγών, ὥσπερ οὗτοι

πρᾶξαι, Xen. *Oec.* 15.11 ὅ τι δὲ ἔροιο τῶν καλῶς πεποιημένων, οὐδὲν ὅ τι ἄν σε ἀποκρύψαιτο ὅπως ἐποίησεν, Din. *Philocl*. 9 οὐδὲν ὅ τι οὐκ ἂν ὁ τοιοῦτος ὦ ἄνδρες ποιήσειεν.

[28] In Hippoc. *Flat.* 12, the verb ἐξεπλήρωσεν would at first sight seem to refer to the (generic) present, but note the past-tense form ἐσῆλθεν (without ἄν) in the following sentence.

[29] Cf. Soph. *Trach.* 630 ἐννέποις, Pl. *Lach.* 193c φαίη, Dem. 23.63 εἴποι.

[30] Compare *CGCG* (n. 1), 441.

[31] See Wakker (n. 1 [2006]), 179 n. 4.

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λέγουσι· πῶς γὰρ **ἄν** [*sc.* **κατέφυγεν**], ὅστις ἐν τῷ δωματίῳ πληγεὶς κατέπεσεν εὐθύς, περιέστρεψα δ' αὐτοῦ τὼ χεῖρε, ἔνδον δὲ ἦσαν ἄνθρωποι τοσοῦτοι, οὓς διαφυγεῖν οὐκ ἐδύνατο, οὔτε σίδηρον οὔτε ξύλον οὔτε ἄλλο οὐδὲν ἔχων, ᾧ τοὺς εἰσελθόντας **ἂν ἠμύνατο**.

Thus, gentlemen, that man [Eratosthenes] got exactly what the laws prescribe for men who do such things. He was not dragged inside from the streets, nor did he flee to the hearth, as my opponents say; for how **could** he **have** [**fled**], considering that he was struck in the room and fell down immediately and that I bound his hands behind his back and so many men were inside, from whom it was impossible for him to escape, as he did not have an iron bar or wooden stick or anything else with which he **might have fended off** the people who had entered? (Lys. 1. 27)

There are two relevant instances here. Let us begin with πῶς γὰρ ἄν [*sc.* κατέφυγεν]. First, there is no explicit conditional clause, and it makes little sense to supply one. The speaker is arguing that, the circumstances being what they were, it was impossible for Eratosthenes to flee to the hearth. Why would the speaker imagine what Eratosthenes would have done under different, more conducive circumstances? And even if he did, how could he say that Eratosthenes might not have fled under such circumstances? As to quantification, if we were dealing with an SPC then the speaker would be saying that Eratosthenes certainly would have defended himself and fled to the hearth, if the circumstances had been more to his advantage. While that would be acceptable, it would be rhetorically more effective to suggest that Eratosthenes fleeing would be a mere possibility even under more conducive circumstances: in that way he would make this scenario seem more remote ('The circumstances did not allow Eratosthenes to flee, and no one can be certain what he might have done if things had been different'). While this may be a matter of taste, the issue of polarity is more pressing: 'He would not have fled to the hearth' would normally imply 'He did flee to the hearth', which is wrong. There is no reason to assume that this is an exception to the rule (see section 2.3). As I just argued, it does not make sense to supply a counterfactual conditional clause, let alone a focussed one. Moreover, Eratosthenes is a main participant in the narrative, not some virtual onlooker, and the speaker is concerned precisely with the question of what realistically could have happened.

To further corroborate this point, let us review some indisputable cases of SPCs in constructions with πῶς ἄν to see how they are different from what we find in example (30). First, consider the following famous passage:

31) πῶς δέ **κεν** Ἕκτωρ κῆρας **ὑπεξέφυγεν** θανάτοιο,
εἰ μή οἱ πύματόν τε καὶ ὕστατον ἦντετ' Ἀπόλλων
ἐγγύθεν, ὅς οἱ ἐπῶρσε μένος λαιψηρά τε γοῦνα;

How **would** Hector **have escaped** fateful death,
if Apollo had not for the very last time come up
close to him to rouse his might and give him swift knees? (Hom. *Il.* 22.202–4)

Hector would not have escaped if circumstances had been different and Apollo had not stood by him. The SPC implies that he did escape (for the moment), which is correct. The following example shows the effect of polarity reversal:

