

ALEXANDER'S DECISION-MAKING AS HISTORICAL PROBLEM

JOHN MA

Der junge Alexander eroberte Indien.

Er allein?

Cäsar schlug die Gallier.

Hatte er nicht wenigstens einen Koch bei sich? [...]

So viele Berichte. So viele Fragen.

B. Brecht, "Fragen eines lesenden Arbeiters"

Alexander's jump

In early 325 BCE, Alexander was shot in the chest. The arrow, loosed at close range from an Indian longbow, penetrated his body armour and nearly killed him. The episode took place at the culmination of his campaign against the Mallian nation in the Panjab: the Mallians were overwhelmed by the multiple columns, speed, and versatility of Alexander's army. A final effort by the Mallian forces breaks and flees to a strongpoint (probably Multan). The next day, the defenders evacuate the outer walls, fall back to the inner redoubt. One half of the army, under Alexander's direct command, forces a potern; the other half of the army is delayed by a snafu involving scaling equipment. At the citadel wall, Alexander seizes one of two ladders available, clambers up with sword and shield, clears the defenders off with sword work, and crosses the parapet to stand on the wall. Three men have followed him up (two high-ranking Macedonians, one NCO). The Royal Guards, the Hypaspists, jostle up the two ladders—which break under the weight. Alexander jumps down into the Mallian-held side. After holding his own hand-to-hand and missile combat, he is hit, the worst of many wounds suffered during a battle- and siege-filled lifetime. He will be shielded by two companions (the NCO dies, shot in the face), and his life saved; the army storms the citadel and slaughters everyone inside.

The episode is best known from the careful account in Arrian, a morceau de bravoure of battle-writing, and a good example of the source-sifting of which Arrian is ostentatiously proud¹. The wounding of Alexander, and its aftermath, are instructive in many ways—Alexander's taste for personal violence, the surprising





^{1.} I thank the Department of Classics at the University of Boulder, Colorado, for the opportunity to give this paper at the Celia Fountain Symposium in Honor of E. Fredricksmeyer; and B. Chrubasik, B. Gray, R. Lane Fox and P. Martzavou for comments. All mistakes remain my responsibility.



picture of the king throwing rocks in combat, the aftermath of emotions and image management by the convalescent Alexander (who makes a point of being seen riding and walking to his tent). Fascinatingly, Arrian, drawing on the account of Ptolemy, purports to transcribe Alexander's thought process, at the moment when he was standing on the wall, shot at from all sides (the neighbouring towers, a mound inside the citadel)².

Alexander was conspicuous by the splendour of his arms and his unusual boldness, and he decided that by remaining on the spot, he would be in danger, without performing any deed of note, but that if he leapt down within the wall, he might scare off the Indians, and if not, and danger were inevitable, he might accomplish great deeds worth hearing by posterity, and he would not die ignobly. Having decided this, he leapt down from the wall into the citadel.

The passage shows Alexander concern with glory—one of the rare statements of such a goal in Arrian. But it also shows rational calculation of possibilities, the thinking-through of consequences, with various outcomes implicit in the two alternatives canvassed (stay on wall OR jump off; jumping off the wall back into the Macedonian-held site did not occur). Bosworth, describes the king as "transported by battle fury", which perhaps is true, but does not preclude rational calculation—or at least, the desire to represent him as rationally calculating, whether Alexander's own self-presentation, his companion's Ptolemy's image of Alexander, or later historiographical constructions. Strikingly, Diodoros preserves a simple note that Alexander did think about the situation, and take a reasoned decision, as he jumped³. It is this process of rational decision-making that I would like to examine, as part of a meditation on the basic question: why did Alexander win?

I aim mostly to look at Alexander at war. Now it is true that a great part of the conquest took place by exploiting the porosity of empire: the conquest involved a triple deconstruction of the Achaimenid formation, first by the turning of imperial structures of control and extraction to support the invading and nomadic army (since the point of extraction was to enable the passage of itinerant army and court by preparing and feeding imperial consumption—as shown by Herodotus, but also by the recently published parchment documents from Baktria), second by using the same techniques of negotiation and bargaining with local elites that the Achaimenid state relied upon (this is visible in Karia, Egypt, Babylonia), and thirdly by undoing the bonds of the dynastic pact, by showing members of the Iranian elite that they had much to win by rallying to the invader. All three strands have been noticed and explored by P. Briant, in a series of articles and in his sum of Achaimenid history⁴. The explanatory power of this analysis does not lie in Alexander's romantic pothos or genius, but in historical context and in documents. But the process of conquest is not only political: negotiation and rallying happen after the violent military successes that characterize all of Alexander's reign and expedition; Alexander had to destroy, systematically, repeatedly, on a massive scale, the opposing means of organized violence. He was very good at it. Can we find a way of talking about this fact as historians, looking at context and evidence? In the striking phrase of





^{2.} Arr. 6.9.5

^{3.} Diod. 17.99.1.

