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Edited by:

Edward Anson ✦ Michael Fronda ✦ David Hollander

Timothy Howe ✦ John Vanderspoel

Pat Wheatley ✦ Sabine Müller ✦ Alex McAuley

Catalina Balmaceda ✦ Charlotte Dunn



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How were Battlefield Dead Counted in Greek Warfare? Catherine Rubincam

Abstract: *A previous article (“Casualty figures in Thucydides’ descriptions of battle,” TAPA 121 [1991] 181-198) found patterns of rounding and clustering in Thucydides’ 49 human casualty figures sufficient to suggest that most of them were estimates rather than precise counts. This article takes up the obvious question left unanswered in that study, namely, how the apparent imprecision in these casualty figures can be explained in the light of the historian’s generally presumed access to good sources of information on these events. The answer suggested here is that the decentralization of the processes of recovering and identifying the dead, cremating them, and carrying back their names and ashes to Athens, which is required by Thucydides’ description of the 11 separate biers paraded for the official end-of-year ceremony, made it likely that no one compiled an accurate list of all the dead from each battle. Hence the imprecision in the answers the historian received to his questions about the casualty numbers.*

The point of departure for this article is a study I published in 1991, which analyzed some patterns in the distribution of the 49 numbers in Thucydides’ text referring to human battle-casualties.¹ To facilitate this analysis, I tabulated these numbers in two graphs, the first (Graph #1) highlighting the use of two major types of qualification (“approximating” and “comparative”), the second (Graph #2) superimposing the numbers referring to battle casualties on those of soldiers mentioned in non-casualty situations (i.e., soldiers going into battle or out on a campaign).² On the basis of Graph #1, I commented, “[M]ost of the figures must be somewhat rounded, since 41 of the 45 figures greater than 10 are multiples of 10, which can hardly reflect the literal truth,” noting further that one could discern “a greater degree of rounding as the figures grow larger”—an analysis that “show[ed] up ten among the 45 figures above 10 ... as having a greater degree of exactness than most within their numerical range.”³ If these were numbers predetermined by human decisions (such as, e.g., numbers of troops being sent on a campaign or into battle), this evidence of rounding would be unremarkable. But death on the battlefield is unlikely to strike with such respect for the decimal numeric system! I concluded, therefore, that most of these numbers are not raw body-counts, but have at least been rounded to the nearest 10 or 100 or 1,000.⁴

That Thucydides (or his informant[s]) might have rounded up some casualty numbers to the nearest node on the decimal scale will hardly surprise anyone. However, another, truly surprising, kind of pattern becomes evident upon closer scrutiny of how the 49 casualty figures are distributed: the striking frequency of 200 (7x), 300 (7x), and 1,000 (4x).⁵ The significance of

¹ Rubincam 1991.

² These graphs are reproduced here, with the permission of the Editor of TAPA, as items 1 and 2 in the Appendix.

³ Rubincam 1991: 182-183.

⁴ Rubincam 1991: 182.

⁵ Rubincam 1991: 183-184.

this pattern of clustering can be seen in Graph #2,⁶ which shows the correlation between the numbers of casualties and the much larger group of numbers denoting troops going into battle or out on a campaign—numbers that were predetermined by human decisions. On this graph “the bars descending from the horizontal axis” represent the casualty figures, while those ascending represent “the figures for troops going out on campaign or into a battle.”⁷ This second group comprises 220 numbers, ranging from 3 to 150,000: these numbers are no doubt easier to ascertain and only a fraction of all the fighters will be casualties.⁸ The fact that the three highest peaks found in the graph of the casualties (200, 300, and 1,000) are identical with the three highest peaks on the graph of troop numbers going into battle cannot be explained as the result of mere rounding of raw numbers to nodes on the decimal scale. It requires us to assume that some element of estimation was involved.⁹

My 1991 article did not attempt to reconstruct how this could have happened. That is the question to be dealt with here. If Thucydides had been writing, like Herodotus, about events that occurred at least one generation earlier, or, like Diodorus, about events far in the past, for which he depended on earlier written accounts, then this combination of a high rate of decimal rounding with a pattern of clustering that mirrors that in the statistics for troops going into battle might not demand any special explanation. But Thucydides is the archetypal primary historian—a man who lived through, and fought in, the war he narrated, took pains to interrogate many of the participants in the events he described, and wrote down his account within about 30 years of the occurrence of those events.

