TODAY we usually consider individuals’ political judgments, once transformed into votes, to be discrete and countable.¹ Such a view underlies the use of majority or supermajority rule: we choose a precise vote threshold, a proportion of such individual judgments,² to be necessary for the adoption of a policy or the election of a candidate. Yet the activity of counting inherent in the notion of aggregation—the idea that the outcome of democratic decisions ought to be determined by calculating the specific number of votes—was not always taken to be the critical means by which we might discover collective preferences. Systems of acclamation both preceded and endured long past the invention of aggregative mechanisms. Acclamation took the form of shouts or murmurs or, in a more complicated sense, the estimation of waved hands: what is salient is that these votes were heard or observed qua unified whole, rather than counted. Here

¹This article was originally written for a conference at the European University Institute on “The Greek Polis and the Invention of Democracy,” October 6–8, 2006. Later versions were presented at the American Political Science Association 103rd Annual Meeting and Exhibition, Chicago, IL, August 30–September 2, 2007 and the Association for Political Theory, University of Western Ontario, October 11–14, 2007, to workshops at Brown, Columbia, NYU, Princeton and Yale and to the Columbia Department of Classics. I thank participants at all these sessions and appreciate comments from Jon Elster, John Ferejohn, Jennifer Gandhi, Bryan Garsten, Ira Katznelson, Alexander Kirshner, Adriaan Lanni, Bernard Manin, Karuna Mantena, Josiah Ober, Adam Przeworski, Anna Stilz, Peter Stone, Adrian Vermeule and James Zetzel, as well as from Bob Goodin and three reviewers for the JPP.

²In adopting the language of individual judgments rather than preferences, I do not mean to suggest that the Greeks were necessarily public spirited rather than self-interested. Rather, my argument is that the concept of the counted vote depended upon a prior view of individuals as capable of good judgment, including about what would be in their own best interests as a polis. That said, the aim of aggregating individuals’ preferences over policies did not constitute a dimension of Greek democracy; though no one would have doubted that people might have a private interest in a given outcome, the aim of voting was not to sum those interests in a utilitarian fashion. For discussions of the judgment v. preference ideal, see Coleman and Ferejohn (1986), Cohen (1986), and Brennan and Pettit (1990). More recently, see Goodin’s (2003) account of a way in which a model of democracy for which the aggregation of preferences is fundamental can nonetheless attend to the construction of these preferences through what Goodin terms “democratic deliberation within.”
I wish to examine the theoretical significance of the following empirical puzzles: under what circumstances did aggregation emerge, and why, despite the introduction of the counted vote, did mechanisms of acclamation persist? Through contrasting aggregation with acclamation and estimation—rather than with deliberation, as is today the standard antipode—I hope to explore the analytical and normative foundations of counting votes.

Aggregation, I shall argue, is aristocratic in its origins. By this, I do not wish to make the obvious point that the counting of individual votes emerged in the context of a body that was comprised of members of an upper class (although this is also true). Instead, what I want to emphasize is that aggregation was originally an institution designed to assess the independent votes of those, and only of those, who possessed a special and superior faculty of political judgment. Acclamation, on the other hand, was a mechanism for the masses, lacking such developed faculties. The perception that the many had judgments worthy of “counting” took time to be democratized. Thus, the members of the Spartan gerousia and of the Athenian areopagus, the bodies in which voting has been thought to originate, were thought to possess the superior capacity for judgment that made the weighting of individual votes important there, whereas such a faculty was not initially attributed to members of the assemblies. Aggregation presupposes both that individual judgments are distinctive and of intrinsic value; acclamation holds that the body as such is the relevant agent of decision.

Perhaps unsurprisingly, only with the rise of democracy did the view of ordinary citizens as entitled to have their votes counted rather than clumped emerge. Note that the question here is not of the expansion of the suffrage as such (having one’s vote “count” in the usual sense), but in the analytical structure and normative significance of the shift to having individuals’ particular judgments subject to aggregation. Yet even in democratic Athens, the precise counting of votes was generally restricted to circumstances in which preserving independence of judgment was paramount, such as in jury trials, whereas most decisions of the assembly were estimated rather than counted. Thus I also ask why estimation might be preferable in cases in which ascertaining a precise count would be technically feasible and not particularly costly. I suggest that although estimation does of course entail a sort of impressionist count, the procedure does not precisely account for each person’s individual judgments: it too is designed to capture the dominant sentiment of the crowd, and in this way may more closely resembles acclamation than...

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3This formulation is intended in part as an homage to Manin’s (1997) Aristotelian claim that elections are an aristocratic mechanism.

4See Larsen 1949, and Staveley 1972.
aggregation. The use of thorubos, or clamor, in assemblies and juries also secured the social benefits of an acclamatory system in the context of a decision procedure based on the counting of votes.

Although classicists have recognized the importance of the emergence of the counted vote—G. E. M. de Ste Croix argued that it was “by far the most important single step in the development of democracy”—and have marveled at how little attention the matter has received, the topic has remained largely unaddressed by historians and political scientists alike. Even though my primary aim here is not historical reconstruction but analysis, given the relatively unfamiliar nature of the subject even for scholars well versed in the ancient world, a brief review of the critical moments in the emergence of the counted vote in archaic Greece will situate the critical examination. First, I turn to Homeric councils and assemblies to challenge the dominant explanations for the emergence of aggregation, and argue that perceptions of competence gave rise to different accounts of their political behavior. Second, I trace the development of voting in the archaic period to highlight the coexistence of mechanisms of acclamation and aggregation, and to suggest that vote-counting constituted a means of showing respect to the individual judgments’ possessed by members of the Spartan gerousia and Athenian areopagus. I then examine the circumstances under which both estimated and counted votes were used, along with what I view as the acclamatory device of thorubos, in fifth- and fourth-century Athens. Such an inquiry illuminates the possibility that the use of aggregation reflects an attractive respect for individual members of a society as possessing epistemic dignity, but insofar as we wish to convey that a decision emerges from a body as a whole, mechanisms of acclamation or of estimation may be preferable.