^{4.} P. Briant, Histoire de l'Empire perse de Cyrus à Alexandre, Paris, 1996.



R. Andreotti, in a groundbreaking survey of 1958, which introduces modern study of Alexander, "il profilo più netto è quello del soldato"⁵.

Lapalissades

Alexander the soldier did a lot of winning: the fact has not passed unnoticed. The narrative account is basically one long story of winning; Arrian notes that he did not find aporon, impossible, anything he undertook relating to ta polemika, affairs of war⁶: the precision of the description, its phrasing in terms of finding a way through, suggests that we have here an echo from the account by Ptolemy, a man who lived and fought in the decade-long expedition. Why did Alexander do all this winning? The immediate answer is a *lapalissade*, or a tautology: he won because he had a better army, and because he was a better general. These are threadbare answers; in unpacking them, we run the risk of reinventing the wheel, or worse, rediscovering the need for the wheel in the first place. It is enough to remember five points, in the absence of any Cortés-like overwhelming technological superiority (the fact that the Macedonians had longer spears does not amount to such and advantage, even though the Persians may have wondered about that, if we can trust the detail in Diodoros that they had longer spears and swords prepared before Gaugamela)7: 1. Alexander's army is very big, as far as full-time fighters go; 2. it is constantly topped up with elite fighters from the incredibly dynamic society of fourth-century Macedonia; 3. it is versatile and diverse, including heavy infantry, light infantry, heavy battle-winning cavalry, light cavalry, a siege train, and even ship and pontoon-building specialists; 4. it has a lot of "bottom" (to use the English expression for boxers) or lasting fighting power (visible in big battles like Gaugamela, but also in small engagements like the battle before Sangala, in the land of the Kathaians, where the infantry breaks through two lines of chariots)8, and simply the capacity to win a lot of the local fights it gets into, with strong spear-thrusts to the face; and 5. all battle-fighting systems are coherently integrated. But the last point, of integration and organization, does bring us to the idea of generalship: if Alexander was a better general, how was he a better general, and what does this mean in historical terms? The question is intriguing, in light of the passage which opened this paper, and which shows Alexander's rational decisionmaking processes.

Perhaps he was just very talented—and we could leave it at that. But many people have not wanted to declare "genius" and go home. The question "Why did Alexander win?" has been translated into "What made him a better general?", and been looked at by many people outside of the strict limits of the discipline of history—by people who are concerned with fighting wars and winning battles (or at





^{5.} R. Andreotti, "Il problema di Alessandro Magno nella storiografia dell'ultimo decennio", *Historia*, 1, 1950, pp. 583-600.

^{6.} Arr. 7.15.3.

^{7.} Diod. 17.53.1.

^{8.} Arr. 5.23.1.

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least writing about these activities, hopefully for the eyes of those who undertake them) and by people who are concerned with how organizations, decision-making and leadership interact—namely people who teach management theory. Titles such as "Alexander's art of strategy" or "Leadership secrets of Alexander the Great" abound, and must make up a decent proportion of the production on Alexander; this share intersects with the hero-worship bibliography, and in fact could be considered as a subsection of it, with the added twist of revealing the secrets that you can apply in your own life (litigation, boardroom, lifestyle...). This structural need—to give useful lessons—determines the nature, and the deficiencies, of the genre, which must extol before it analyses: we want usable lessons from genius. Historia Alexandri magistra vitae? As one manager said to me, "Alexander must have had incredible charisma", notes the management guru John Adair in his Effective Leadership Masterclass: What Every Manager Can Learn from the Great Leaders⁹, Professor Manfred Kets de Vriets, who holds the Raul de Vitry d'Avaucourt Chair of Leadership development at INSEAD, tells us that "The major lessons [Alexander] taught us should be applied every day in offices and conference rooms through the world". These lessons are "have a compelling vision and strategy, nurture executive role constellations, model excellence, encourage innovation, manage meaning, encourage followers, invest, consolidate, plan, create mechanisms of organizational governance". David Lonsdale, a lecturer in strategic studies, derives from the story of Alexander such lessons as "control is based upon complex grandstrategic relationships", "Adapt", "There is no substitute for military genius", "Do not blunt your swords in the name of humanity" (an injunction not to go soft—based on the campaigns of terror which Alexander conducted in Afghanistan and NW Pakistan, and which leaves one rather worried)11.