It is important to distinguish between the evidence of rounding in the casualty figures, which could be sufficiently explained as the action of Thucydides or his informant after the fact, and the evidence of clustering, which is not so explicable. In other words, it is at least theoretically possible that either the historian or his informant rounded up a precise number known to him to a node on the decimal scale, but this explanation cannot be invoked to explain the suspicious clustering of the casualty numbers—the coincidence between the most frequently used casualty numbers and the most frequently used regular troop numbers. In order to explain this appearance of estimation in a large percentage of Thucydides’ casualty numbers it seems necessary to assume that in many cases his sources could not supply the precise number of those killed in the battle about which he was interrogating them. “How could that be?” you may ask. To answer that question is it necessary to review what is known about how casualties were counted after a battle.

Needless to say, no ancient author describes this grim and repugnant task. The details have to be put together from many small indirect testimonia. A battle has been fought, leaving one of the two armies as victor, in control of the battlefield. How can we reconstruct what happened to the dead between the end of the fighting and the end-of-year public burial ceremony in Athens? The most comprehensive survey of the relevant information remains

⁶ From Rubincam 1991: 193.

⁷ The quotation is from Rubincam 1991: 183-184.

⁸ Krentz 1986 concluded, from his analysis of the numbers from battles in the period 479-371 narrated by Thucydides, Xenophon, and Diodoros, that casualties averaged about 5% of the victorious army and about 14% of the defeated army.

⁹ Rubincam 1991: 191: “[M]any of his [casualty] figures have the appearance of estimates made by participants, rather than final official counts.”

that of Kendrick Pritchett, who devoted nearly two-thirds of the 4th volume of his magisterial work, *The Greek State at War*, to the subject “Burial of Greek War Dead.”¹⁰ With typical thoroughness, Pritchett collected and analyzed the available literary, archaeological, and epigraphic sources under 14 sub-headings, from “Mythical Origins” to “Cenotaphs.” There is ample evidence, of course, from all periods that every Greek state considered it a sacred duty to recover and honor its war-dead appropriately. But as to how this should be done, Pritchett argued that the verdict reached by some of the major authorities of the previous generation (Jacoby, Gomme, and Page), that the “common”/“almost universal”/“usual” Greek custom was to bury the war dead on the battlefield, was an over-simplification.¹¹ It appears, in fact, that the two major states about which we are best informed, Athens and Sparta, differed in their custom: the former (from at least the 460s BCE) normally burned the bodies on the battlefield before bringing home the bones and ashes for burial in the *dêmosion sêma*, the public cemetery,¹² while the latter preferred to bury their dead on the battlefield where they had fallen.¹³ For other Greek states the incompleteness of our information makes it harder to draw a firm conclusion concerning their regular burial customs.¹⁴

The one point that no one disputes is that every Greek soldier expected that his military commander would spare no effort to recover his body, if he were killed, and give it appropriate funerary honors. Did it matter in what form his mortal remains were honored? It seems that whether they were cremated before burial or simply buried without cremation was a decision made for pragmatic rather than religious reasons: there was neither a prohibition of cremation, such as used to exist for Roman Catholics, nor a requirement for burial, such as exists in Jewish and Muslim traditions. Major deciding factors must have been what condition the bodies were in when retrieved from the battlefield,¹⁵ how far a journey would be required to convey the

¹⁰ Pritchett 1985: 94-259; references to this volume enclosed in square brackets [#x] refer to the chronological list headed “8. Burials of War Dead in Historical Sources, Including Literary Epitaphs and Inscriptions” (pp. 153-235).

¹¹ Pritchett 1985: 94, quoting Jacoby 1944: 42, Gomme-Andrewes-Dover 1945-1981. vol. 2: 94, and Page 1981: 269, on which he comments, “It is clear, however, that the convention is not so simple, for Greek practice exhibits many variations.”

¹² Pritchett 1985: 178 [#22], commenting on the battle of Eurymedon: “I conclude that Kimon cremated the corpses of the fallen and brought the ashes to Athens for burial, and that this action was a precedent which resulted in a law, passed a few years later, that the dead must always be brought back to Athens for burial.”

¹³ Lakedaïmonians buried on (or near) the battlefield: Olpai (426/5 BCE [Pritchett #41]); Athens, Peiraieus (403 BCE [Pritchett #66]); Leuktra (371 BCE [Pritchett #78]).

