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Early Greek Probability Arguments and Common Ground in Dissensus

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ABSTRACT: The paper argues that the arguments from probability (*eikós*) so popular in early Greek rhetoric and oratory essentially operate by appealing to common positions shared by both speaker and audience. Particularly in controversial debate provoked by fundamental dissensus they make their claim acceptable to the audience by pointing out a basic coherence or congruence of the speaker's narrative with the audience's own pre-established (legal, moral, emotional) standards or standards of knowledge.

KEYWORDS: audience, *eikós*-argument, enthymeme, example, experience, plausibility, probability, similarity, truth, verisimilitude.

1. INTRODUCTION

At some time during the fifth century B.C.E., judicial orators in Greek Sicily appear to have contrived a perfectly suitable method of successfully pleading their cases in such instances in which no eye-witnesses or written documents or other unassailable pieces of direct evidence could be produced. They began to base their arguments on the internal or external probability or plausibility of their statements (Todorov 1968, p. 1; Anastassiou 1981, p. 358; Schmitz 2000, pp. 48-49). This new way of arguing was both in practical usage and in theoretical discussion commonly labeled with the Greek term *eikós*, a term that unfortunately may be (and has been) variously rendered and interpreted as similarity, verisimilitude, truth-likeness, likelihood, probability or plausibility. The main asset of this type of argument for the orator is that its employment is fully and entirely at the command of the skills of the speaker. It thus ideally constitutes what Aristotle calls a 'technical' or 'artful' argument. On the other hand, for the same reason, arguments by *eikós* have often been accused of lack of truthfulness.

The invention of arguments by probability has always been associated with the rise of rhetoric itself as an art. The legendary founders of rhetoric, the Sicilians Corax and Tisias, were credited with their invention (see Hinks 1940, pp. 63-66; Kuebler 1944, p. 15; Kennedy 1963, pp. 26-51; Goebel 1989, pp. 41-42; Gagarin 2002, p. 29), and the famous sophists Protagoras and Gorgias with exploiting them (Aristotle, *Rhetoric* II 24, 1402a25; Plato, *Phaedrus* 267a). Particularly in the fifth and fourth centuries, probability arguments played an important role in Greek oratorical practice. Not only Gorgias (Süß 1910, pp. 50-51; Kuebler 1944, pp. 26-36; Anastassiou 1981), but also Antiphon (Süß 1910, pp. 4-8; Kuebler 1944, pp. 36-61; Due 1980; Synodinou 1981, pp. 118-128;

Gagarin 1989, pp. 47-56; 1990, pp. 29-31; 2002, pp. 112-118, 153-154), Lysias (Schön 1918; Fairchild 1979), Isocrates, and other early Attic orators made ample use of them in their speeches. Also historians such as Herodotus and Thucydides frequently employed them (Rivier 1952, pp. 56-63; Westlake 1958; Woodruff 1994).

In view of their importance in early rhetoric and oratory, probability arguments and the concept of *eikós* have been subjected to closer scrutiny by a number of classical scholars in recent times (Kuebler 1944; Sambursky 1956; Westlake 1958; Turrini 1977; 1979; Fairchild 1979; Synodinou 1981; Anastassiou 1981; Goebel 1983; 1989; Warnick 1989; Cole 1991a, pp. 82-83, 96-97; Swearingen 1991, pp. 46-47, 66-73; Enos 1993, pp. 102-112; Woodruff 1994; Gagarin 1994; 1997, pp. 13-15; 2002, pp. 112-118; Poulakos 1995, pp. 179-181; Jacob 1996; Gondos 1996, pp. 85-88; Carawan 1998, pp. 184-192; Schmitz 2000; Kraus 2006; Hoffman 2008). Notwithstanding, the results continue to be somewhat controversial. The objective of the present paper is to give an explanation of the way probability arguments work in the light of this conference's topic of the search for common ground in argument.