The lessons are distilled in easy nostrums—and who are we to laugh at them? Simon Leys' wonderful novel, *La Mort de Napoléon* (1986), imagines a Napoleon escaping from St Helena, condemned to a life of normalcy because of the death of the double left on the island, before the real emperor can declare himself to he world—and a Napoleon conquering the market of wholesale vegetable distribution in Paris. Alexander's leadership lessons are there to make us help conquer our own private Persian empires. However, one problem with this approach is that it is not very good history. Lonsdale starts from the assumption that "all strategy is eternal" (p. 1) by definition; that exemplifies the need to find usable, and hence decontextualized knowledge. Kets de Vriets claims that one of Alexander's secrets was "tolerance"—"By showing respect for the local traditions, something that the Persians had not done (emphasis in the original), he increased the likelihood that he would be hailed as a liberator and a saviour" (p. 38). As Pierre Briant has shown, and as I summarized earlier, this is not right. The story of the Cyrus Cylinder, now embarked on its world tour, is not that the Persian empire invented human rights, but that it was based on negotiation with local actors.



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^{9.} J. Adair, Effective Leadership Masterclass: What Every Manager Can Learn from the Great Leaders, London, 1997, p. 51.

^{10.} M.F.R. Kets de Vriets, E. Engellau, Are Leaders Born or Are They Made? The case of Alexander the Great, London, 2004.

^{11.} D. Lonsdale, Alexander the Great. Lessons in strategy, London 2007; earlier, Alexander Killer of Men. Alexander and the Macedonian Way of War, London, 2004.



A final example is that of US Army Lt Col. (Retd) Ralph Hayles, who in 1999 ran a consultancy: he drew on his tragic experience in the first Gulf War, when he lead an Apache strike force that was responsible for the death of US forces by friendly fire, and on his knowledge of ancient history:

Mr. Hayles also uses the example of Alexander the Great, who conquered much of the known world in the fourth century BC but was mortally wounded when his back was turned to the enemy as he exhorted his men to keep up with him. "Being the first guy into the fight didn't work for me," Mr. Hayles says, "and in the end it didn't work for Alexander" [...] Mr. Hayles put his principles in play at one of Carolina Restaurant Group's Wendy's franchises. After spending time monitoring the kitchen through several rush hours, he discovered that only the manager and one other worker were entrusted with making french fries. "When the manager was needed elsewhere, he had only one person in the whole place to produce one of the highest-demand products," he says. "When Alexander died, Macedonia soon crumbled, because no one else could lead it," Mr. Hayles told the manager. "If you don't train employees to have your critical skills, this place can fall apart because you're busy fighting on one front when there's trouble somewhere else." The manager soon decided to schedule training in french-fry making for more workers¹².

The point here is not the jumbled ancient history (resembling, perhaps, the Alexander Romance), nor the inevitably bathetic effect of comparison between the french fries and the breakup of Alexander's empire (a cheap shot, this). It is that such stories illustrate the way in which the supposedly practical genre of "Leadership secrets of Alexander the Great" is in fact a literary, or sub-literary genre, which perhaps makes some small contribution in practical terms, but whose real function (I suspect) is to mediate the desires and the identity of the reader, or the participant in the leadership seminar, in terms of imagined greatness: this works in various ways, offer consolation, inspiration, or vicarious dignities (hence the inevitable bathos of using Gaugamela to run your boardroom meeting: in fact, this bathos is confronted and transcended by the genre, if you agree to collaborate with its assumptions). If this analysis is correct, the "practical" essays on Alexander constitute an ethical-aspirational genre, read in airports, in business class seats, and in hotel rooms, a shimmering "reflection of Alexander" which is very interesting but has little to tell us as historians—as little as other reflections such as Plutarch's or Seneca's Alexanders.

Essential for the workings of the ethical genre is the assumption of genius; there lies another problem for the historian. After all, Simon Leys' greengrocer Napoleon conquers the market because of his superior mind and ability. We could, then, explain Alexander's run of successes by his talent at making good decisions—granted all the other points, about the political nature of conquest through bargaining and continuities, and about the size, ability, versatility (etc.) of his army. The narrative in Arrian (the most detailed and best, when all is done and said) can be read as a succession of optimal decisions taken by Alexander. From this narrative of good decisions, it is not difficult to extract a clear idea of how he fought—this is for the "management school" or "war college" Alexander—with a combination of careful planning of great complexity, management of resources and pace, extreme speed, *spoude*, and aggressiveness during action, constant refusal to fit expectation and constant choice to attack the strongest point, very good information flows and reactivity. The battle at the Hydaspes illustrates these points, even if we grant Bosworth's point that





^{12.} Wall Street Journal, March 9, 1999.