¹⁴ The ashes of Athenian allies were sometimes buried in the *dêmosion sêma* at Athens: e.g., Argives killed in 464 BCE (IG 1².928 [Pritchett #23]); Thessalians killed in 431 BCE (Thuc. 2.22.2; Paus. 1.29.6 [Pritchett #32]). On Kynoskephalai Pritchett comments, “Clearly, Pelopidas was buried on the field of battle. There is no reason to believe that the remainder of the [Theban] dead were not similarly treated” (Pritchett 1985: 220 [#82]).

¹⁵ Xen. *Anab.* 6.4.9 recounts how Xenophon led his division to search for dead left unburied for five days: “They buried the greater part of the dead just where each had fallen ... ; for they had already lain unburied five days, and it was not now possible to take them up ... ; some that lay upon the roads, however, they did gather together and bury as their means allowed, while for those they could not find, they erected a great cenotaph ... and placed wreaths upon it” (translation by Pritchett 1985: 210 [#67]). Three groups are distinguished here: (i) those that had suffered most from lying exposed on the ground for five days, which could not be moved, and had therefore to be buried just where they were; (ii) those that had lain for five days on the roads, i.e., on a drier surface, so that they had deteriorated less, and could be collected into a single trench; (iii) those that could not be found, who were honored with a cenotaph.

remains to the intended site of the funeral ceremony,¹⁶ and whether a truce offered sufficient time to identify and recover the bodies, and either burn them and collect their ashes to take home or bury them with due honors on the field:¹⁷ if time pressed, then hasty on-the-field burial was clearly required.¹⁸ The losing side in a battle normally had to negotiate with the victorious general permission to collect their dead. The time involved in this process might leave the bodies in such a condition that their transportation any significant distance was impossible, in which case either immediate cremation, as a prerequisite for taking home the bones and ashes, or hasty burial of the bodies more-or-less where they lay were the only possible options. As for distance as a factor, on the basis of his lifelong experience in walking the Greek countryside, Pritchett stated, “no two men could have carried a body very far on Greek roads”; he noted, however, one case where bodies seemed to have been transported as much as 50 km, presumably by means of carts.¹⁹ The dead were commemorated by inscriptions of varying formats: in Athens the names of the individual dead were inscribed on *stelai* with an indication only of their tribal affiliation and (sometimes) the war-theatre in which they had died, as well as military offices held; memorial inscriptions of many other states contain tribal affiliations,²⁰ while in a few patronymics and/or honors such as Olympic victories were added. Memorial inscriptions honoring the dead by name might be placed also on the site of a battlefield burial, in which case a cenotaph, with or without names, might be erected to honor them in their home city.

Wherever the physical remains of the war-dead came to rest, their names had somehow to be conveyed back to whoever kept the record of men eligible to be called out to fight. Ancient city-states lacked the bureaucratic infrastructure on which modern war departments depend for this kind of record keeping, and reconstructing the details of how they kept track of fluctuations in their military manpower requires considerable guesswork. This question, which was not a major focus of Pritchett’s study, has now been taken up by a new generation of scholars, most particularly Pamela Vaughn, in a 1991 article that analyzes the relevant

¹⁶ Pritchett 1985: 192 [#46] draws particular attention to the case of the Thespians after Delion because the dead were transported an exceptionally long distance (“some fifty kilometers”) for cremation and burial.

¹⁷ Pritchett 1985: 163-164 [#8] suggests that not only Anchimolios, the leader of the Lakedaimonian force sent to expel Hippias from Athens (512 BCE), but also the other Lakedaimonian casualties were buried at Alopeke in Kynosarges (Hdt. 5.63); he comments: “The Athenians conceded the right of burial to the defeated enemy. ... Just as the permission to erect an inviolable trophy was accorded to the victor regardless of whether the battle took place in enemy territory, so the convention about the burial of the dead included not only the right to take up the corpses, but also the option of incineration or burial on the spot.”

¹⁸ Examples of hasty burial on the field would be: Agesilaos at Koroneia (394/3 BCE [Pritchett #71]); Antigonos at Paraitakene (317 BCE [Pritchett #95]); Achaians at Kaphyai (220 BCE [Pritchett #106]).