I. ACCLAMATION IN HOMERIC ASSEMBLIES

Scholars today generally concur that the Homeric works provide valuable historical insights into the sociopolitical context of the late eighth and early seventh centuries. In his accounts of councils and assemblies, Homer does not provide any discussion of voting procedures: in both bodies, decisions were made by acclamation. Although “[t]here is no formal vote hence no counting of votes, and no formal obligation to respect the people’s opinion . . . it is clearly in the leaders’ interest to heed the assembly’s voice.” Yet the consensual mechanism famously broke down in the Homeric context. It is for this reason that Glotz

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5G. E. M. de Ste. Croix (1972, pp. 348–9), for instance, writes, “It is extraordinary how both ancient and modern writers have neglected this development.”


7Ibid., p. 28.

8See book 2 of The Iliad (Homer 1990), in which Agamemnon tests the Achaeans’ resolve; book 9, in which Diomedes counters Agamemnon’s efforts to persuade the troops to return home; and book 24 of the Odyssey (Homer 1996), in which the assembly is divided on the question of whether or not to avenge the suitors.
thought that the counting of votes emerged: “The vote is the prophylactic against civil war; where it does not exist there remains, in default of absolute power, only the alternatives of civil strife or anarchic inertia.”

It is surely the case that acclamation may under certain conditions fail to resolve disagreement. Yet this falls short as an explanation for the emergence of vote-counting on two grounds. It suggests that there is something fundamentally inadequate about the mechanism of acclamation for decision purposes, and it asserts that the counting of votes can effectively resolve these deficiencies. Indeed, Nicole Loraux argued that voting in an assembly in many Greek cities was called “diaphora” (in her translation, “dividing up” or “disagreeing”), and that victory in a vote was still disturbing insofar as stasis was always latent.

By the time of classical Athens, in Paul Cartledge’s words, “every vote on a major policy issue threatened the outbreak of stasis.” In the case of widespread division, though, it is surely true that no decision may be taken (Glotz’s “anarchic inertia”); why a ballot would resolve matters marked by widespread disagreement more effectively than a voice vote, however, requires some explanation.

It is true that a ballot might resolve second-order disagreement about the relative strength of the support for each size. But it is not clear that uncertainty about this matter generally caused or exacerbated conflict. Further, the archaic Greeks, already relatively sophisticated institutionally, could not have believed that the problem of indecisiveness would have been readily resolved through counting hands. There is no reason that a split vote would not lead to a minority’s refusal to accept the outcome, leading just as readily as acclamation to stasis. Finally, as we shall see in a moment, the ballot was not introduced first in large bodies, in which the immediate consequences of division might have been large-scale violence. Instead, it was used to resolve internal disputes among aristocrats. It is surely true that the relative difficulty of counting heads in a large rather than small body may partially explain its emergence in councils rather than assemblies. Yet given the remarkable level of technical organization among individuals in other mass settings—notably, the hoplite phalanx—it is hard to imagine that balloting would have constituted an insurmountable obstacle for the archaic Greeks.

Even as early as Homer, there is some evidence that the later emergence of the vote in councils rather than assemblies may be attributable to the epistemic superiority of the members of the council. Recent work by Deborah Beck highlights this point. First, Homer presents speakers in councils and in assemblies differently. The example of Nestor in *The Iliad* is illustrative of this.

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9 Glotz 1929, p. 56. Further, Tsopanakis (1954) holds that the evidence that Homer notes that certain matters were decided unanimously, or with the members in complete accord, in fact implies that dissent was not just possible but frequent.

10 Loraux (1997, p. 101), holds also that in the case of equal division, the Greeks believed that it would be the worse opinion that would prevail and thus longed for unanimity.

11 Cartledge 2007, p. 166.

point. When Nestor speaks to the council—a body of *gerontas*, regarded as, if not old, then wise men—he is identified as “Nestor, whose advice had shown best before this.”

Compare this description with how Nestor is portrayed when he speaks to the assembly: “Nestor, he who ruled as a king in Sandy Pylos.” Note here that whereas the salient feature of Nestor as a speaker in a council is his capacity to give good advice, his authoritativeness is what is highlighted in the assembly.

Second, the response of council members to speakers differs from the response of assemblies. In a council, the standard response is “so he spoke, and the word he spoke was pleasing to all of them.” In contrast, Beck notes that the formulaic response of an assembly to a presentation is “and they were stricken to silence,” and then after another person has taken his turn, the group responds positively: “they listened hard to him, and obeyed him.” Whereas an assembly obeys, a council considers whether or not the argument is pleasing. Both are acclamatory, but the faculty of judgment is more strongly emphasized in the council than in the assembly. Thus, in “wise councils,” the speaker advises and the members listen reflectively. In assemblies, comprised of ordinary soldiers, the speaker offers an authoritative statement, which is obeyed passively by the assembly. Both are implicitly consensual—again, no vote is taken—but the council suggests the exercise of judgment, whereas the assembly’s response is one of awe-struck submission.

Finally, the famous judicial scene on the shield of Achilles also emphasizes the role of elders in giving their verdicts in a suit over the murder of a relative, with a responsive crowd before them:

The crowd cheered on both, they took both sides,
But heralds held them back as the city elders sat
On polished stone benches, forming the sacred circle,
Grasping in hand the staffs of clear-voiced heralds,
And each leapt to his feet to plead the case in turn.
Two bars of solid gold shone on the ground before them,
A prize for the judge who’d speak the straightest verdict.

While the crowd cheers, the elders are physically set apart, their dignity as judges represented through their placement on stone benches and their orderliness in rendering their individual verdicts. Such a model of judgment is echoed in the *gerousia* of archaic Sparta and the *areopagus* of Athens.