Alexander's army was larger and qualitatively better, and hence that the outcome was obvious—the river crossing itself took a great deal of organization, and what modern military historians would call good staff work. A simpler way of saying this is found in Arrian's final judgment on Alexander: he was good at planning and at *prolabein*, getting his blows in first (and also had divine help)¹³.

Ginôskô

However, Arrian also provides a very careful portrayal of Alexander's decisionmaking processes: the dramatic example of Alexander on the wall in the Mallian town is only one example. The standard verb for deciding is not dokei + dative, "it seemed good" (this occurs rarely), but the form egnô. It occurs 36 times in Arrian's history of Alexander's expedition (including the expression apegnô, he decided not to). The verb deserves attention. Ginôskô is a verb of cognition, which literally means "to acknowledge", "to get to know"; strikingly, it also appears in the text of the letter of Alexander to Priene, precisely to describe a decision—when regulating the statuses of Priene and of the surrounding communities, Alexander declares that certain villages are to pay tribute, and that the land is his, χώραν γινώσκω ἐμὴν εἶναι, literally "I acknowledge to be mine" 14. I once wondered about the significance of this verb, in the context of studying how exactly conquest takes place, namely through performative utterances that claim to be a recognition of fact. Here, what matters is the original use of the verb, to describe reasoned decision based on knowledge. Arrian—admittedly uses this verb in the past time, "he had gotten to know", to mean "he decided". But could this usage reflect the way his main sources, Ptolemy and Aristoboulos, contemporaries of Alexander, described the latter's decision-making process? In this case, decision was considered, by Alexander and his contemporaries, as a cognitive process: you could decide to do something ("ginôskô + verb"), or you could decide that something was the case—that is, indeed, the process at work when Alexander works through the possibilities on the wall of the Mallian town.

This cognitive process is not isolated, but part of a chain of intellectual events. The other two stages are observation—*katidôn*—and speculation, reasoning, guessing, conjecturing—*eikase*. For instance, during another of Alexander's murderous campaigns in the Punjab, against the Kathaians¹⁵. Alexander observes the nature of the opponent, taking the necessary measures of sending his light cavalry to fix and delay the enemy; later, he decides (*gnous*) that the situation does not call for cavalry work, so sends in (and indeed leads in) his infantry (this is the moment when the Macedonian infantry break through two circles of chariots), he also decides (*gnous*)

^{13.} Arr. 7.28.3, cf. 7.30.3.

^{14.} Inschr. Priene 1, with J. Ma, "Seleukids and Speech-acts: Performative Utterances, Legitimacy and Negotiation in the World of the Maccabees", *Scripta Classica Israelica*, 19, 2000, pp. 71-112, and especially P. Thonemann, "Alexander, Priene and Naulochon", in P. Martzavou, N. Papazarkadas (eds.), *Epigraphical Studies in the Post-Classical Polis*, Oxford, 2012, pp. 23-36.

^{15.} Arr. 5.22-4.



that a lake behind the city where the Kathaians take refuge is not deep, so conjectures (*eikasas*) that they will escape fro there, so posts troops (cavalry, under Ptolemy—which perhaps confirms our suspicion that this description of Alexander's decision-making process is indeed Ptolemy's)—and all happens as Alexander had conjectures, *xunebe hopôs eikase*, a phrase which recurs throughout Arrian's account (notably at Issos)¹⁶. Conversely, Alexander, before crossing the Hydaspes to attack and conquer Poros, made sure to overload and scramble the signs Poros had at is to try to guess what was going to happen: would Alexander cross, would he wait for the river to decrease, where would he go?

So Alexander took his decisions on the basis of observations and guesses— is this anything to be particularly surprised about? Humans (and probably not just humans) are hard-wired to do just that when deciding. The Tyrians, when they see Alexander has a larger fleet than expected, decide not to fight at sea: katidontes and apegnosan are the same words used as for Alexander's decisions¹⁷. One might just decide $(gin \hat{o}sk \hat{o})$ that Alexander was particularly talented at observing and at guessing and implementing, and leave it at that: we return to the problem of genius as a blank wall for the historian, $ne\ ultra$. I would like to propose three possible ways in which Alexander's decision-making might be of interest to the historian: these are intellectual history, military history, and historiography.