¹⁹ See Pritchett 1985: 42 for the quotation; 192 for the exceptional case of the Thespians after Delion (424 BCE [#46]); 151-152 for the less arduous transportation of the Argive dead after Hysiai (669 BCE [#3]) a distance of “about seven kilometers” to Kenchreai, the nearest friendly territory to the battlefield.

²⁰ Information on non-Athenian casualty-lists: an Argive list from Korinth and Koroneia (394-388 BCE) has about 100 names, listed by tribes and phratries [Pritchett #72]; a Theban list from Alexander’s capture of that city (335 BCE) has “each name followed by an adjectival patronymic” (Pritchett 1985: 144, #6); a Mantineian list from the late mid-4th century has “[n]ames with patronymics arranged under tribal headings” (Pritchett 1985: 144, #5); a Korinthian list from the 2nd half of the 4th century has “ten names arranged by tribes as well as subdivisions within the tribe” (Pritchett 1985: 145, #7); a Thespian list from the 3rd/2nd century BCE has “about fifteen names with patronymics” (Pritchett 1985: 145, #8).

evidence with exemplary care.²¹ The picture she draws emphasizes the significant practical difficulties that Greek armies must have faced in identifying their dead amid the carnage left on the battlefield: disfigurement by wounds, the unreliability of weapons as markers of identity, the victors' stripping of armour and even clothing from the defeated dead, the hastening of putrefaction by Mediterranean summer heat, and the absence of any equivalent of the official "dog-tags" used by modern armies.²² She concludes:

We are left in the end with a dilemma of sorts: we know disfigurement or loss of corpses and subsequent misidentification could occur, and yet we hear of no standard methodology for precise identification which could explain the Greeks' apparent facility in reckoning individual battle casualties. Perhaps the relatively small losses (in modern terms) in battle [here she cites Krentz's average estimates of 5% for the victors and 14% for the vanquished²³], the accuracy of muster lists, and the presence of family and close friends in the ranks usually allowed for a rough "process of elimination" which left only a few hoplite dead positively unidentified.²⁴

Vaughn's allusion to "muster lists" needs some clarification. Her article was published shortly after M.H. Hansen challenged the long-held assumption that the Athenians kept a single comprehensive list (*katalogos*) containing the names of all citizens liable to service as hoplites.²⁵ He argued that we should be wary of assuming the existence of a comprehensive citizen *katalogos* just because this seems to us the most efficient way to keep track of a city's militia force, contending that the term *katalogos* is better interpreted as a muster list compiled for a particular expedition, probably by the *taxiarchos* commanding each tribal regiment. The process by which such a *katalogos* of all those serving on a particular mission would have been compiled has now been convincingly reconstructed by Matthew Christ.²⁶ It would have been based, from the time of Cleisthenes down to the 4th-century-BCE Lycurgan reform, on information supplied by the demarchs, who had custody of the *lexiarchika grammateia*, the lists kept in the administrative centre of all Attic demes, which would be updated each year by the addition of a new cohort of ephebes, and the crossing out of the names of the fallen. If the tribal taxiarch was responsible for putting together his tribe's muster list (*katalogos*) for each

²¹ Vaughn 1991.

²² On the difficulties involved in identifying the dead on the battlefield, see Vaughn 1991: 73 ("rapid corruption under the summer sun"; "disfiguring wounds which would hamper identification"); 76 ("By the time the defeated force was allowed to retrieve its own men, virtually all possible identifying tokens of any value - shields, helmets, cloaks and the like - would surely have been stripped by the other side"); 84 ("[O]ddly none of the hoplites' traditional equipment would have been truly reliable in identifying individuals" because shields and spears were sometimes borrowed); 81 (the case described in Menander *Aspis* 69-72, where a servant, seeing his master's shield lying damaged on the field, jumps to the mistaken conclusion that his master is dead).

²³ Krentz 1986: 18.

²⁴ Vaughn 1991: 88-89.

²⁵ Hansen 1985; strongly endorsed by Christ 2001: 400-401. Against the counter-arguments that "a central register would have made conscription much simpler," Christ judges the "formidable ... bureaucratic challenge" of "keep[ing] track of 18,000-24,000 potential hoplites, a group with considerable turnover due to death or disability from natural causes or warfare" a sufficient reason for choosing "a method of collecting names that was less onerous."