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15 Beck 2006, ch. 5; pace Finley (1979, p. 123), who argues that the council consists in authoritativeness rather than judgment. See also Borgeaud (1887, p. 7), arguing that in the ancient Homeric assembly the people did not so much vote as, without deliberation, shout or murmur their support for the proposals presented to them by those in positions of authority.
II. THE ORIGINS OF COUNTING VOTES IN ARCHAIC GREECE

The Spartan gerousia (council of elders) has generally been taken to be one of the first bodies in which the vote was introduced.\(^{18}\) Although the dating of the gerousia and its powers relative to the apella (assembly) are both matters of serious contention, that the gerousia rendered decisions through the vote is relatively well established. The gerousia was not itself chosen by vote. Lycurgus, Plutarch reports, appointed the first gerousia, but he also prescribed a procedure by which the most outstanding men over the age of 60 would be elected as members. The people would gather in the assembly, and a small body of judges would be shut in a nearby room, close enough to hear the cries of the assembly (these cries were the normal decision-making procedure in the assembly, Plutarch writes). In an order determined by lot, the candidates for the gerousia would pass through the assembly, greeted by the shouts of the crowd; the judges would evaluate which candidates had received the loudest shouts, and those candidates would be elected.\(^{19}\) (Aristotle denigrated this procedure as puerile.\(^{20}\)) Note that the idea of expressly voting among multiple candidates—and the concept of election more generally—here retains its acclamatory character: the outcome is collective, or “clumped,” rather than rendered by counting individual votes.

Yet though the gerousia was chosen by an acclamatory voice vote, its decisions do not seem to have been made by such a mechanism. It is believed instead that aggregation may have originated in the gerousia, with its votes governed by majority rule.\(^{21}\) If the gerousia is likely one of the very first, if not the first, locus of political decision-making by counting votes, why might it have been introduced in this context? Here, I wish to suggest that voting emerged not in response to the threat of dissension—in which case we might have expected it to originate in the apella—but because of the individual merit of the members comprising the gerousia.

In selecting the gerontes (councilmen), Plutarch muses about the competition that there must have been to determine “who of many wise and good was wisest and best, and fittest to be entrusted for ever after, as the reward of his merits, with

\(^{18}\)See in particular: Larsen 1949; Staveley 1972; Tsopanakis 1954, p. 44; Cartledge 2001, p. 35, by implication.

\(^{19}\)Plutarch 2001b, 26.1–3, pp. 75–6.

\(^{20}\)Aristotle 1995a, II.9, 1271a10, p. 71.

\(^{21}\)What evidence do we have that votes in the gerousia were aggregated? Unfortunately, the two critical pieces of support are considerably later: the trial of King Pausanias in 403 BC, and the events, likely dating to the mid-third century, described in Plutarch’s Agis (2001a, 9–11, pp. 317–31). Although it is difficult to draw inferences from the fifth and third century, Cartledge (2001, p. 35) argues that Sparta’s archaic period was also its “classical epoch.” The former case consists in a vote by a court consisting of the 28 gerontes, the five ephors, and the other king besides Pausanias; the verdict for acquittal was 14 gerontes and five ephors against the other 14 gerontes and the king (Pausanias 1918, 3.5.2). The second case also describes a split among the gerousia, in which a decree is rejected by the gerousia with a one-vote majority (Plutarch 2001a, 11.1, p. 324). Finally, a slightly more ambiguous passage from Aristotle in the Politics (1995a, II.11, 1273a2–3, pp. 77–8) seems to suggest that if the king and elders concur, they can decide whether or not to submit an issue to the assembly, whereas in case of disagreement, the assembly can address the issue.
the supreme authority of the commonwealth, and with power over the lives, franchises, and higher interests of all his countrymen.” Further, the composition of the gerousia suggests that each individual member might have had particular wisdom—Staveley refers to their “dignity,” Forrest to their “prestige”—that enabled each one to have special competence, and thus an individual “voice” worth hearing (perhaps literally in the form of deliberation, perhaps figuratively in the form of the vote).

Note also—though here we are on more controversial ground—the role of the gerousia in providing a corrective to the apella. The “Great Rhetra,” the Spartan constitutional document ascribed to Lycurgus, prescribes only that the 28 elders and two kings, acting collectively as the gerousia, should put proposals before the assembly, which is to decide. The question of the relative power of the damos (the people qua Spartan citizens) to alter the proposals put before it need not concern us. Instead, let us turn to the “rider” (which we can accept, with most modern scholars, as part of the original text): “if the damos speaks crookedly, the elders and kings are to be removers.” What matters for us here is simply that the reversal was on the grounds of an incorrect decision, at least from the perspective of the gerousia and kings. As long as crookedly refers to the idea that a choice was made incorrectly, and that the gerousia (and kings) had some power to check the decision, this suggests that the function of the gerousia is to provide good judgment. There may well have been disagreements, and voting no doubt was designed as a means of managing conflict in some sense. But what voting would have offered that shouting did not was to enable each geron to render his verdict on a given matter. Why would such power be of importance? To count votes is to implicitly affirm the weight of each individual’s judgment on a matter. Whereas the masses’ judgment could be shouted, the members of the gerousia deserved to be counted individually.