Intellectual history

The first is the consequence of following the insistence in Arrian, probably reproducing Ptolemy, in describing Alexander's decision-making as a fixed procedure, with specialized vocabulary. Modern military thinking has similar expressions decision-cycles or the OODA (observation-orientation-decision-action) cycle (as in "getting within the opponent's OODA" and so on); Alexander's behaviour at the Hydaspes falls within this category). The temptation here is to try to analyse the description of Alexander's decision-making in terms of philosophy of knowledge. What we see at work is a set of cognitive procedures, to try to determine facts, on the basis of perception, signs, and probabilities; it is also linked to an awareness of causality. This can be seen in the case of action in terms of what is causing the events experienced in the here and now: Alexander reacts to the initially successful Tyrian sortie at sea, during the siege of Tyre in 332 BC, by setting most of the ships to pinch off any Tyrian reinforcements coming out of the harbour—which leaves the Tyrian flotilla, as energetically manned as it is, doomed to defeat¹⁸. In so doing, Alexander effectively concentrated his forces on the least visible, but most effective source of what he was seeing—the Tyrian harbour, not the actual fighting Tyrian units attacking the anchored Macedonian fleet. A sense of causality also underlies the calculation of what might happen: a lot of Alexander eikazo- activity falls in this category, of thinking





^{16.} Arr. 2.10.3.

^{17.} Arr. 2.20.7-8.

^{18.} Arr. 2.22.3.



through chains of action and consequences, for instance on the wall in the Mallian town, but also more generally on the battlefield, during complex operations involving multiple columns, especially in the multi-parted orders issued to subordinates.

It so happens that about this time, Aristotle was developing systematic thinking and writing about dialectics (of which rhetoric is one branch, as he observes in the Rhetoric, Book 1)—a science about signs, knowledge, and probabilities, leading to propositions which can be joined in syllogisms (again, as is developed in the Rhetoric). Was the secret weapon of the Macedonians the syllogism, and not the sarissa? The temptation is all the stronger for Aristotle having been Alexander's tutor, a fact which has always excited curiosity (starting with ancient forgeries of letters between the two). The immediate problem with any view that Alexander was trained in how to frame problems in terms of the philosophy of knowledge developed by Aristotle is that this is not at all how the surviving parts of Aristotelian philosophy work. The *Rhetoric* or the *Nikomachean Ethics* do not show a philosophy geared to yield usable techniques of practical use, but have as their bedrock a very civic ethics of individual virtue, based on truthfulness and moral character (this, in fact, is the definition of what philosophy is for, or indeed philosophy is); syllogism uses propositions to discover truths (in the case of deliberation) or facts or at least probabilities in the past (in the case of forensic rhetoric)—not to decide on the most practical and advantageous course of action in the present and future. In addition, ginôskô and eikazô do not seem particularly prominent, as far as I can tell, in Aristotelian philosophy of knowledge.

This gap is in itself interesting, and requires some thought. One way of going about it might be to try to look for points of contact, especially in Aristotelian treatment of deliberation: granted that the criterion is ethical, how are good decisions to be reached? Some of the processes, if not the terminology, in the Nikomachean Ethics¹⁹, might well be closer to the processes at work in Arrian. A more radical solution might be to flip the problem: given that what we do see, especially in Arrian, is the careful, insistent (if at times simplified) portrayal of Alexander's decisionmaking, probably based on a contemporary source, we should realize that we have a body of fourth-century thought about cognition and intellectual process—one which is likely to have some relation to Aristotelian dialectic, either as a type of knowledge and teaching adapted or invented for kingly education, or as an appropriation and readaptation, by Macedonian military elites, of Aristotelian philosophy for practical purposes of administration and war-making. The common stock of Greek military history, with its interest in causality, planning and outcomes, and tactics, might have offered the materials for this sort of teaching; it is also possible that this military thinking derived from fourth-century military practice, for instance around Epameinondas, whom Pierre Lévêque and Pierre Vidal-Naquet told us to take quite seriously as a thinker²⁰, This is a range of possibilities; the point here is that the story of Alexander's expedition might gain by being read as an episode of intellectual as well as military history.

^{19.} E.g. NE 1141b23-28, on decision-making in assembly deliberation; I owe this reference, and gratitude for discussion, to B. Gray.

^{20.} "Epaminondas pythagoricien et le problème tactique de la droite et de la gauche", Historia, 9, 1960, pp. 294-308.