²⁶ Christ 2001.

expedition, using information supplied by the demarch, he would also, no doubt, be the person charged with co-ordinating the recovery and identification of the bodies of his regiment's war casualties, and marking off these names on his muster list. On his return to Athens, he would pass on the annotated list to each demarch, so that the deme records could be brought up to date.²⁷

But there is another element also in the process of recovering, identifying, and honoring the dead, which seems to have received insufficient attention. Thucydides (2.34.3) says that the funeral ceremony involved a procession of 11 carts, ten of them carrying each a bier containing the ashes of the dead from one of the ten tribes, and the eleventh one honoring the dead who could not be found ("the unknown soldiers"). How did the ashes get brought back? Unless we assume that the Athenians did not care whether the ashes paraded on the bier over which each family mourned actually included the burned remains of their deceased relative,²⁸ then the process of assembling and cremating the remains on the battlefield must also have been carried out separately by each tribe. Some scholars have argued against individual cremations, as requiring too much work and too much fuel. I would contend that Thucydides' description of the funeral ceremony requires the assumption of not individual but tribal pyres, from which the fellow tribesmen of the dead collected their bones and ashes and carried them back to Athens for deposit at the tribal headquarters to await the ceremony honoring that year's dead.

Imagine the situation on a battlefield following a fierce hoplite battle. The defeated side will normally have fled, while the victors, left in possession, prepare to deal with the bodies strewn across the field. Each taxiarch on the victorious side will be concerned to check on his own men: he will send out small parties to tend his regiment's wounded and collect the bodies of its dead - a task entrusted to their close comrades, who can best identify them. Once they have been collected, the taxiarch will cross these men's names off his muster list (*katalogos*), after which the dead will be cremated, if Athenian, or buried on the field, if Lakedaimonian. (Other states would make various decisions, depending on the circumstances.) If there is time—i.e., if night does not come on too soon, and no further military action is imminent—the victorious fighters will also strip weapons and clothing from the enemy dead, and pile the stripped bodies in a heap.²⁹ Later that day or the following morning a herald will arrive from

²⁷ On the process of conscripting hoplites see Christ 2001: 401-402. Christ envisages the compilation of the ten tribal *katalogoi* for each campaign as a collaboration between the generals and the taxiarchs, which is no doubt correct. I am suggesting, however, that the generals left more of the responsibility to the taxiarchs both before and after the campaign.

²⁸ An allegation of such a scandal was recently made against the U.S. Joint POW/MIA Accounting Command (JPAC) in connection with the "arrival ceremonies" staged at Joint Base Pearl Harbor-Hickam in Hawaii for the remains of Americans killed in WWII, the Vietnam War, and Korea (<https://www.stripes.com/jpac-admits-to-phony-ceremonies-honoring-returning-remains-1.246322>).

²⁹ Thucydides' account (4.44.3-5) of the battle of Solygeia (425 BCE) exemplifies how unexpected events sometimes forced changes in the usual process: the initial battle resulted in an Athenian victory (*oligoi elassous* 50 Athenians were killed vs. 212 Corinthians), the Corinthians retreating to a nearby hill for protection against the Athenian cavalry; the Athenians then stripped the enemy dead, took up their own dead, and set up a trophy (using, presumably, some of the despoiled weapons and armour). Subsequently, Corinthian reinforcements appeared from several directions; so the Athenians under Nikias quickly began retreating towards their ships, taking with them the rest of the despoiled weapons and armour and their own dead, except for two whose bodies

the defeated side requesting a truce for the recovery of their dead—a request usually granted without conditions. Presumably, this truce would normally permit also immediate cremation (followed by transportation home of the ashes) or (less commonly) transportation home of bodies for the defeated dead.³⁰

Scholars have pointed out that the division by tribes of the names on the memorial inscriptions suggests that the mason received a separate list from each tribe.³¹ It would surely be an unnecessary complication for the mason to receive a single, integrated, list of the dead, which he had then to disaggregate into ten tribal lists. The appearance of the Athenian casualty lists, which are not standardized in format, and fairly frequently show names that must have been added after the original mason had finished his work,³² clearly supports the assumption made here of a decentralized process involving input from a number of different individuals (presumably the taxiarch of each tribal regiment that sustained losses in engagements of that year).