The Athenian areopagus is a second possible source for the origin of counting votes, though there is scant evidence. Even the function of the areopagus prior to Solon—whether it served as a council or as a homicide court—remains unresolved. A key source is the Eumenides, in which Athena establishes the

\[\text{Plutarch 2001b, 26.1, p. 75.}\]
\[\text{See respectively Staveley 1972, p. 30 and Forrest 1980, p. 46.}\]
\[\text{Plutarch 2001b, 6.1, pp. 57–8.}\]
\[\text{Though see Ogden 1997, p. 101.}\]
\[\text{Cartledge 2001, p. 29.}\]
\[\text{Staveley (1972) held that because the list of eponymous archons dates to 681 BC, the establishment of a formal aristocratic Council that voted should be dated at Athens and Sparta to the latter half of the eighth century. Larsen (1949) argues that either in electing magistrates or in functioning as a law court, formal votes must have been taken. Yet Larsen gives us little reason to think that formal votes were required, as opposed to acclamation, in the resolution of these sorts of matters in particular.}\]
\[\text{The primary schism surrounds the question of whether Aristotle’s Constitution of Athens is dispositive with respect to the powers of the pre-Solonian areopagus. (Aristotle 1996, III.6, p. 212). Though most scholars have held that the areopagus originally functioned as council to the king and then emerged as the major political body in its own right, a few, most notably Wallace (1989), regard the account offered in the Constitution of Athens as spurious, and argue that the areopagus was from inception a homicide court.}\]
areopagus to decide the verdict between the Furies and Orestes; if the vote is equal, Athena declares that Orestes will win. Apollo reminds: “Shake out the lots and count them fairly, friends. Honor justice. An error in judgment now can mean disaster. The cast of a single lot restores a house to greatness,” and the vote, once counted, is in fact equal. If the areopagus is indeed a key institution for the origins of counting votes, it is worth noting that either possible institutional role—homicide court or council—is a paradigmatic example of a body whose function is to exercise judgment. The composition of the body is suggestive on this score. At least in later days the members of the areopagus were ex-archons, chosen from the Eupatridai, but in general they are taken to always have been leading men. This is the sort of circumstance under which we would expect to encounter voting: members with a degree of dignity or standing and a view that they individually possessed a strong faculty of judgment. Their views ought not to be “clumped” together, either through acclamation or through the informal mechanism of “estimating votes” (which we shall encounter in a moment): these are the actors not only whose independence of judgment, but whose independent judgment of an unusually high quality ought to be counted rather than clumped. Situating the origin of counting of votes with the Spartan gerousia and the Athenian areopagus highlights the fact that having one’s vote count is a marker of distinction, one that was only expanded to the “mass” in democratic Athens.

III. COUNTING V. ESTIMATING IN ATHENS

In classical Athens, systems of counting and estimation largely displaced acclamatory decision procedures. There was still, as will be discussed shortly, a role for shouts and murmurs in the form of the thorubos (clamor, or tumult) of the crowds in the assembly (ekklesia) and the jury courts (dikasteria). But voting, rather than acclamation, constituted the decision mechanism in the classical Athenian jury and assembly.

Athenian democracy was predicated on the belief that the status of being a citizen conferred a certain epistemic dignity. In other words, to be a citizen meant that one was capable of exercising the faculty of judgment sufficiently well to serve in political life. This is indeed closely reminiscent of Aristotle’s account of a citizen as “one who is entitled to share in deliberative or judicial office.” But it is not fanciful to think that the Athenian conception of citizenship was akin to this view. Citizenship was a matter of desert, not simply of descent: as has frequently been noted, one’s citizenship could be scrutinized and even revoked for

29 Allen 2000, p. 20.
30 In his brilliant recent book, Democracy and Knowledge, Ober (2008, p. 162) elegantly describes the way in which Athenian democracy considered “[e]ach juryman and assemblyman as both an individual agent capable of learning and as a node in an extensive social network that was also a network of knowledge.”
31 Aristotle 1995a, III.1, 1275b15–20, p. 87.
failure to fulfill one’s duties. Further, as Ober has suggested, the fifth century witnessed the democratization of both *eugeneia* (high birth) and *kalokagathia* (imperfectly translated, beauty-and-goodness). As such, there was no need to differentiate the population according to the criterion of judgment. For the Athenians, the concept of *bo boulomenos*—any ordinary person who wished could participate—was of central importance. Such an idea suggests a high level of confidence in the political judgment of the average person—that is, the sort of judgment that merited being counted individually. While acknowledging the ongoing presence of an “elite,” if we might believe that the citizen members of these various bodies were broadly, by mid-fifth century, indistinguishable on epistemic grounds, how else might we explain the choice to count or to estimate in Athenian institutions?

The primary responsibility of the jurors in the people’s courts (*dikasteria*) was to hear those private suits (*dikai*) that were not heard by an arbiter and public prosecutions (*graphai*). The people’s courts—typically held to be the quintessential democratic institution—used ballots in the form of bronze disks, which were counted. In contrast, most votes of the *ekklesia* (assembly) and the *boule* (council) conducted by a hand-count, *cheirotonia*, which was always estimated. The use of estimation extends both to the primary responsibilities of the assembly—the election of magistrates, the establishment of treaties, and the ratification of legislation—and to the primary business of the Council of 500, notably setting the agenda for the Assembly, including the drafting of legislation. According to the *Constitution of the Athenians* (*Athenaion Politeia*), at least in the fourth century, nine chairmen (*proedroi*) were to “judge” or “assess” or even “estimate” (*krinein*) the vote. However, the assembly did not always vote via *cheirotonia*. In some cases in which an individual’s status was at stake—considerations of ostracism, *adeia* (immunity), and the conferral of citizen rights—the *ekklesia kyria* (principal assembly) seems to have used ballots, which were counted. When conducting cases of *eisangelia* (public prosecution for political malfeasance), the *boule* voted first with ballots rather than hands (and secondarily with hands to decide on the penalty), and for internal votes of confidence, they first used a system of olive leaves (*ekphyllophoria*) and then ballots. Thus, when the assembly and council conducted their primary legislative

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33As Bernard Manin (1997, pp. 15–6) has argued, this concept helps to explain the support for lotteries rather than election as the means by which most offices would be filled in Athens. Such an argument may also indicate—as Allen (2000, p. 44) implies—that there was a suspicion of *voting* as undemocratic. This, however, is hard to substantiate given the ubiquity of voting, if not of aggregation as such, in Athens.
34I am indebted to Hansen (1991) for this discussion. Note that both Hansen and Staveley (1972) hold that because *psephismata* derives from “psephos” (pebble), it seems that the Assembly might at some point have voted in the same way as the courts.
36Aristotle 1996, 44.3, p. 245.
and electoral functions, votes were estimated, and in most cases in which individuals were subject to judgment, votes were counted.