32) ἀλλ' ὡς κατεποντώθη λέγουσιν. ἐν τίνι πλοίῳ; δῆλον γὰρ ὅτι ἐξ αὐτοῦ τοῦ λιμένος ἦν τὸ πλοῖον. πῶς **ἂν** οὖν οὐκ **ἐξηυρέθη**;

But they say he was thrown into the sea. From what boat? For it is clear that the boat must have come from the harbour itself. So how **would** it not **have been found**? (Antiph. 5.28)

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'How would it not have been found' translates into 'It would certainly (not + not) have been found', which, reading the construction as an SPC, implies that the boat was in fact not found. This is precisely the speaker's point: the boat was not found and therefore the victim was not thrown into the sea. It will be clear, I hope, that the pragmatics of examples (31) and (32) are different from that in (30). In (30) the speaker argues that some action was inconceivable given the actual circumstances. In (31) and (32), by contrast, the speaker suggests that some occurrence would have been inconceivable if the circumstances had been different.

Now we may turn to ἠμύνατο ἄν in example (30). This case is different, for here the context does allow us to supply a conditional clause: 'if Eratosthenes had had such a weapon'. Also, the polarity is sound: 'He would have defended himself' correctly implies 'He did not defend himself'. While a simple counterfactual interpretation therefore cannot be ruled out, I hope that, based on the evidence for the relevance of the category 'past potential' presented so far, we are now more open to that interpretation even when it cannot be enforced. In this particular context the potential interpretation is cued by the earlier past potential construction (πῶς γὰρ ἄν) but also by the parallelism with the lexical potential construction found in an earlier subordinate clause: οὓς διαφυγεῖν οὐκ ἐδύνατο mirrors ᾧ τοὺς εἰσελθόντας ἂν ἠμύνατο.[32]

There is a second relevant rhetorical trope we find with questions with πῶς ἄν, which concerns the idea that nothing could have been done that would have been more extreme than what was actually done. Wakker discusses the following passage from the *Antigone* (the expression here is πόθεν ἄν instead of πῶς ἄν, but the rhetorical effect is the same):[33]

33) καίτοι πόθεν κλέος γ' **ἂν** εὐκλεέστερον
κατέσχον ἢ τὸν αὐτάδελφον ἐν τάφῳ
τιθεῖσα;

Yet, whence **would/could** I **have gotten** more famous
glory than by placing my very own brother
in a grave? (Soph. *Ant.* 502–4)

The rhetorical question suggests that the course of action adopted by Antigone gave her the greatest possible degree of fame. Wakker argues: 'It would be rhetorically less effective if by the use of a past potential she would leave open the possibility that she could have won a more honourable glory somewhere else.' The opposite is true: a potential reading actually entails that the likelihood of Antigone winning greater glory was more remote than a simple counterfactual reading. This is due to the implicit negative polarity and the criterion of quantification. Compare the following paraphrases:

34) There is no way by which I **would have won** greater glory.

35) There is no way by which I **could have won** greater glory.

[32] See also πῶς ἄν οὖν εἰσήγαγον in Gorg. *Pal.* 12 (D.W. Graham, *The Texts of Early Greek Philosophy* [Cambridge, 2010]). We find ἀδύνατον in the immediate context and also the phrase οὐκ ἐπ' ἐμοί, signalling lack of license. Throughout sections 6–12 Palamedes consistently emphasizes it was impossible for him to betray the Greeks to the Trojans: in 6 he says ἀδύνατός εἰμι τοῦτο πράττειν 'I am unable to do this', in 12 we find πάντως ἄρα καὶ πάντῃ πάντα πράττειν ἀδύνατον ἦν μοι 'It turns out all of these things were impossible for me to do in every way'; we may also note 10 ἄπορα 'difficult', 11 ἀπορώτερον 'more difficult' and the use of the optative γένοιντο in a similar question with πῶς ἄν in 6. All in all, there are many cues for a potential interpretation of ἂν εἰσήγαγον in 12.

[33] Wakker (n. 1 [2006]), 175–6.