How does this reconstruction of the process of identifying and recording the identities of the war-dead relate to the question of the suspicious clustering of numbers in Thucydides' casualty statistics? We cannot know who supplied these numbers to the historian, but we can assume that he would seek out some returning participants in each battle—perhaps one of the generals—and elicit from them the numbers of dead on both sides, as well as the details of how the battle unfolded. If each tribal regiment took care of collecting and cremating the bodies of its own casualties, as well as carrying back the bones and ashes, and the muster list, with the names of the dead marked off, to the tribal headquarters at the end of the expedition, then the general in overall command may very well not have had a single, comprehensive muster list of all the men under his command. He will have depended on the tribal taxiarchs to report to him, probably orally, how many each regiment had lost. In these circumstances the general might well have been content to estimate an approximate total, instead of adding up all the separate figures supplied by the taxiarchs to get an exact figure. Numbers produced in this way, as approximate estimates, would naturally show the kind of clustering that appears in Thucydides' figures.

A brief postscript is in order on the few casualty numbers in Thucydides that are obviously neither rounded nor clustered. There are seven in all, ranging in date from 427 to 414 BCE:³³ one Plataian archer captured in the breakout by half the defenders from their besieged city

they could not find. Nikias, having co-ordinated the withdrawal of the ships to some nearby islands, sent a herald from there and recovered the two abandoned bodies under truce.

³⁰ Pritchett 1985: 164: "Just as the permission to erect an inviolable trophy was accorded to the victor regardless of whether the battle took place in enemy territory, so the convention about the burial of the dead included not only the right to take up the corpses, but also the option of incineration or burial on the spot."

³¹ Pritchett 1985: 180, commenting on the Erechtheid casualty list for 460 BCE (*IG* I².929 = *IG* I³.1141): "The monuments show a great variety of design in respect to the number of / stelai, the position and number of the epigrams, the geographical rubrics with some lists distinguishing separate campaigns while others group all names under a common heading, the treatment of the allies, and certainly the sculpture which adorned the monuments. ... Indeed, Bradeen (*The Athenian Agora* 17 [1974] 33) has noted so many divergencies in the tribal lists of a single year that he concluded, 'The divergence in method of listing indicates clearly that the lists were drawn up and submitted independently by each tribe.'"

³² The best account of these physical details of the memorial *stelai* is Bradeen 1974.

³³ See Table 3 in the Appendix.

(3.24.2); 25 Athenians executed after the capture of Plataiai (3.68.3); 292 Lakedaimonian hoplites captured on Sphakteria (4.38.5); 2 Athenian hoplites killed in the battle near Solygeia and left on the field (4.44.5); 212 Corinthians killed in the battle near Solygeia (4.44.6); 7 Peloponnesians and Chalkidians killed in the battle at Amphipolis (5.11.2); and 5 or 6 killed of the small group of Athenian archers and Argives accompanying Lamachos at Syracuse (6.101.6). None of these numbers is a multiple of 10, and all except the last one are unqualified. Most of them refer to non-Athenians, and in two cases—Solygeia and Amphipolis—the Athenian casualties in that same battle are given as a qualified rounded number. The first five cases in this group involve numbers that surely occasioned much talk at Athens, while for the last two Thucydides could not interview the Athenian commanders, who were dead. Thus it appears that only in exceptional circumstances did Thucydides supply precise, unrounded casualty figures obtained from Athenian informants; most of the numbers he gave of Athenian casualties are obviously rounded and many are qualified, as well as exhibiting collectively the kind of suspicious clustering typical of estimates. If the process of identifying the dead, cremating their bodies, and bringing home their ashes for burial was decentralized in the way suggested here, this is surely a sufficient explanation for a degree of patterning that could not easily have been produced by chance.³⁴

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³⁴ A version of this paper was presented at the 2018 meeting of the Classical Association of Canada in Calgary, AB. I am grateful for the questions and comments of those present on that occasion. Thanks are due also to the Social Sciences & Humanities Research Council of Canada for a series of grants in support of my long-running research project on how ancient historians use numbers in their narratives, including, most recently, an Insight Grant awarded in March 2014. My husband, Irvin Rubincam, has been, as always, my most patient and helpful critic.