Let us consider possible alternative explanations for the origin of the counted vote. Was the critical issue determining whether the vote would be counted or “clumped” the question of whether an individual’s fate was at stake? In cases such as the “vote on the magistrates,” in which any magistrate could be subject to a vote of no confidence and removed from office, the ekklesia kyria used cheirotonia, suggesting that an individual’s status as such did not generate the choice to vote. A second possible explanation might be that the estimation of the hand-count was introduced for the sake of efficiency. Just as one might have thought that the reason for the introduction of vote-counting in councils rather than assemblies was a consequence of their relative size, one might also assume that the estimation of the hand-count was introduced on practical grounds, a necessary move given the size of the body (attendance at the assembly numbered around 6,000). Along these lines, Staveley holds that the “multiplicity” of decisions rendered by the ekklesia encouraged the use of estimation rather than aggregation. However, the fact that in some cases the desire for an accurate count trumped efficiency concerns demonstrates that the size of the body did not inhibit counting where deemed necessary. The number of jurors in the court could be over 1501, and the vote would still be counted. What of the hypothesis that counting might have been used instead of estimation in tight votes? The decision to count jury votes is independent of the margin of victory; later inscriptions from the Greek world provide the actual numbers of votes even when the decision is unanimous or very nearly so.

Another possible explanation is offered by Mogens Hansen, who suggests that counting of votes was “doubtless” a mechanism to ensure that quorum was reached. But since quorum requirements only pertain to a restrictive set of assembly decisions (those for which the ekklesia kyria used ballots), and does not make sense in the context of a jury for which a particular size is set, it cannot explain the choice to count votes as such. The question, “How many counted votes are necessary?” presupposes a positive answer to the question, “Should votes be counted?” In other words, the decision to count votes for certain matters is prior to the decision that a particular number of individuals ought to be present for such votes. Further, although there are different possible explanations for the choice of quorum rules—to ensure that a minority bloc of citizens could not enact their will because of low attendance, for instance—the explanation for the use of quorum rules, at least in this context, likely tracks the explanation for vote-counting. If we believe that the Athenians counted votes as a means of recognizing the epistemic capacity of individual citizens, we might also think that

40 Vermeule 2007, ch. 4.
the reason for specifying a number of citizens might be to ensure that an adequate number of such judgments had been brought to bear on a difficult matter to give us confidence in the outcome. Aristotle’s famous “Doctrine of the Wisdom of the Multitude” passage (as Jeremy Waldron has termed it\(^{41}\)) hints at such an account:

For when there are many, each has his share of goodness and practical wisdom; and, when all meet together, the people may thus become like a single person, who, as he has many feet, many hands, and many senses, may also have many qualities of character and intelligence. This is the reason why the many are also better judges of music and the writings of poets: some appreciate one part, some another, and all together appreciate all.\(^{42}\)

A system of counting considers each voter’s ballot discretely. Following a process of counting each vote separately, each individual could, in principle, identify the role she performed in a decision, whether as a member of a majority or minority. This, it should be emphasized, does not mean that the citizen in a body even the size of the smallest ancient jury could expect to be decisive. But it does mean that he could know he had played some role—and an equal one, at that—in generating the outcome. There is, of course, a substantial literature in political science seeking to explain the supposed paradox of participating in a vote in which one cannot rationally expect to instrumentally affect the outcome; a major response to the paradox is that the benefits to the voter in a large body, because she cannot expect to be decisive, are primarily expressive.\(^{43}\) One might believe, then, that participating in an acclamatory process would confer at least the same benefits as casting a ballot, if not greater, given the excitement of shouting or hand-waving and the likelihood that one will be seen performing a socially beneficial act. But acclamation carries a risk that a fair system of voting does not: the chance that one’s vote will be entirely neglected, simply because others were much taller or louder.

In the jury system, the presence of a minority vote was, as we have already seen, recorded—for instance, Socrates in *Apology* expresses his surprise at the closeness of the vote, and that a mere 30 votes would have tipped the balance.\(^{44}\) A convicted defendant could take some cold comfort in the fact that a minority believed his account. The clear, enumerated presence of such a minority, further, may have had little effect on the enforcement of the outcome. The decentralized nature of punishment in Athens—private citizens did most of the work of implementation alongside magistrates—meant that collective action was not even necessary to enforce penalties.\(^{45}\) To estimate in a trial would have left both jurors and defendant to wonder about the accuracy of the outcome, leaving the fairness of the outcome subject to challenge on procedural grounds. In contrast, this very

\(^{41}\)Waldron 1995, p. 564.


\(^{43}\)The *locus classicus* for both the discussion of the paradox and the expressive theory is Downs (1957, the latter at p. 48). See also: Hardin 1982; Brennan and Lomasky 1993; Schuessler 2000.

\(^{44}\)Plato 1975, 36a, p. 37.

\(^{45}\)See Allen 2000, pp. 201–2, and *passim*. 
ambiguity about the proportion of the members in favor of a decision may be an affirmative benefit of a system of *cheirotonia*. Those in charge of assessing the vote can take the climate of the body as a whole without acknowledging the precise weight of the opposition. In an assembly setting, this may be desirable, especially if the matter under consideration requires the coordination or compliance of thousands of citizens, as would adherence to a new law, or waging war. The presence of a formally counted minority could threaten the view that the outcome emerged from the community as a whole, and could lead to ongoing lobbying to reverse the decision.