Military history

Hence military history offers a second context to examine Alexander's decision-making. As already pointed out, Alexander's army is highly complex, and constantly evolves; its versatility is a function of complexity: line infantry (with a regular organization), crack troops, light infantry in a variety of flavours (including the elite Agrianians), heavy cavalry in plain vanilla and in elite varieties, mounted recon, light cavalry of all kinds. This complexity develops out of late fifth and especially fourth-century evolutions in Greek warfare, towards multiple parts working in close coordination in time and space: heavy infantry, light infantry, cavalry. There is no need to posit a "RMA" (revolution in military affairs), which is rather difficult to locate at any one point (Iphikrates? Epameinondas "the Pythagorician"?); but there clearly is a steady evolution, and it is clear that Alexander's army is not the product of his genius, but represents the end point of the evolution towards complexity, with a qualitative jump, which is probably to the twenty years of experimentation and fighting on all fronts by Alexander's father, Philip II—a fourth-generation army (the second generation being the new fightingstyle of the Athenian-Peloponnesian wars 460-404, and the third generation being the experiments of the fourth century).

It is also possible that Alexander's war-fighting system is influenced, like much else, by Achaimenid practice, especially but not exclusively after 330. The dispatch of a large army with a fighting core of elite troops drawn from an ethno-elite tied to the ruler by a feudal contract, the picking and mixing from local crack troops, the juggernaut-like process of coopting local fighting men, the division of large armies into columns which all have coordinated missions, the amphibious progression of land and sea forces: these features seem very characteristic of Alexander's expedition, which combined reliance on the ethno-elite of Macedonian fighters and cooptation of local forces such as Persian cavalry and, especially, horse archers from the Upper Satrapies. But they are also evident in Achaimenid campaigning, for instance in the repression of the Ionian revolt in 494, carried out by multiple columns, or the great invasion of Greece in 480, when the Achaimenid army combined a fighting core of Iranian troops with lots of subject levies, coopted local forces (Thessalian, Boiotian medizers), deployed horse archers to great effect, and chose carefully among the forces of the imperial army (as Mardonios did before Plataia, retaining elite forces such as the Egyptian marines). The Achaimenid accents might come from structural factors (conquering armies have to operate this way), the adoption of Achaimenid imperial structures after 330, or conscious imitation by the para-Achaimenid state culture of the Temenid kingdom.

This sort of army—fourth-generation fourth-century army, with an Achaimenid flavouring—requires a particular type of leadership, as fourth-century military thinkers were well aware (for instance Xenophon): all the various forces within a battle line, and all the various columns within a campaign, must be precisely coordinated from a central point, which the general occupies, like the head. Someone, namely the commander, has to give complex, multi-parted orders. Ptolemy, during the campaign against the Kathaians, is told to stop the Kathaian break-out attempt (at the point Alexander has conjectured this would take place); he







is ordered to issue trumpet signals when he makes contact—this is the cue for others to converge. For Ptolemy, the engagement is limited to a "when-order" (when X, do Y); but his actions act as the trigger for other when-orders (when Ptolemy sounds the trumpet, attack), and perhaps "if"-orders covering other eventualities: the action is pre-coordinated. Alexander's role is to think through chains of causality, because the fourth-generation army needs this function to be performed. Whereas John Keegan's vivid, over-heated image of Alexander emphasized the Homericheroic aspect and inspirational leadership as his secret, we might prefer J. Griffiths' analysis of Gaugamela, showing Alexander in good managerial command of the army at all times²¹.

But Alexander also needs subordinates to make this happen, at various levels. First, the army needs very high-level subordinates like Parmenion, who basically can be given a mission and trusted to execute it and report relevant information back to Alexander at the centre. Second, the army needs mid-range subordinates who are given "when-orders" and "if-orders", such as Ptolemy at Sangala against the Kathaians, or Krateros at the Hydaspes, opposite Poros' camp. Krateros is given a set of orders covering four possibilities, with explanations as to their rationale:

Krateros was ordered not to attempt a crossing till Poros and his army had left his camp to attack Alexander's forces, or till he had learnt that Poros was in flight and his own side victors; 'but should Poros take a part of his army and lead it against me, and leave another part behind at his camp with elephants, still stay where you are; if, however, Poros takes all his elephants with him aganst me, but leaves some part of his army behind at the camp, cross with all dispatch, for it is only the elephants which make it impracticable to disembark horses: the rest of the force will not trouble them²².