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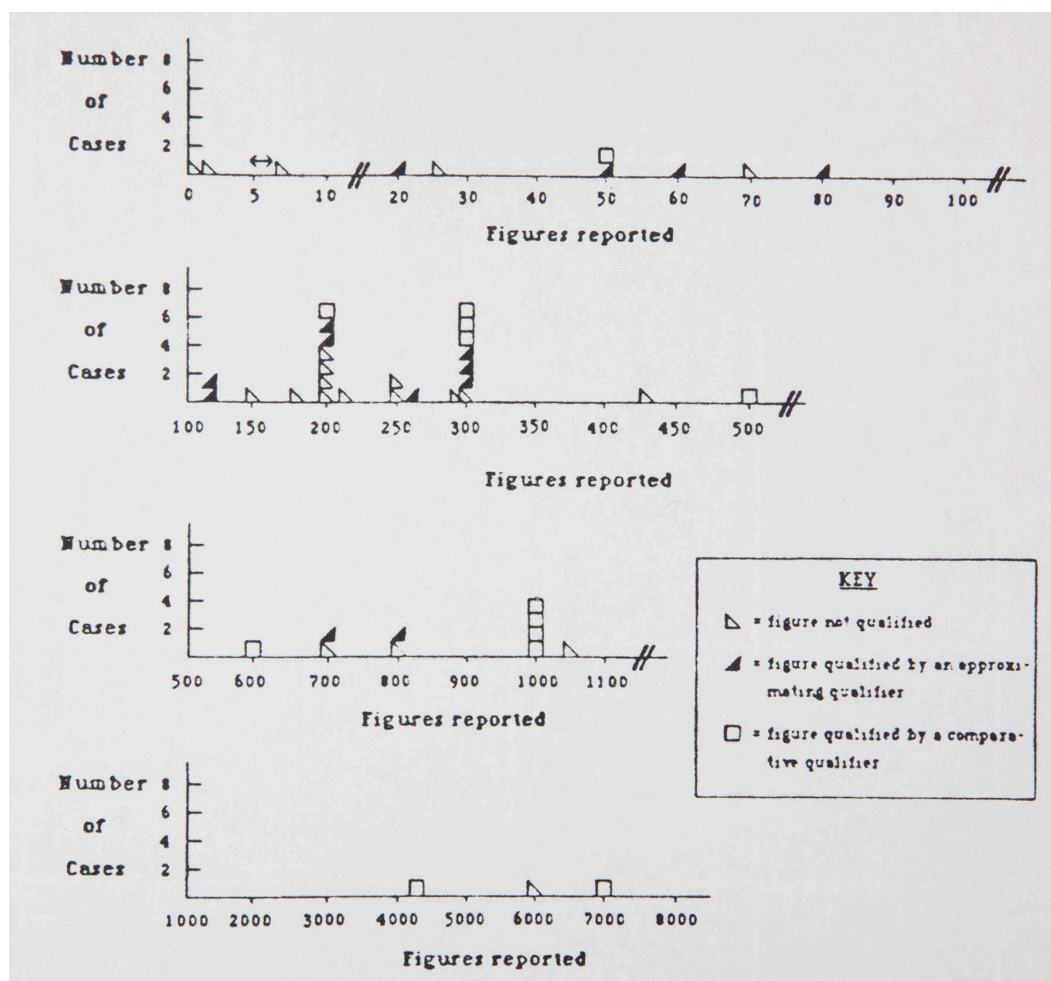
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APPENDIX