Aggregation, by acknowledging the weight of each individual’s vote on both sides of a decision, thus signals respect for the judgments of the distinct individuals who participated in the decision. Estimation seeks instead to assess the dominant view of the crowd *qua* totality, thus affirming the communal nature of the endeavor. The risk associated with estimation is that particular individuals—especially those in the minority—may not believe that their specific vote was counted; further, they may feel that the full weight of the opposition was not sufficiently acknowledged. Even the winners of an estimated vote may wish to know that their *individual* votes constituted part of the margin of victory, rather than having been swept into a pile of faceless supporters. Estimation can give voters no such guarantees, and may, like acclamation, fail to signal the respect for individual judgment conveyed by aggregation.

**IV. SECRECY AND THE VOTE**

Another important objection to the explanation offered here may be raised at this point: the ostensible distinction between estimation and aggregation, it may be argued, is in fact dependent upon the publicity inherent in *cheirotonia* and the secrecy of the ballot. However, at least in the early part of the fifth century, the voter would place the ballot in one of two urns, each representing guilt or innocence, and so the voter’s decision was obvious to all. This suggests that the decision to count votes in the classical world was at least initially independent of the desire for secrecy. Further, in the case of *cheirotonia*, a practical reason for

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46 In this respect, aggregation is compatible with Thomas Christiano’s argument that the principle of “public equality,” which constitutes the moral basis of democratic decision-making, requires that “institutions . . . be structured so that all can see that they are being treated as equals” (Christiano 2008, p. 2).

47 This may indeed leave room for the judges to distort the outcome, as Aeschines lamented. Yet there is little reason to believe, as we today know all too well, that vote-counting is immune from manipulation. Aeschines, *Against Ctesiphon* (3.3), as cited in Hansen 1991, p. 210.

48 See Boegehold 1963, p. 367.

49 Boegehold (1963, p. 370) suggests that “early in the fifth century in the minds of some men who were living in Athens, viz. the painters, there could exist simultaneously and interdependently the notions of *psephoi*, a judicial decision, and a lack of secrecy.” By the time Aeschylus wrote the *Eumenides*, the vote was secret; as ascribed to the *areopagus* by Aeschylus, secret ballots received the imprimatur of both ancient origins and of being a mechanism of the wise. Aeschylus 1977, 725–68, pp. 263–5.
estimation might have been the difficulty of counting hands in a body comprised of people of different physical heights and levels of enthusiasm. Yet this does not fully explain the choice to estimate. Despite the logistical difficulties, in principle hands could have been counted, particularly if, as is sometimes supposed, the citizens were organized into some set of groupings (perhaps tribal). In addition, since ballots even once secret were sorted into different urns, in many cases the outcome could have been estimated, but were always counted.

The presence of spectators (boi periestikotes, in Latin the corona) to the jury—a mix of elite members (there in part to hone rhetorical skills), citizens under age 30, prospective jurors, other citizens in the agora and sometimes foreigners—sheds light on this issue. At least some of the bystanders likely knew a litigant or had some other reason for caring about the outcome; litigants tried to fill the corona with their family and friends. However, a concern about the pressure of bystanders may also have generated the norm preventing spectators to the assembly from observing votes concerning citizenship. Lanni calls attention to a passage sometimes attributed to Demosthenes on this point: “The law orders the prytaneis to set out the voting urns and to give ballots to the citizens, who enter before foreigners come in, and the barriers are taken away to insure that each citizen may be free to make an independent judgment concerning the man on whom he is about to confer citizenship.”

Given the potential influence of bystanders, and perhaps because of thorubos even among jurors, it may have been thought that public voting on judicial verdicts could serve a sinister purpose (though if thorubos constituted a public activity among jurors, however, one might reasonably ask whether secrecy in judgment was in fact prized). The risk was that jurors or spectators with a stake in the outcome would seek to distort others’ judgments through the use of bribes or threats during the moment of the vote. Whereas in matters concerning all members of a society, such as warfare or legislation, every individual would have to live with the consequences of a bad decision, a vote on a particular individual’s status in the community would affect members of the society unequally, leaving some with a interest in influencing the verdict regardless of the truth or fairness of the charge. Note again that the relevant concern was not that the status of a particular individual was under consideration (since elections and even some prosecutions of magistracies were conducted by cheirotonia), but perhaps that an individual’s liberty, and even life, was at stake. Although all citizens would have

52 From a perspective distinctly unflattering to jurors, Aristotle (1995b) emphasized this in distinguishing between speeches in the assembly and in the jury-court in the Rhetoric: “In a political debate the man who is forming a judgment is making a decision about his own vital interests. There is no need, therefore, to prove anything except that the facts are what the supporter of a measure maintain they are. In forensic oratory this is not enough; to conciliate the listener is what pays here. It is other people’s affairs that are to be decided, so that the judges, intent on their own satisfaction and listening with partiality, surrender themselves to the disputants instead of judging between them”. Aristotle, Rhetoric, 1.1, 1354b29–1355a1, p. 2153.
been affected by the selection of an incompetent magistrate, for instance, a smaller proportion of the jury would have a specific interest in the verdict of a given case, and the unequal stake in the verdict would increase the chance of coercion among them. The complicated procedure by which jurors were randomly assigned to courtrooms also suggests concern about the risk of bribery.

Further, the jurors may be presumed to have relatively equal information: they have each heard the same presentations, and no juror, at least in principle, should be more likely than another to reach a superior conclusion on the truth of the matter. The absence of deliberation before voting in Athenian jury trials affirms this account: there is no need to share information or persuade others when each has equal capability to render a verdict independently. Thus, secret ballot may have emerged in Athens to preserve independent judgments under conditions of equal information but unequal stake. The use of private ostraka in assembly decisions of ostracism may be on similar grounds. Each citizen had equal opportunity to evaluate a political leader and thus presumably equal capacity to judge, though certain citizens might well have had private interests in retaining or excluding a given person.

