# RAPHIA, 217 B.C.E., REVISITED

The Battle of Raphia, 217 B.C.E., was one of the two greatest battles of the Hellenistic world. Only Ipsus, 84 years before, can be compared. In sheer size of armies it surpassed all the famous battles in Roman history. It remains to this day the biggest armed encounter ever waged on a single battlefield in Palestine, or Coele-Syria for that matter. In its purely military aspect, it has often been taken as a water mark in the evolution of the patterns of Hellenistic warfare and a symptom of their partial ossification. Polybios' relatively detailed description is a mine of information, as yet insufficiently elucidated, on the methods, tactical tools, possibilities and inevitable, but not always properly grasped, limitations of that warfare. The significance for subsequent development in the Hellenistic East of the battle of Raphia — and, of the Fourth Syrian War's seemingly paradoxical outcome — has repeatedly been ignored or misconstrued; largely, it appears, through disregard of vital tactical facts in the battle and a singular lack of interest in the geographical, strategic and logistical framework of the campaign.

To this writer's knowledge, its circumstances and conduct have never been the subject even of a strictly limited battle-field study, like Kromayer and Veith's well-known studies of the Three Diadoch Battles: Paraitakene, 317 B.C.E.; Gabiene, 316; Gaza, 312.

The apparent completeness of the Polybian account of the battle of Raphia seemed (e.g. to Kromayer and Veith) to make a modern detailed investigation unnecessary. It is probably the absence of such investigation that led historians from Delbrueck to Tarn to draw far-reaching, and dogmatic, conclusions — mostly as yet unopposed — from apparently clearcut situations; the accounts of which sometimes, on closer scrutiny, begin to look illusory. Thus even the two major controversies, and consequent discussions, that did arise in connection with the battle appear to have been largely unnecessary; and in the end

futile. Their subject-matters looked important enough: the composition of a vital part of Ptolemy's army, and the relative suitability of Indian and African elephants for battle. But both controversies were rooted in misunderstandings. Both will be dealt with here later.

The battle of Raphia has implications not only for the technical history of Hellenistic warfare, but also for the broadest questions concerning the Hellenistic East — the development of the principal states and power-centres, their external and internal postures, their national characters (or absence, or various mixtures, of such), the sources and composition of the main forces within them, military, economic, social and ethnic. Granted, a truer view of the campaign of the year 217 will not, in itself, enable us to answer all the questions to which all these factors and inter-relationships give rise, but it can give us a chance to see them in a somewhat more real perspective. For example, a rather widely accepted emendation of Polybios' account would have only 5,000 "Graeco-Macedonian", or "Hellenic" — that is, *non*-Egyptian — cleruchic phalangites present in Ptolemy's army. However, if we can prove that there were indeed 25,000, and that the 2,300, or rather 3,000, horse on his left wing, also, could not in fact have been "native Egyptians", it would substantially alter our picture of the whole mise-en-scène for the forthcoming great internal struggle in Egypt in the latter years of Ptolemy IV's reign, and in that of the Fifth. It would indicate an entirely different (and much more credible) balance between the various, and antagonistic, forces returning from Raphia — a balance that was, after all, to express itself in the relative stability, however fragile, which in fact did result in the first two generations of Second-Century Ptolemaic Egypt. On a different plane, a more factual analysis of the broader aspects (including the political-economic background, especially in the Lagid empire) of both the deployed armed strengths, and the existing and prospective potentials, of the two contending powers in the IVth Syrian War and after is likely to shed some sorely needed light on the war's paradoxical conclusion and results; and, even more important, on the subsequent military and political developments leading to the Fifth Syrian War and the Seleucid expansion westward in 203–202 and 197–192 B.C.E.