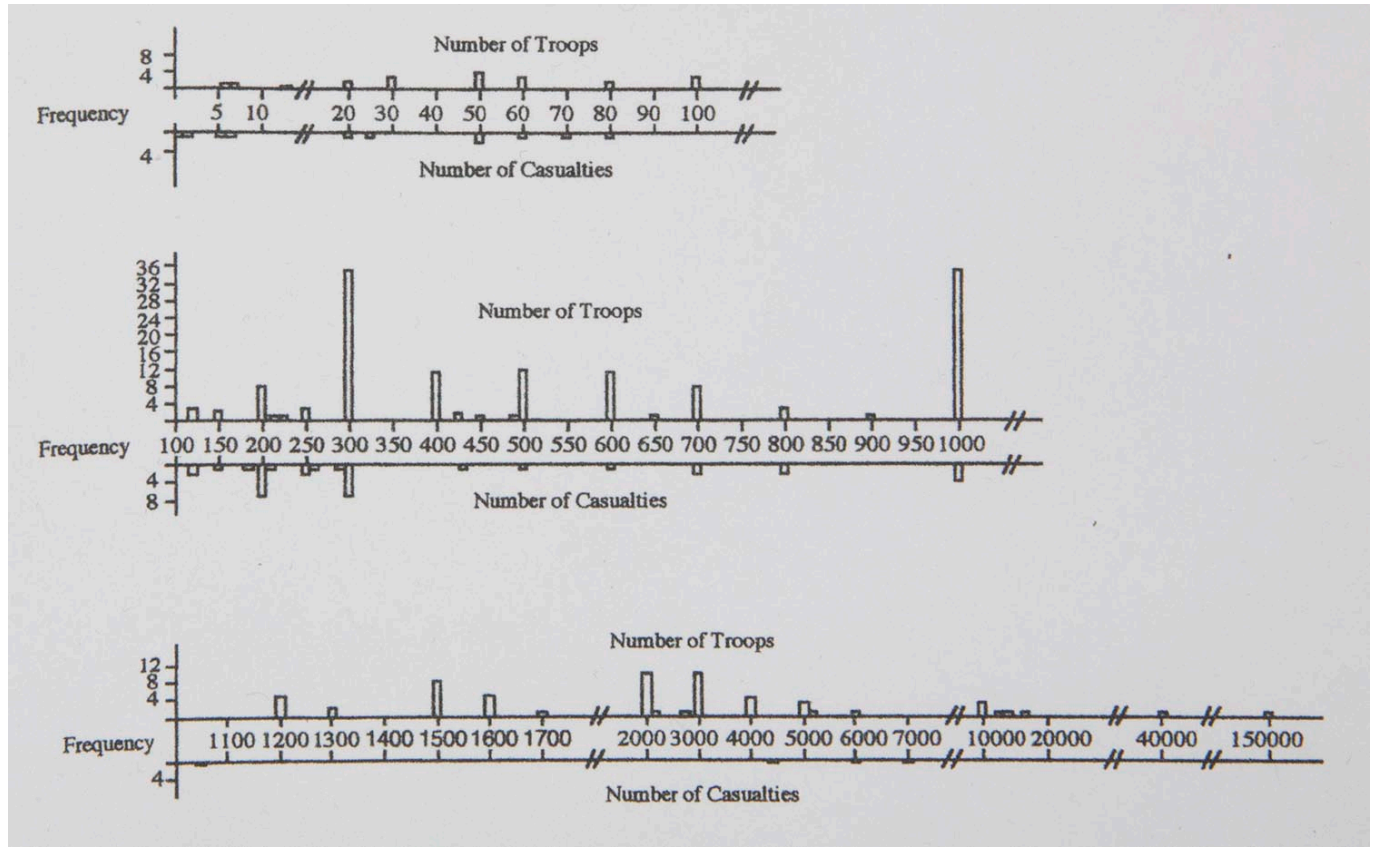
1. Graph showing casualty figures in Thucydides (from Rubincam 1991: 192)³⁵



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2. Graph showing correspondence between peaks of MIL casualty numbers and of general MIL numbers (from Rubincam

2003: 457; adapted from Rubincam 1991: 192)³⁶



3. Non-Rounded & Non-Clustered Casualty Numbers in Thucydides

Ref.	Location of Battle	Ethnic	Number of Casualties	Qualif'n	Remarks
3.24.2	Plataiai	Plataians killed	1 archer	-	• original force <i>es</i> 220 <i>malista</i>
3.68.3	Plataiai	Athenians executed after surrender	25	-	• original force 80
4.38.5	Sphakteria	Lakedaimonian garrison captured on island	292	-	• original force 420 hoplites • includes next item
4.44.5	Solygeia, Korinth	Athenians killed and left on field	2	-	• included in total of <i>oligôî elassous</i> 50 Athenians killed (4.44.6)
4.44.6	Solygeia, Korinth	Korinthian hoplites killed	212	-	• unusually precise #
5.11.2	Amphipolis	Peloponnesians & Chalkidians killed	7	-	• total of <i>peri</i> 600 Athenians killed (5.11.2)
6.101.6	Syracuse - Epipolai to Great Harbor	Athenian archers & Argives	5 <i>or</i> 6 + 1 general	<i>ê</i>	• original force <i>ou polloi</i> archers & Argives

³⁶ Copyright © 1991 Society for Classical Studies (founded as the American Philological Association). This graph was in the article that first appeared in *TAPA* 121 (1991) 181-198.