(It is interesting to note that Krateros made his own judgement, disregarding all four sub-orders, and attempting to cross before Poros decided to make his move— a decision which added considerably to the tactical confusion in Poros' army before the battle, and probably a good decision). Similar orders were given to the phalanx commanders at the same battle: as long as the cavalry has not finished the job, hold back; afterwards, full-on advance. Thirdly, the army needs lower subordinates, who can relied on to execute orders aggressively and fearlessly. It is because of the solidity and reliability of the chain of command, combine with the army's fighting power, that Alexander can pre-coordinate a battle like Gaugamela— and win.

In this context, Alexander's careful decision-making process is not a reflection of personal genius, but a structural requirement of the army. Just as the king had two bodies (to use the concept elaborated by Kantorowicz), the charismatic heroic body of fighting, hunting and carousing, and the physical body which gave out age 32 (Alexander's whole life aimed at conflating the two), the king also had two brains, his physical organ, and the tactical role imposed institutionally by the structure of the army. Of course, it helped, in both cases, that in all probability, Alexander was one the one hand very strong and well-trained, and on the other hand, intelligent, aggressive, patient, skilful, confident and (I have suggested) schooled in dialectical problem-solving.





^{21.} J. Keegan, *The Mask of Command* cander's heroic style precludes any real command and control); *contra*, J. Griffiths, "Alexander's General part Gaugamela", JHS, 67, 1947, pp. 77-89.

^{22.} Arr. 5.11.4.



Historiography

"In all probability"— we only know Alexander through his image. Alexander might have drawn on Greek historiography as one of the sources for his awareness of causality, and his attention to planning; but conversely, Alexander himself is a historiographical effect. On the wall at the Mallian town, Alexander's dilemma echoes the way Homeric heroes think— especially the cold resolution of the equation of risk, death and glory: Alexander's portrayal casts him in the heroic mould, at the very moment when Arrian/Ptolemy purports to give us his most intimate thoughts. More generally, the account of Alexander's expedition is full of moments that dramatize Alexander's power of decision-making: the Gordian knot which acts as a symbol (even though Alexander probably did not cut it), the councils where Alexander makes the right decision in spite of advice by Parmenion. The force of these stories is to emphasize the exceptional nature of Alexander's decisions, and hence mind; this works to make a political point, characteristic of monarchical historiography, namely to justify sole rule by locating it within the superhuman nature of the ruler.

But awareness of the historiographical construct of Alexander the decider does not mean that we cannot say anything about the historical problem of knowing why Alexander won; the historiographical aspect is not the most interesting thing, or indeed the only thing we can say about Alexander. I have argued above that there are two historically instructive contexts to try to get some understanding of why Alexander won— the intellectual history of the fourth century, and the military evolutions ("RMA" or increasing complexity) during the same period. However, it is equally clear that the historiographical aspect, apart from being crucial for the understanding of the reception, and construction, of Alexander's image, is also part of debates and claims made during Alexander's lifetime, about his processes of decision-making and the political consequences and problems linked with them. These unsolved problems are those of the distribution of responsibility, power and rewards in the Macedonian conquest of the Persian empire: did "Alexander" win and conquer, or conquest the result of a collective enterprise? The historiographical construct does not mask our understanding of the historical Alexander, but contributes to it.

This debate, which perhaps goes back to Kallisthenes' official narrative, but certainly is attested in court contexts, can be seen clearly in the case of the defeat of a Macedonian contingent, led by the Iranized Lykian Pharnouchos against Spitamenes. All the elements of the Macedonian war-fighting system were there, but picked apart by a surprise attack. Leadership fell through: lack of coordination doomed the Macedonian response, and the subordinate commanders refused to take overall command, when Pharnouchos tried to fob this role off onto them²³. This incident could be interpreted to show that that the Macedonian war-fighting style could not work without the mastery and talent of Alexander to run it. Indeed, this is how some of Alexander's own courtiers interpreted it, in Plutarch's account²⁴, which shows the force of Alexander-centred interpretations, as political discourse at the time.







^{23.} Arr. 4.5-6, with detailed report of behaviour of the three Macedonian commanders, from Aristoboulos.

^{24.} Alexander 50.4.



But it is clear that the failure of Pharnouchos, an Achaimenid notable, to manage complex tactical coordination in the face of an ambush, does not reflect badly on the Macedonian officers; their refusal to assume the leadership role is less an indication of panic, than the result of their socialization and institutionalization as subordinate officers, meant to carry out direct orders as part of complex operations, but not to generate such orders. To interpret this incident as showing that the army could not function without the genius of Alexander at its heart is a mystification, to translate military structure into political metaphors. No wonder this mystification was instantly resented by some members of the Macedonian military elite— as happened at the banquet where Kleitos was killed by Alexander.