Secret ballot is so nearly ubiquitous today that it may seem that the decision to retain the public form of cheirotonia is surprising. Public show of hands preserves the ability to alter votes in light of others’ views—both through deliberation and even at the moment of voting—and may have been one of the attractive features of cheirotonia and of the system of estimation. This is because the public mechanism is not strictly simultaneous, enabling, as Jon Elster has written, individuals to have some causal impact on each other. Although in principle, once the question is posed, those in support or opposed would raise their hands at the same time, the pause to allow the assessors to estimate the outcome would have permitted some to hesitate and then to raise their hands to accord with others’ votes. Each member could gain a sense of where he stood relative to others on a given matter: he could recognize when he was in the vast minority and alter his vote on the spot, or turn if undecided to those whom he considered knowledgeable for guidance. Whereas one might expect that jurors would have equal access to information necessary to render a verdict, there was little reason to believe that the capacity to judge the best course of action would have been equally distributed among members of the assembly or council.

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53 It seems jurors in Athens could not be excluded on the grounds of partiality; a day’s jury panel was selected without prior knowledge of which cases the jury would judge. According to Hansen (1991, pp. 197–8), daily selection by lot was likely introduced as a mechanism of control following bribery scandals in the late fifth and early fourth century.

54 Lanni 2006, p. 38.

55 See Ober (2008, pp. 180–1) for an ingenious discussion of ostracism as a means of aggregating social information about the probability that someone would constitute a threat to the city, akin in some respects to a prediction market.

56 See Elster 2007.
although, as suggested, at least in principle each would have had an equal stake in the outcome. Aristotle held that the sort of political oratory necessary in the assembly was far more difficult than oratory in the courts because of the need in the former to address contingent future events, whereas the latter pertains to “what is or is not now true.”\footnote{Aristotle 1995b, III.17, 1418a1–5 and 1418a21–25, p. 2265.} Thus, as in the creation of legislation, in cases in which there may have been unequal information but equal stake, the vote may have been public.

The members’ susceptibility to public pressure thus had epistemic advantages, insofar as one could defer to local experts at the moment of the vote, and perhaps also moral benefits. As Geoffrey Brennan and Philip Pettit have argued, the desire for social acceptance might have generated “discursive pressure” on individuals to vote in a way that could be defensible to others in terms of the common good. There are of course costs associated with open voting, notably the risks, as Brennan and Pettit discuss, of bribery, blackmail, or intimidation.\footnote{Brennan and Pettit 1990, p. 329.} Yet given the roughly equal stake each citizen has in the outcome, the incentive to coerce others will be mitigated. Although it is surely true that the bite of a given piece of legislation or the obligation to go to war may fall disproportionately on some members, the general nature of these norms suggests that the consequences will be at a minimum more equally distributed than they would be in the verdict of a jury trial, for instance. The more serious problem of open voting, that of threats, is more likely to arise in cases in which a particular citizen or group has a special or personal stake in a matter, as in a trial or an ostracism or a citizenship hearing. The incentive to bribe will likely be greater in deciding an individual case than the creation of a general norm or widespread obligation to which all will be bound. Further, the public nature of the cheirotonia may ward against intimidation, as those seeking to coerce may easily be exposed for their behavior. At least in cases in which there was disagreement about the matter at hand, it is reasonable to expect that the coercer would face social opprobrium.

V. ACCLAMATION AND THORUBOS

Thorubos, as a source of pressure, could have generated a desire for a secret ballot; however, the fact that thorubos was not proscribed (perhaps, again, even among the jurors) could indicate that the desire to ensure independent judgment was at least partially attenuated.\footnote{Bers (1985, pp. 9–10) has held that thorubos constituted a public dimension of jury behavior, suggesting even that litigants called upon the jurors to serve as witnesses to each other. Even if this was purely a rhetorical strategy, however, it is possible that the absence of formal deliberation among the jurors did not preclude heckling or private conversations among those seated near each other.}

Although, as suggested, mechanisms of aggregation largely replaced those of acclamation in ancient Athens, the tumult in assemblies and juries nonetheless constituted a key feature of the
decision-making context. As we have seen, acclamatory devices in the archaic world were relegated to the masses, the members of whom were not considered to possess judgments worth aggregating.

Plato in general characterized *thorubos* as constituting evidence of the deficiencies of democratic rule on these very grounds. The Athenian Stranger in the *Laws* criticizes the use of *thorubos* and secret ballot alike in the jury: “[S]ometimes we find in a state that the juries are useless, dumb things; the individual jurymen keep their opinions a mystery known only to themselves and give their decisions by secret ballot. It’s even more serious when so far from keeping silent when they hear a case they make a tremendous disturbance as though they were in a theatre, and hurl shouts of applause or disapproval at the speaker on either side in turn.” Yet Socrates in the *Protagoras* presents the use of *thorubos* among the Athenians in a less negative light, suggesting that the Athenians respect expertise in technical matters if not in state policy: “But if anyone else tries to give advice, whom they don’t regard as an expert, no matter how handsome or wealthy or well-born he is, they still will have none of him, but jeer at him and create an uproar, until either the would-be speaker is shouted down and gives up of his own accord, or else the police drag him away or put him out on the order of the presidents.”

To be sure, the vision of the Athenians hounding a speaker out of the Assembly is not entirely attractive. In the context of the Platonic linkage of knowledge and political rule, though, it is hard to view this passage as an unmitigated criticism of *thorubos*; the willingness of Athenians to let *ho boulomenos* advise on matters of the state is not praised by Plato’s Socrates, of course.