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In (34), the speaker is saying that there is no hypothetical scenario that would have *guaranteed* greater glory. In (35), the speaker is making a wider claim: there is not even a hypothetical scenario that would conceivably have led to greater glory. The latter reading entails a rejection of more hypothetical scenarios than the former. Therefore, it makes the possibility of the speaker winning greater glory seem more remote, which makes it rhetorically stronger.[34]

The corpus evidence for the construction under discussion corroborates the interpretations advocated above. I have conducted proximity searches in the *TLG* on [καίτοι + πῶς + ἄν], [πῶς + ἄν + οὖν] and [πῶς + γάρ + ἄν], again up until Dinarchus. In total I found 107 instances. Now, if the use of the simple counterfactual made sense in this construction, we should find it not only when reference is made to the past, but also when reference is made to the present. In the great majority of cases, however, we find the optative (93 instances), as in καίτοι πῶς ἂν ἄνθρωποι σχετλιώτεροι ἢ ἀνομώτεροι γένοιντο; 'Yet how could there be more wicked and lawless people?' (Antiph. 6.47)

When we do find the past-tense indicative (14 instances) the time reference can normally be assigned to the past, where, as I argue, there is modal ambiguity.[35] There is an interesting exception:

36) πῶς γὰρ **ἄν** τις ἢ τὴν εὐγένειαν **ὑπερεβάλετο** τῶν γεγονότων ἀφ' Ἡρακλέους καὶ Διός …

For how **could** one **surpass** the ancestry of those who descended from Heracles and Zeus … (Isoc. *Epist. Archid.* 3)

The difference with the other examples discussed in this section is that here the rhetorical question is embedded within a larger counterfactual scenario. Isocrates considers how easy it would be for him to praise Archidamus in the conventional way: in that case he would not have to be original (2 οὐ γὰρ ἔδει, with modal past-tense indicative), for no one would be unable to find suitable material (4 τίς δ' ἂν ἠπόρησε … ;). Throughout the entire passage, the condition 'if I were to praise you in the customary fashion' remains cognitively accessible. The form ὑπερεβάλετο ἄν signals an impossibility within the context of this counterfactual scenario. What we have here, in my view, is a combination of potential modality (which would normally yield ὑπερβάλοιτο ἄν) with present counterfactuality (hence the shift to the modal past-tense form).

2.6 Conclusion

In this section I have argued that certain instances of the past-tense indicative with ἄν should be interpreted as retrospective root potentials rather than as simple past counterfactuals. The latter interpretation can be ruled out when (1) there is no explicit counterfactual conditional clause and none can be plausibly supplied; (2) universal quantification over possible worlds results in unwanted implications; (3) reversing the

[34] Similar cases are Lys. 29.7 ἀπώλετο, ἐπηρεάζετο; Dem. 19.85 ἐχρήσατο, 23.15 συμπαρεσκεύασαν.

[35] There are some instances where the phrasing allows for reference to the generic present but the statement applies to a past event: see e.g. Dem. 19.85 πῶς ἂν οὖν ὑβριστικώτερον ἄνθρωπος ὑμῖν ἐχρήσατο; 'How could/would a person have dealt with you more outrageously?' The subject is generic (ἄνθρωπος), so a present potential translation ('How would a person deal with you') appears possible; the hypothetical actions of this generic person, however, are compared to Aeschines' past actions, so a past potential reading is just as possible. See also Dem. 23.15.

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polarity yields the wrong counterfactual implication. Moreover, a comparison with the corpus data where the author or speaker refers to the present points to a strong association between certain types of expression ('There was nothing X could have done', 'How could X have done Y') and potential mood in the mental construction of Greek language users.[36]

The morphological ambiguity of the past-tense indicative with ἄν is due to the lack of a separate past-tense optative in Greek.[37] This does raise the question, however, why this particular form was used and not, for example, the optative. In fact, I will argue in the next section that the optative can be used to express retrospective *epistemic* potentiality. The explanation is probably that retrospective root potentials are always counterfactual. It may therefore have felt more natural to use a counterfactual form and leave the potential modality to be inferred by the context rather than the other way around. Retrospective epistemic potentials, on the other hand, are not counterfactual; moreover, epistemic potential modality is more strongly related to the present evaluation of the speaker than to the objective characteristics of the situation described in the past.