2. UNDERSTANDING *EIKOS*-ARGUMENTS

2.1 *The classic example*

The best introductory illustration of what early Greek *eikós*-arguments basically are about and how they work in practice continues to be the famous stock example presented by Aristotle in the *Rhetoric* (II 24, 1402 a 17-20):

> If the accused is not open to the charge – for instance if a weakling be tried for violent assault – the defence is that he was not likely (*eikós*) to do such a thing. But if he is open to the charge – i.e. if he is a strong man – the defence is still that he was not likely (*eikós*) to do such a thing, since he could be sure that people would think he *was* likely (*eikós*) to do it. (Trans. Roberts 1954)

Plato refers to the same example, with slight differences, in the *Phaedrus* (273 b-c):

> [Tisias] wrote that if a feeble and brave man assaulted a strong coward, robbed him of his cloak or something, and was brought to trial for it, neither party ought to speak the truth; the coward should say that he had not been assaulted by the brave man alone, whereas the other should prove that only they two were present, and should use the well-known argument, "How could a little man like me assault such a man as he is?" (Trans. Fowler 1919, p. 557)

Aristotle attributes the example to a hand-book written by Corax, whereas Plato ascribes it to Tisias. Whether or not Corax or Tisias ever composed any written treatises is a matter of dispute, and so is the personal relationship between the two of them. Traditionally, Tisias is regarded as Corax's pupil, so he may just have written down his master's teachings. But it has also been propounded that they may actually have been one and the same person, Corax ('Crow') being a nickname of Tisias' (Cole 1991b).

Both accounts, in spite of a difference in emphasis (Goebel 1989, pp. 49-53), doubtlessly refer to the same source. Yet Plato's version particularly emphasizes (or even adds) the element of deception and untruthfulness, for obvious reasons, as we shall see shortly. What is exactly identical in both versions and may therefore be safely regarded as the core of the example is the weak man's argument. It is based on his lack of bodily strength, i.e. on his lack of the appropriate means for committing the crime. This is the

typical pattern of an ordinary *eikós*-argument. It appeals to a general common sense warrant, in this case that according to everyday experience no action will be reasonably attempted without the prerequisite means.

In Aristotle's version, however, the argument receives an additional twist by the corresponding counter-argument. The strong man in his turn may plead that he is equally unlikely because he was likely to appear guilty. His argument is based on the belief that nobody would commit a crime without any reasonable hope of getting away with it unsuspected and undetected. This demonstrates how probability arguments may easily be turned either way, a feature aptly dubbed 'reverse *eikós*-argument' by Michael Gagarin (Gagarin 1990, p. 30; 1994, p. 51; 1997, p. 14; 2002, pp. 112-114). The persuasive force of a 'reverse *eikós*-argument', however, is clearly much weaker than that of a straight probability argument. Consequently, in practical oratory the 'reverse *eikós*' appears not to have been widely used. Outside the Corax example it is only found in Antiphon's *First Tetralogy* (2.3; 2.6), a work that is a training exercise in *eikós*-argumentation (Gagarin 1997, p. 14), but not in actual speeches. So the reverse *eikós* may have been more of an element of demonstration and instruction or of witty sophistic antilogies (Hoffman 2002) than of actual oratory. Contrariwise, the straight *eikós* argument was a central component of practical oratory at least in the fifth and fourth centuries.

2.2 *Interpretations of* eikós

In his discussion of rhetoric in the *Phaedrus*, Plato has Socrates make the following remark (267a):

> We will let Tisias and Gorgias rest in peace, who saw that probabilities should be more honoured than truths, and who make small things appear great and great things small by the power of speech ... (Trans. Gagarin 1994, p. 49)

Michael Gagarin has argued that this comment of Plato's is unfair and that people like Tisias, Gorgias, and Antiphon did not essentially believe that probabilities were in any way better, stronger or more valuable arguments than truth itself, but would only resort to arguments from probability as a makeshift in cases in which 'truth', vouched for by unassailable direct evidence such as written documents, testimony by eye-witnesses or the like, was either not available or inconclusive (Gagarin 1994, pp. 49-57; 1997, pp. 14-15; 2002, pp. 29-30).

Gagarin may be right. The real reason, however, why Plato should want to stress the contrast of truth and probability in this context, is his peculiar interpretation of the concept of *eikós*. This becomes evident later in the dialogue, when Socrates addresses Tisias directly as an imaginary interlocutor (273d):

> Tisias, some time ago, before you came along, we were saying that this probability (*eikós*) of yours was accepted by the people because of its likeness (*homoiótēs*) to truth; and we just stated that he who knows the truth is always best able to discover likenesses. (Trans. Fowler 1919, p. 559).