Conclusion: Alexander, Ptolemy, Myllinas at the Aornos Rock

In summary, in this paper, I have focused on Alexander's decision-making in the context of his fighting and winning, to try to find out why Alexander found nothing aporon in matters of war; the detour through the undergrowth of the management-study worship of Alexander serves mostly as an invitation to historicize as much as possible. It is possible, and even likely, that Alexander's optimal decision-making is the result of specific training in problem-solving, though there is (it seems) no direct fit with the surviving body of Aristotelian writing on dialectics, deliberation and knowledge. The lapalissade of Alexander having a better army, in its diversity and versatility, does tie into these issues of intellectual history, because the army was structured around the identification and implementation of good decisions in time and space, in order to do more than just blunder to victory. Managerial control of the various parts is a structural necessity; in practice, this takes the form of pre-coordinated orders, and reliance on various levels of subordinates to implement but also to provide good flows of information: the king's social brain is a collective brain. This institutional feature, however, was prone to mystification, manipulation, and conflict, as part of the politics of monarchy.

All these issues can be read in the operations to capture the formidable fortified position of the Aornos rock (Pir-Sar), during the campaign against the Assakenoi²⁵. The slow march and establishment of a base with good supplies in case of a long siege illustrate the usual planning and management of options. The attack on the Aornos itself is carried out with an elite, flexible strike force led by Alexander himself, again a characteristic of the rhythms Alexander's campaigning. The first blow is given when Alexander seizes a ridge by a turning movement through a rough path, and fortifies this position in the enemy's rear. Did Alexander do this personally? In fact, he sent Ptolemy, with a special force. Did Ptolemy capture the ridge personally? In fact, Ptolemy probably sent one Myllinas in charge of an advance party; at least, this is suggested by Curtius, who records Myllinas, a Royal Secretary, as the officer who actually captured the ridge (probably a special appointment, by Alexander, within Ptolemy's force). The combination of sources, apart from illustrating the excellence





^{25.} Arr. 4.28ff.



of the usual critical method, raises the issue of who actually is responsible for "conquering" or winning. The next day, actual first assault on the Aornos Rock is a failure: the Rock is too strong for frontal assault by Alexander, and Ptolemy's task force witnesses the failure of Alexander's troops, before the Assakenian defenders turns on Ptolemy's small troop, and nearly overwhelms it. During the night, Alexander sends a message to Ptolemy²⁶: Arrian preserves this message, another example of the four or five orders by Alexander which are preserved. Ptolemy is to attack the Assakenian defenders, while Alexander takes his own troops up the rough path with Ptolemy has himself used the previous night: in this way, the defenders will not know which way to face, and the operation will succeed.

The order could be interpreted as a rebuke to Ptolemy, for standing by during the previous day, while Alexander's assault was driven off: Ptolemy's inaction could be seen as dooming the frontal assault by failing to provide a diversion, and endangering his own small force. Alexander's orders would contain not just a rebuke, but also act as an on-the-job tactics lesson. A memorable lesson for Ptolemy, an illustration of how the expedition acted as an on the road staff college, and proof that Alexander's tactical sense was much more developed, much close to "real war" than that of even his upper subordinates. This interpretation is pleasing, but perhaps falls apart upon examination. The two objections are the following. First, would Ptolemy have recorded a rebuke, and an incident which cast him such unfavourable light? Second, would Ptolemy, a high-ranking officer at this point, not have known the idea of a diversion, namely of multiple attacks to split defenders' forces and ensure the success of an assault? This principle is normal practice in Alexander's sieges, and, perhaps, might be considered as common sense.

Therefore, another interpretation might be that Ptolemy was sent up to capture a ridge in the enemy's rear, with orders to carry out a diversion during the frontal attack by Alexander—but that he judged otherwise, once in position: he decided, on the basis of what he could see, that the frontal assault had no chance of success, and that by carrying out a diversionary attack, the only thing he would do is endanger his own forces; so Ptolemy sat tight. Alexander's message to him, during the night, acknowledges Ptolemy's decision: Alexander decides not to repeat the day's futile frontal assault, but to take the whole force up the difficult path. This has a chance of succeeding—but only if Ptolemy carries out his diversionary attack. So the first decision by Ptolemy was itself an act of communication, a sign, a signal, to Alexander, and made the latter shift his plan. The ascent duly succeeded—to be followed by set-piece siege-works against the citadel on the Rock, negotiation and massacre. The operations at the Aornos Rock show the detail of interaction between Alexander and a subordinate, and the way in which Alexander's social brain was the result of distributed personhood and collaborative work.

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^{26.} Arr. 4.29.4.