3. RETROSPECTIVE EPISTEMIC POTENTIAL

Distinguishing a retrospective epistemic potential (REP) from a regular present epistemic potential is a much easier matter than distinguishing a retrospective root potential from a simple past counterfactual. The only thing that needs to be argued is that a certain instance of the optative with ἄν describes a (hypothetical) situation that belongs to the past. The existence of such cases is well documented by Kühner and Gerth,[38] but this interpretation has been argued against at some length by Wakker and is absent from *CGCG* (n. 1).[39] It should be noted that the REP seems confined to Herodotus and may have been an Ionicism; Attic authors prefer lexical means to express retrospective epistemic potentiality, as in ἀδίκημά του γυναικὸς ἐγενόμην **ἴσως** 'perhaps my birth was the fruit of a wrongful act done to some woman' (Eur. *Ion* 325). My discussion here is based mainly on the evidence collected by Kühner and Gerth (as, again, reviewing all instances of ἄν would be an unreasonably time-consuming project), but I will also discuss an example I encountered among the testimonies pertaining to the Lysianic corpus.

In *Histories* 7.214 Herodotus discusses the identity of the person who led the Persians through the mountain path at Thermopylae. He assumes that it must have been Ephialtes, but others say it was some Onetes. Herodotus dismisses this option, but he goes on to explain that in principle it is possible:

[36] The term 'constructicon' denotes a mental network of constructions parallel to the mental network of lexical items: see H. Diessel, *The Constructicon* (Cambridge, 2023).

[37] Such ambiguity is not alien to the Greek language. There are no distinct forms for past or present counterfactuality; in both cases, the past tense with ἄν is used (although there are distributional differences pertaining to aspectual forms and time reference, see la Roi [n. 1]). Some instances of the aorist indicative, which is morphologically a past tense (from a synchronic point of view), should probably be interpreted as functionally (and historically) nonpast tense forms (A.A. Nijk, 'How to control the present: a unified account of the nonpast uses of the aorist indicative', *JHS* 136 [2016], 92–112). Also, the past-tense indicative may stand in for the final subjunctive in a past counterfactual context: Lys. 1.40 ἵνα μετ' ἐμοῦ τὸν μοιχὸν ἐτιμωρεῖτο 'so that he might help me take vengeance on the adulterer'. If all this is possible then there is no clear reason why the past-tense indicative should never be used with potential modal value.

[38] Kühner and Gerth (n. 1), 232–3 refer to Hdt. 1.70 λέγοιεν, 7.180 ἐπαύροιτο, 7.184 εἶεν, 7.214 εἰδείη, ὡμιληκὼς εἴη (example 37 below), 8.136 προλέγοι, 9.71 εἴποιεν. They allow for a present tense translation (see my discussion below) in the case of 1.2 εἴησαν, 2.98 εἴη, 5.59 εἴη.

[39] Wakker (n. 1 [1994]), 165–6.

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37) **εἰδείη** μὲν γὰρ **ἂν** καὶ ἐὼν μὴ Μηλιεὺς ταύτην τὴν ἀτραπὸν Ὀνήτης, εἰ τῇ χώρῃ πολλὰ **ὡμιληκὼς εἴη**.

For even if we was not a Malian, Onetes **may have known** the path, if he **had often visited** the country. (Hdt. 7.214)

The particle γάρ signals that this sentence is a justification for why Herodotus discusses Onetes at all: for if he was not from the region, how could he even have known the path? Herodotus notes that it is possible that he knew the path, if he had been to the region often. There is no plausible way in which the optative εἰδείη in the main clause or ὡμιληκὼς εἴη in the conditional clause can be construed as referring to the present. Most probably, Onetes was no longer living at the time of Herodotus' writing, and even if he was, there is no reason why Herodotus would have known this; and even if he did, what is contextually relevant is Onetes' knowledge *at the time*. If Herodotus had been certain about Onetes' knowledge, he would surely have used past-tense indicative forms rather than present forms.

In the following example a present time interpretation seems blocked by the aspectual form of the optative:

38) τῷ δὲ σφαγιασθέντι τούτῳ οὔνομα ἦν Λέων· τάχα δ' **ἄν** τι καὶ τοῦ οὐνόματος **ἐπαύροιτο**.

The name of this man who was slaughtered was Leon; he may well **have had** his name **to thank** for this in a way. (Hdt. 7.180)

Obviously, Leon died in the past. One might argue that he still has his name to thank for his death, but the aoristic aspect of ἐπαύροιτο construes this not as something ongoing but as something complete. Aoristic aspect is generally not compatible with present time reference (except in unusual circumstances; see Nijk [n. 37]), and Herodotus can hardly be saying that in this very moment, Leon dies because of his name.