This remark refers to an earlier passage in the dialogue (262a-b), in which it was stated that whoever wanted, even for the sake of deceit, to possess accurate knowledge about

the degrees of resemblance (*homoiótēs*) and dissimilarity (*anhomoiótēs*) between objects, must necessarily first know the truth about the thing itself which those objects resemble.

Plato thus clearly interprets *eikós* in terms of truth-likeness or verisimilitude. This he does because his intention is to devaluate and denigrate the probability arguments popular among sophists and orators. For likenesses, in his view, are mere imitations of reality and are thus both inferior and posterior to truth. This is clearly also why Plato particularly emphasizes the notion of untruthfulness in his version of the Corax/Tisias example.

Similar interpretations of *eikós* in terms of likeness and imitation are also found in other dialogues (see Turrini 1979), for instance in a passage in the *Sophist* (240 a-b), in which 'image' is defined as 'another thing fashioned in the likeness of the true one', from which it is concluded that it is not true, but *eikós*. Yet as truth is what really exists, the paradoxical conclusion is that *eikós* both does and does not exist. As a consequence, Plato is distrustful of *eikós*-arguments. In the *Phaedo* (92 d), he characterizes them as "mere impostures [that] may deceive us greatly" (see also *Theaetetus* 162e-163a).

Plato's ontological and epistemological interpretation of the early Greek concept of *eikós* as truth-likeness has undoubtedly been highly influential (see, e.g., Hinks 1940, pp. 63-64, Sgherri 2002, p. 102), particularly so, as some such understanding is also suggested by modern language usage in terms such as 'likely' in English, 'vraisemblable' in French, or 'wahrscheinlich' in German, derived from Cicero's Latin rendering 'veri simile' (e.g. *Lucullus* 32; 99-100). Nevertheless, it clearly distorts its original sense.

An entirely different, yet equally inappropriate interpretation could be suggested by the unreflecting translation of *eikós* as 'probability', which may evoke modern notions of a statistical and frequency-based probability calculus. As Ian Hacking (Hacking 1975) demonstrates, this modern concept only emerged in the 17th century in conjunction with inductive logic (see also Hoffman 2008). Even if we introduce a certain subjective or personal element as in what is called 'Bayesian' probability (probability as personal degree of belief), named after the 18th century mathematician Thomas Bayes and advocated in the mid 20th century by statisticians such as Frank P. Ramsey, Bruno de Finetti or L.J. Savage (Hacking 1975, p. 14-15; see also Howie 2002), the concept will still prove inappropriate as it involves mathematically calculable quantities, an idea completely alien to the ancient concept.

Aristotle's definition of *eikós* as that which holds "for the most part" (hōs epì to polú) with respect to "things that may as well be other than they are" (*Rhetoric* I 2, 1357a34-b1; II 25, 1402b14-16; *Prior Analytics* II 27, 70a3-6) has occasionally been called 'statistical' (e.g. Chisholm 1966, p. 7; Weidemann 1987; see also Madden 1957, pp. 167-172; Warnick 1989, pp. 307-308; Jacob 1996, p. 239) or viewed as akin to at least the subjective variant of statistical probability (Schmitz 2000, p. 47; Hoffman 2008), particularly as in the *Topics* 'for the most part' is contrasted with the necessary and the rare (*Topics* II 6, 112b5-13). Yet if Michael Winter is right in stating that Aristotle's general concept of 'for the most part' refers to what happens naturally unless impeded by any internal or external interference (Winter 1997), it is clear that Aristotle's 'for the most part' is not really quantifiable.

Aristotle integrates *eikós*-arguments into his overall concept of the enthymeme (Grimaldi 1973; 1980, 1996; Sprute 1982, pp. 74-80). He regards them as one of two basic sources for enthymemes (the other being arguments from signs; *Rhetoric* I 2,

1357a31-32). But most importantly, in this respect he bases *eikós* on what he calls *éndoxa*, i.e. generally accepted opinions, which according to a definition given in the *Topics* (I 1, 100b21-23) is to say "what is acceptable to everybody or to the majority or to the wise", as opposed to that which is necessarily true. This notion of *éndoxa* however introduces a strongly audience-oriented element. Not objective probability of events, but subjective acceptability of opinions appears to be at the core of Aristotle's theory.