As Adriaan Lanni has argued, in the absence of formal accountability mechanisms for jurors, *thorubos* helped to constitute a set of implicit social sanctions for juries thought to have rendered wrong verdicts. Such argument is supported, for instance, by Demosthenes:

> You will soon leave the court, and the spectators, both foreigners and citizens, will be watching, and looking at each man as he passes to detect by their look which ones have voted to acquit. What will you say, gentlemen of the jury, if you walk out having betrayed the law? With what expression will you face them?

The bystanders engaged in *thorubos* and heckling as a means of accountability, as Lanni suggests: “it insured that the jurors could not make collective judgments without the immediate knowledge of a section of the community.” So on this account, *thorubos* was a means of ensuring collective, rather than individual, responsibility. It constituted a public sanction, a way of preserving the social
benefits of an acclamatory system, in the context of an aggregative system reflecting the epistemic dignity of its individual members.

Likewise, *thorubos* may have ensured a role for mass participation in the formation of views about issues confronting the assembly. As Robert Wallace has suggested, the Athenians did not feel obliged to let their orators speak as long as they chose; in the absence of time limits for speeches and the fact that an assembly meeting could only last a day, *thorubos* constituted a means of ensuring that all those who wished could have their say. More significantly, the obligation to listen silently to speakers was considered a hallmark of tyranny. Given that the vast majority of speakers at the assembly would have been expert orators, *thorubos* was the only form of political speech many of the participants would deploy at the assembly. Thus *thorubos* was a critical form of democratic participation in deliberation, serving as an acclamatory means of constructing public opinion. Moreover, *thorubos* may also have functioned as an accountability mechanism, a way of controlling the behavior and speech of orators as unelected politicians and thus not susceptible to most of the formal legal sanctions to which those chosen for office were subjected.

In sum, the acclamatory mechanism of *thorubos* helped to shape the views of citizens prior to decision-making, and to provide a means of public control over those filling institutional positions not subject to formal accountability procedures or to reelection. Bringing *thorubos* together with the estimation of *cheirotonia*, acclamatory devices constituted the key means by which Athens as a political community could speak, as it were, univocally. By identifying the number of votes in the minority, there is no fiction of consensus in the community: the verdict is simply the judgment of the majority of the competent citizens comprising the jury. Though *cheirotonia* is a mechanism by which individuals wave their hands, and a rough majority is determined, the absence of an identifiable and recordable minority and majority position helped to convey the collective nature of the decision. Whereas the assessment of acclamatory shouts or the estimation of hand-waves seek to capture only the imprecise metric of preponderance, a threshold emphasizes that a specific number of individual votes is necessary for passage.

Finally, the physicality of *cheirotonia*, especially combined with the vocal expressions of *thorubos* in the assembly, may also have contributed to a level of excitement (if not necessarily passion), perhaps helping to convey the sense of a communal outcome. Thucydides describes the way in which the acclamatory mechanisms of the Spartans in their assembly (which endured into the classical period) was manipulated for these purposes: the ephor Stheneliadas pretended

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66 Ibid., p. 226.
that he could not tell which side—for or against war—was louder, “because he wanted to make them show their opinions openly and so make them all the more enthusiastic for war,” and then had them physically separated, so that the breadth of support could be demonstrated.\(^69\) Even once the capacity for good judgment was considered to be a faculty possessed by all native freeborn men, democratic Athens did not exclusively turn to aggregative mechanisms. Instead, it relied on acclamatory mechanisms in contexts in which demonstrating unity would have been of paramount importance.

VI. CONCLUSION

Aggregation has a primary position in democratic theory as the ultimate decision-making mechanism for collective bodies, though both its potential for irrationality (because of the ostensible risk of cycling) and its unreasonableness (because the vote does not need to be publicly justifiable) have been criticized in recent decades. Further, it seems that there is nothing intrinsically democratic about vote-counting: any plural body, however hierarchical or elitist, may implement it, and, indeed, the evidence strongly suggests that it originated in aristocratic bodies such as the *gerousia* and *areopagus*. But the distinctiveness and appeal of counting comes to the fore once contrasted with acclamation: aggregation presupposes a positive view of the capacity for individual judgment among members, and in that sense confers dignity upon them. However, this very independence—that collective decisions were merely the summation of particular individual judgments—was a liability in contexts in which the Athenians wanted to convey that a decision was *theirs*. The variety of acclamatory mechanisms described here—the shouts and murmurs of Homeric assemblies, the *viva voce* mechanisms of Sparta, and the estimations of hands in Athens—are all means by which a collective body, qua mass, expresses its approval or disapproval as one. This could and did take an anti-democratic form: the restriction of vote to aristocratic bodies in archaic Athens, the use of acclamation in the oligarchic Spartan assembly, and the view that *thorubos* constituted mob behavior are all examples of this perspective. But the use of *cheirotonia* and a more sympathetic understanding of *thorubos* underscore the fact that waving and shouting have their place in democratic decision-making.

In recent years, scholars of the ancient world such as Josiah Ober have sought to affirm an epistemic account of the origins of democratic institutions.\(^70\) Although aggregation may constitute a means of accumulating and sorting the dispersed knowledge of a *polis* on such an account, the decision to count votes has not typically been held to be an epistemic innovation. Yet respect for the epistemic quality of individual judgments is both presupposed and affirmed by

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\(^{69}\)Thucydides 1972, I.87, pp. 86–7.

\(^{70}\)For instance, Kleisthenes’ creation of the Council of 500, on Ober’s (2005, p. 38) account, served to pool the knowledge of the various demes.
the decision to count votes. Nonetheless the choice between aggregation and acclamation is not purely epistemic: it also must depend upon the extent to which we want to imagine our democracy to be conceptualized strictly as a means of coordinating and assessing the judgments of individual citizens. Acclamation enables us to decide and to act *qua* community, rather than via appeal to the majority of the citizens who comprise it. As such, acclamation retains no small appeal.

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