Nevertheless, Wakker argues against a past potential interpretation of example (37):

[T]he full optative period is often said to have an unmistakable past reference. . . . However, it may perhaps be better to explain it like Hdt. 1.2.1 εἴησαν δ' ἄν οὗτοι Κρῆτες ('and these would prove to be/have been Cretans', 'once it might appear that these were Cretans'), where the potential optative is used for what may later prove to have been true (Goodwin 79, KG 1,232–3). In that case, it is a normal potential optative referring to a future observation about some past fact.[40]

So far as this argument goes, the issue may be mostly terminological. Let us consider the parallel Wakker adduces:

39) μετὰ δὲ ταῦτα Ἑλλήνων τινάς (οὐ γὰρ ἔχουσι τοὔνομα ἀπηγήσασθαι) φασὶ τῆς Φοινίκης ἐς Τύρον προσσχόντας ἁρπάσαι τοῦ βασιλέος τὴν θυγατέρα Εὐρώπην. **εἴησαν** δ' **ἂν** οὗτοι Κρῆτες.

After this they say that some Greeks (they are unable to give the name) landed at Tyre in Phoenicia and carried off Europa, the daughter of the king. These **may have been** Cretans. (Hdt. 1.2)

The people who reportedly abducted Europa, tentatively identified by Herodotus as Cretans, are no longer living. It would seem inescapable that the optative εἴησαν refers to the past. In both examples (37) and (39) the optative expresses the same modal meaning: Herodotus is uncertain about whether the situation referred to was actually the case, but

[40] Wakker (n. 1 [1994]), 165.

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considers it at least possible. According to Wakker's argument, both are instances of 'a normal potential optative referring to a future observation about some past fact'. But it is precisely because the fact referred to belongs to the *past* that these examples are different from what might be considered a normal potential optative. Wakker goes on to argue that what we may have in example (39) 'is not a real past potential, but something akin: it is a cautious statement about the possible past'.[41] This accords with my definition of a retrospective epistemic potential.

Further on, however, Wakker suggests that the 'optative conditional period' in example (39) may be a 'normal potential one' after all. In order to read it in this way, she interprets what Herodotus is saying as a 'more or less timeless observation like "of course he could know the path, if he had much acquaintance with the country"'. To my mind, interpreting a statement about a specific person in specific past circumstances as a generic statement is not in accordance with attested tense usage in Greek: surely replacing εἰδείη ἄν with, say, οἶδεν ἴσως would be infelicitous.

A similar move has been applied to example (39), perhaps more plausibly. According to Kühner and Gerth, **εἴησαν** δ' **ἂν** οὗτοι Κρῆτες may also be translated with a present tense: 'dies **mögen** wohl Kreter **sein**'. This approach is also adopted by la Roi, who renders 'These Greeks **may be** Cretans'.[42] la Roi does not explicitly address the issue of whether or not this is a *past* potential, as his argument in context is that it is not a counterfactual form. The question is why we should translate the optative here with a present tense when the situation belongs to the past. Perhaps some conceptual scenario is taken to be implied in which the Cretans are presently accessible as characters in the story (something like 'these characters may be Cretans'). But again, in order for this argument to work it needs to be shown that Herodotus uses the present indicative in this way. A good parallel would be a case of the present tense in combination with ἴσως expressing uncertainty about a past fact, but it seems to me that οὗτοι Κρῆτές εἰσιν ἴσως would be dubious Greek with respect to tense usage.[43]

Little evidence has been produced for the retrospective epistemic potential use of the optative outside Herodotus. The most interesting case cited by Kühner and Gerth is the following:

40) ἀπολύει δέ με καὶ ὁ νόμος καθ' ὃν διώκομαι. τὸν γὰρ ἐπιβουλεύσαντα κελεύει φονέα εἶναι. ἐγὼ μὲν οὖν πῶς **ἂν ἐπιβουλεύσαιμι** αὐτῷ, εἰ μὴ καὶ ἐπεβουλεύθην ὑπ' αὐτοῦ;

The law the prosecutor appeals to acquits me too. For it states that one who has plotted must be a murderer. Well, how **would/could/might I have plotted** against him, if he had not plotted against me as well? (Antiph. *Tetr.* 3.2.4–5)

Kayser conjectured ἐπεβούλευσα here. There is a counterfactual conditional clause, so this may well be an SCP: 'I would not have plotted against him if he had not plotted against me.' If we want to take the optative reading seriously (it is retained by Dilts and Murphy[44]) we may consider it to be an REP, understanding its value to be 'How does it make sense that I plotted against him', that is, 'It makes no sense that I plotted against

[41] Wakker (n. 1 [1994]), 166.