This trait is even more prominent in another treatise that is highly pertinent but rarely cited (for exceptions see Goebel 1989, pp. 43-45; Schmitz 2000, pp. 47-48), namely the so-called *Rhetoric to Alexander*, which is mostly attributed to Anaximenes of Lampsacus. This treatise is arguably the only extant treatise that reflects the pre-Aristotelian, sophistic tradition of rhetoric. Its author places *eikós* first among seven types of what he calls 'proofs derived from words or actions or persons themselves'. *Eikós*-arguments stand in one group together with examples, contradictions, enthymemes, maxims, signs, and refutations, and are defined as follows (7, 1428a25-34):

> A probability is a statement supported by examples present in the minds of the audience. […] because each member of the audience is personally conscious of having corresponding desires about these and similar matters himself. Consequently we must always pay attention in our speeches to the question whether we shall find our hearers possessed of a personal knowledge of the thing we are speaking of, as that is the sort of statement they are most likely to believe. (Trans. Rackham 1937, p. 321).

In this definition Anaximenes, too, highlights the audience's knowledge and experiences and their emotional predispositions and behavioural habits, with which the speaker's statements have to be brought into resonance. This is endorsed by chapter 14 (1431a24-26), in which Anaximenes states that the main difference between *eikós* and example lies in the fact that in the case of *eikós*-arguments the audience themselves possess the knowledge required for the comprehension of the argument, whereas in examples … (in the following gap in the text it may most reasonably have been stated that in examples the requisite knowledge needs to be imparted by the orator).

If this description is correct, then what is reflected in rhetorical *eikós*-arguments is plausibility rather than probability, according to the methodical distinction already propounded in 1776 by George Campbell (Campbell 1776/1963, pp. 81-86; see Walzer 1999). This again perfectly squares with what Plato in the *Phaedrus* quotes as Tisias' own definition of *eikós* as "that which most people think or accept" (273a-b; see also 259e-260a; 'doxastic definition', Hoffman 2008). This is the definition Socrates subsequently distorts by shifting it towards the notion of likeness to truth.

2.3 *Meanings of* eikós

The best way to reveal the original concept behind *eikós*-arguments is to look more closely at the word itself. From the point of view of linguistics, *eikós* is the participle of the present perfect verb *éoika*. Unfortunately, little help comes from etymology, as the meaning of the root *eik-* is completely opaque. Therefore the meaning of these words can only be ascertained by examining their usage in early Greek texts. Recent studies (Turrini 1977; Synodinou 1981; Kraus 2006; Hoffman 2008) elicit two basic meanings: On one hand, *éoika* can mean 'to be similar', 'to resemble', 'to look like'. This 'comparative' meaning (Synodinou 1981, e.g. pp. 11 and 34) is particularly frequent in very early texts

such as Homer and Hesiod, in which it covers about 80% of the total of instances (Turrini 1977, pp. 544-550; Synodinou 1981, pp. 11-21; Kraus 2006, p. 133; Hoffman 2008, appendix). Yet it turns out that in all instances in which the word has that meaning, it is invariably accompanied by a complement in the dative. On the other hand, however, in instances in which the verb is used absolutely, i.e. without a dative complement (but often with an infinitive instead), it bears quite a different sense; it means something like 'to be appropriate, fitting, suitable, proper' ('normative meaning', Synodinou 1981, pp. 21-27; Turrini 1977, pp. 550-557), mostly in the sense of being in accord with what is socially or ethically desirable, or with opinions generally held, or with a person's character, standing or previous deeds. It may be asked which of these meanings is primary. Turrini (1977, pp. 545 and 557), Dzialo (1998), and Hoffman (2008) make a case for the 'likeness' meaning, whereas I have myself pleaded for 'appropriateness' (Kraus 2006, pp. 133-136). In the end a decision may be unnecessary, as both may further be reduced to a common denominator such as 'closeness', or 'matchingness'. What is more important is that in *eikós*-arguments the term (both as finite verb and participle) is generally used in the absolute construction, which makes a strong case for the 'appropriateness' meaning. Moreover, this also rules out the interpretation as 'likeness to truth', as the word cannot have this meaning unless 'to truth' is explicitly added in the dative.

3. EMPLOYING *EIKOS*-ARGUMENTS

3.1 *The place of* eikós-*arguments*

Legend has it that rhetoric and thus also arguing by probabilities was first invented by Corax and Tisias as a means for influencing and directing political assemblies in the newly-established democratic city-state after the expulsion of the Syracusan tyrants. Yet in practice it appears that the truly predominant field of employment of *eikós*-arguments was judicial oratory, only to a lesser extent political oratory. Moreover, even within judicial oratory, their favourite domain appears to be argumentations that concern what later rhetorical theory would call the conjectural status, i.e. the issue whether or not a certain crime was in fact committed by the defendant. This is in fact true for Gorgias' fictitious *Defence of Palamedes* as well as for Antiphon's *First Tetralogy* and *On the Murder of Herodes*, and for Lysias' speeches number 1, 9, 12, 16, and 24, speeches in which argumentation by *eikós* is particularly prominent. It is in addressing issues of that kind of utmost dissensus that arguments from probability are employed to the best effects. For, what Nicholas Rescher rightly formulates as "the cardinal rule governing the operation of [the] concept of plausibility": "*in cases of conflict, never make the more plausible give way to what is less so*; by all means, retain the more highly plausible theses." (Rescher 1976, p. 14; Rescher's italics).

In such cases, naturally the initial dissensus between the two opposing parties is complete and fundamental. There can be no way of meeting half-way. The objective of each party must therefore be to gain as much common ground as possible with the judge or jury, and to prevent the other party from doing so (similar considerations apply with respect to political assemblies in political oratory). This is exactly why probability arguments work so particularly well on such terms. They basically appeal to ideas of common sense. But common sense makes common ground.

3.2 *Ways of formulating* eikós-*arguments*

As the ancient examples demonstrate, there are basically two different ways of linguistically formulating *eikós*-arguments, an explicit and an implicit one (Fairchild 1979, p. 53). The first way is explicitly labeled by the participle *eikós* or the verb *éoika*, or another of its variants, in expressions such as "it is highly probable that X" or "it is not probable that Y" or "it is more probable that X than Y". This applies to most of the arguments used by Antiphon and Lysias.

But *eikós*-arguments may also be put implicitly. They may be formulated in the form of negative phrases or rhetorical questions either in a potential optative ("future less vivid") or in the contrary-to-fact mode. This way of putting such arguments is clearly preferred by Gorgias, who rarely uses the word *eikós* itself. In the *Defence of Palamedes*, for instance, he makes Palamedes say: "Not even for security reasons would anybody perhaps do such a thing" (§ 17) or: "How could the deed have been done?" (§ 12). But Antiphon, too, occasionally employs this method, such as in *On the Murder of Herodes* 69: "Nobody would have thought the guy would ever dare do this", or, combining explicit and implicit mode, in 45: "How is this likely?"

4. HOW *EIKOS*-ARGUMENTS OPERATE

4.1 *Audience-adaptation and common ground*

As we have seen, early Greek *eikós*-arguments are not based on the idea of likeness to truth, nor do they operate by any notion of statistical probability. Instead, they make their claim acceptable to the audience by pointing out a certain coherence and congruence of the speaker's own narrative with the audience's pre-established set of convictions, i.e. their ordinary everyday experience, their moral values, intellectual knowledge, emotional predispositions and behavioural habits. The speaker's line of argument must thus be adapted to what the audience themselves would feel or do in similar circumstances, or with how they know (or may reasonably assume) the person in question, or his or her friends or relatives, or else similar characters would tend to feel or act in similar situations and under similar conditions. This adaptation to anticipated audience response certainly is what is expressed by the sense of fittingness and appropriateness semantically conveyed by the word *eikós*. If the argument fits with the audience's own convictions, it establishes common ground, to which it may further appeal.