[42] la Roi (n. 1), 257–8.

[43] We do find examples of the type 'The one who did Y is X', as in Ἐπιάλτης … ἐστὶ ὁ περιηγησάμενος τὸ ὄρος κατὰ τὴν ἀτραπόν 'Ephialtes is the one who led them around the mountain along the path'. This may be thought to be a close enough parallel, but in my view the occurrence of a participle as part of the subject complement makes it different.

[44] M.R. Dilts and D.J. Murphy, *Antiphontis et Andocidis orationes* (Oxford, 2018).

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him'. Interestingly, Antiphon's language contains a number of Ionicisms,[45] so it might be no accident that among all other Classical Greek authors beside Herodotus, we find this use here.[46] However, the counterfactual context makes the situation more complex, and we would have to understand 'How is it logical that I would have plotted against him'. This is perhaps too much of a stretch, and even if we adopted this interpretation we might still prefer the past-tense indicative reading because of the counterfactual scenario (compare my discussion of example 36 in section 2.5).

There is one interesting case in a much later text written in the Attic style:

41) ὅτι δ' ὑπὸ τῶν τριάκοντα ἀπέθανεν, ἱστορεῖ καὶ Θεόπομπος ἐν τῇ πεντεκαιδεκάτῃ τῶν Φιλιππικῶν· ἀλλ' οὗτός γ' **ἂν εἴη** ἕτερος, Λυσιδωνίδου πατρός, <οὗ> καὶ Κρατῖνος ἐν Πυτίνῃ ὡς [οὐ] πονηροῦ μνημονεύει· πῶς <γὰρ> **ἂν** ὁ προτεθνεὼς <καὶ> ἀναιρεθεὶς ἐπὶ τῶν τετρακοσίων πάλιν ἐπὶ τῶν τριάκοντα **εἴη**;

That he [Antiphon the orator] died under the Thirty is also claimed by the historian Theopompus in the fifteenth book of his *Philippics*; but that **was probably** another Antiphon, the son of Lysidonides, of whom Cratinus makes mention in *The Flask* as being a bad character. For how **can** one who died previously and was put to death by the Four Hundred **have been alive** during the Thirty? ([Plut.] *X orat.* 833a–b)

With respect to ἀλλ' οὗτός γ' ἂν εἴη ἕτερος one might (although I wouldn't) argue that a present tense translation is possible ('that probably *is* another Antiphon'). However, that is impossible in the second instance, as the past time reference of the verb is made explicit by the phrase ἐπὶ τῶν τριάκοντα: the speaker is concerned with the impossibility that this Antiphon was alive during the regime of the Thirty.

4. CONCLUSION

Past potentials come in different forms and with different meanings: they can be lexical or grammatical, express root potentiality or epistemic potentiality, be viewpointed or retrospective, counterfactual or non-counterfactual, conditional or non-conditional. In this article I have argued that two specific types of past potential can be expressed by grammatical means in Classical Greek: the past-tense indicative with ἄν can function as a retrospective root potential, while the optative with ἄν can function as a retrospective epistemic potential (although this seems mainly confined to Herodotus). The RRP can be distinguished from the simple past counterfactual in that the RRP is typically non-conditional, has existential scope over possible worlds and has a counterfactual implication that is immune to polarity reversal. The REP can be distinguished from a present epistemic potential based on the temporal location of the described event. The evidence presented here should relieve doubt over whether the past potential is a relevant category in Classical Greek grammar.

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[45] For an overview of the issue of the style and authorship of the *Tetralogies* see M. Gagarin, *Antiphon the Athenian: Oratory, Law and Justice in the Age of the Sophists* (Austin, 2002), 52–62 (Gagarin regards the *Tetralogies* as the work of Antiphon the orator).

[46] Kühner and Gerth also refer to εἰδείην in Lys. 7.16, where the optative indeed seems suspect among the counterfactual forms in the context, and C. Carey, *Lysiae orationes* (Oxford, 2007) adopts Emperius' conjecture ᾔδειν. I also found ἡγοῖτ' in Isae. 1.24, where Cobet conjectured ἡγεῖτ(ο).

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