This is basically the model Christopher Tindale describes as the sharing of "cognitive environments" between speaker and audience that ultimately leads to the "acceptability" of arguments (Tindale 1999, pp. 101-115), or what Michael Billig formulates as the principle of common-sense: "The link between the orator and the audience rests upon more than a sharing of argumentative forms. It also comprises a common content. If orators are identifying with their audiences, then they are emphasizing communal links, foremost among which are shared values or beliefs. […] The orator, in identifying with the beliefs of the audience, will be treating the audience as a community bound together by shared opinions." (Billig 1996, p. 226). It may be mentioned as an interesting parallel that Gorgias would only accept the possibility of communication of knowledge provided that it could be based on some common sense-

perception shared by speaker and addressee (Goebel 1989, p. 44, note 7; cf. Jarratt 1991, pp. 53 ff.; Consigny 2001, p. 72).

4.2 *Possible fields of common ground*

The fields in which in probability arguments common ground may be established between speaker and audience can be of various kinds. In the simplest case, an argument may just refer to the audience's everyday experience of how physical nature and the things in their environment usually behave (such as the laws of mechanics, or constancies of weather conditions etc.). In a higher sense, common ground may also be established on a more intellectual level with respect to facts e.g. from sciences or history.

A third, even more important level concerns human actions and the values of human society. Hoffman (2008) in this respect speaks of "social expectations" and "profiles". Human actions may thus be judged as predictable according to earlier life, to custom and habits, to morality, or according to justice. But they can also be qualified according to circumstances such as motives, means, or aims. This is the area most probability arguments in Antiphon's speeches are based on. Particularly important are the domains of human emotions and character, which – together with anticipated profit – are named as major sources of probability in chapter 7 of the *Rhetoric to Alexander*.

4.3 *Non-explicit warrants*

Technically, from a dialectical point of view, these areas of shared knowledge or experience function as non-explicit qualified warrants in an enthymematic or Toulminian argument structure. In this sense, "[c]ustom, habit, or normal ways of doing something" and "general knowledge shared by the speaker, hearer, and audience" are listed by Walton (1996, p. 251) as "bases for determining non-explicitly used premises". Such warrants may also be established from examples, as Anaximenes indicates. It is these non-explicit warrants that ultimately enable the audience to retrace and approbate the speaker's argument.

4.4 *Narrative*

A major medium that makes probability arguments work is the internal coherence of the speaker's narrative, which most naturally exhibits important points of contact with poetical theories of narrative (see Schmitz 2000; Genette 1968; Brinker 1983; Eden 1989; Sutton 1991; O'Sullivan 1995). But on the other hand the importance of narrative also clearly recalls the basic connection of argumentation and narrative as emphasized in Walter Fisher's conception of 'narrative fidelity' and probability, defined as the extent to which the stories that people are told relate to what they know to be true in their own lives (Fisher 1984, p. 8; 1987, p. 5; 1994).

4.5 *The return of similarity*

The audience will usually willingly embrace the arguments propounded by the speaker if they recognize in them a kind of similarity to their earlier experiences. This is what

Anaximenes means when he says that "a probability is a statement supported by examples present in the minds of the audience" (*Rhetoric to Alexander* 7, 1428a25). Examples must bear a natural resemblance to the class they stand for. By this way the notion of similarity after all re-enters into the mode of operation of probability arguments (see also Hoffman 2008). In this context should also be compared the pivotal role of similarities and analogies as one of the basic "transforms" that license the decisive argumentative step in descriptive models of plausible reasoning based on cognitive psychology such as those by Collins and Michalski (1989) or by Smith, Shafir and Osherson (1993).

5. CONCLUSION

The arguments from probability (*eikós*) so popular in early Greek rhetoric and oratory have turned out not to be based on the notion of truth-likeness, as Plato wanted them to, nor on a modern concept of frequency-based probability. It has been demonstrated that particularly in controversial judicial or political debate provoked by fundamental dissensus of opinions, such arguments regularly appeal to positions shared by both speaker and audience, i.e. to common legal, moral, or behavioural standards, to shared knowledge about circumstances, or to a common sense view of reality and the physical world, in order to establish a common basis, that would render the speaker's own point persuasive. They are thus ultimately based on common ground which they themselves establish. In that context it has also been shown that the mode of operation of such arguments, involving the use of non-explicit warrants, narrative coherence, and similarity relations, perfectly dovetails with modern theories about the functioning of arguments.

link to commentary

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