I propose to discuss the Raphia campaign under three heads. A: The

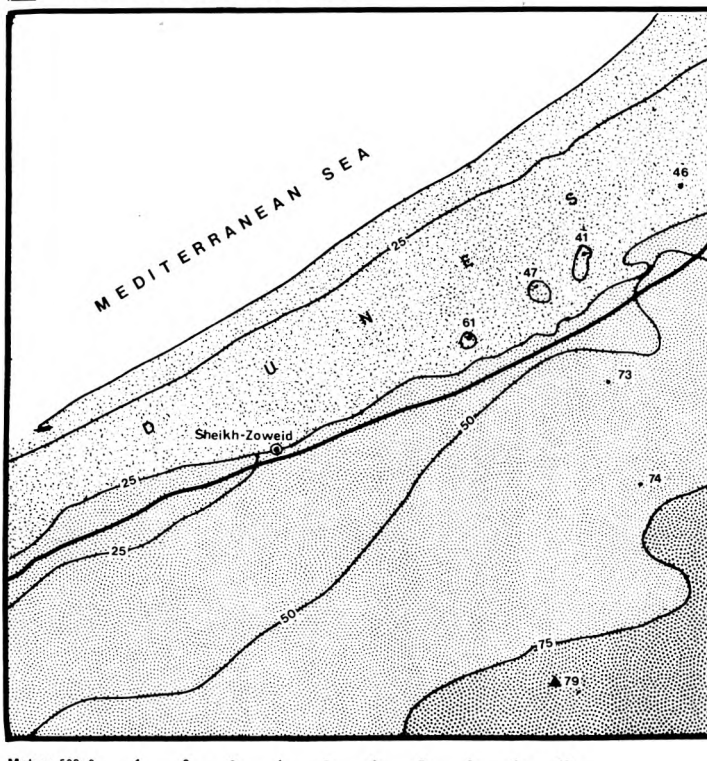
known and established facts about it, drawn mainly from Polybios V with a few useful additions from the Raphia decree in honour of Ptolemy IV.[1] B: The various theories built on these facts during the last two or three generations. C: Topographical, logistical and tactical aspects of the battle, and the Grand-Strategic setting of the campaign, scarcely mentioned expressly in the sources, and overlooked totally in modern historical writing. Polybios' valuable account, whatever its source or sources, is no more than the tip of an iceberg, or rather of several icebergs, political, military, economic, naval and logistical — quite informative, but even more tantalizing in what has been left unsaid or merely hinted. Clearly, Polybios has not only contracted and abbreviated but also *selected* from the original sources only some topics while skipping others. To see the chain of events in their true perspective, Polybios' account has to be complemented and balanced by other sources, and the findings of modern research into the international politics of the time, the contending states' internal problems, the abundant operational and logistic precedents and analogies, and above all, the physical factors.

## *A: The Evidence of the Sources*

Polybios (5.79–82) — in conjunction with the Demotic text of the trilingual Raphia Inscription (1.1. 10–11.; henceforth — "Inscr.") and its precise dating — provides the basic chronology of the campaign, and defines its opening movements. Ptolemy started from Alexandria and concentrated his army at Pelusion, left there on June 13 and encamped some 50 stades before Raphia on the 17th. In response to Ptolemy's advance from Alexandria, Antiochos assembled and led his troops (apparently in the main from Akko-Ptolemais, 5.71) towards Gaza, completed there their concentration, and "proceeded slowly" beyond Raphia, encamping at night some 10 stades from Ptolemy's army. A

[1] H. Gauthier and H. Sottas, *Un decret trilingue en l'honneur de Ptolemée IV* (Cairo 1925). The inscription is quoted henceforth as in W. Spiegelberg's last, "definitive", version in *Demotische Denkmaeler* 3 (Berlin 1932); the same translation is also to be found in H.J. Thissen's *Studien zum Raphiadekret* (Meisenheim am Glan, Germany 1966). Spiegelberg's earlier translations (with some noteworthy reservations) can be found in *Sitz-Ber. München* (1925, 1927).

## A THE BATTLEGROUND

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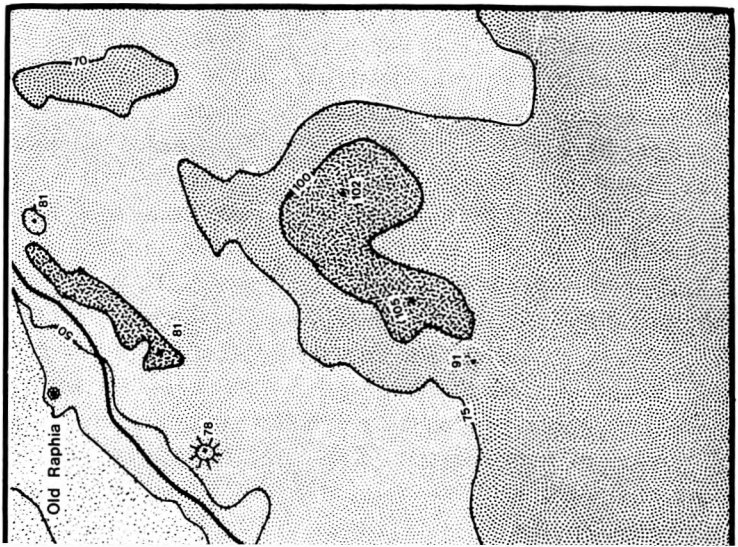
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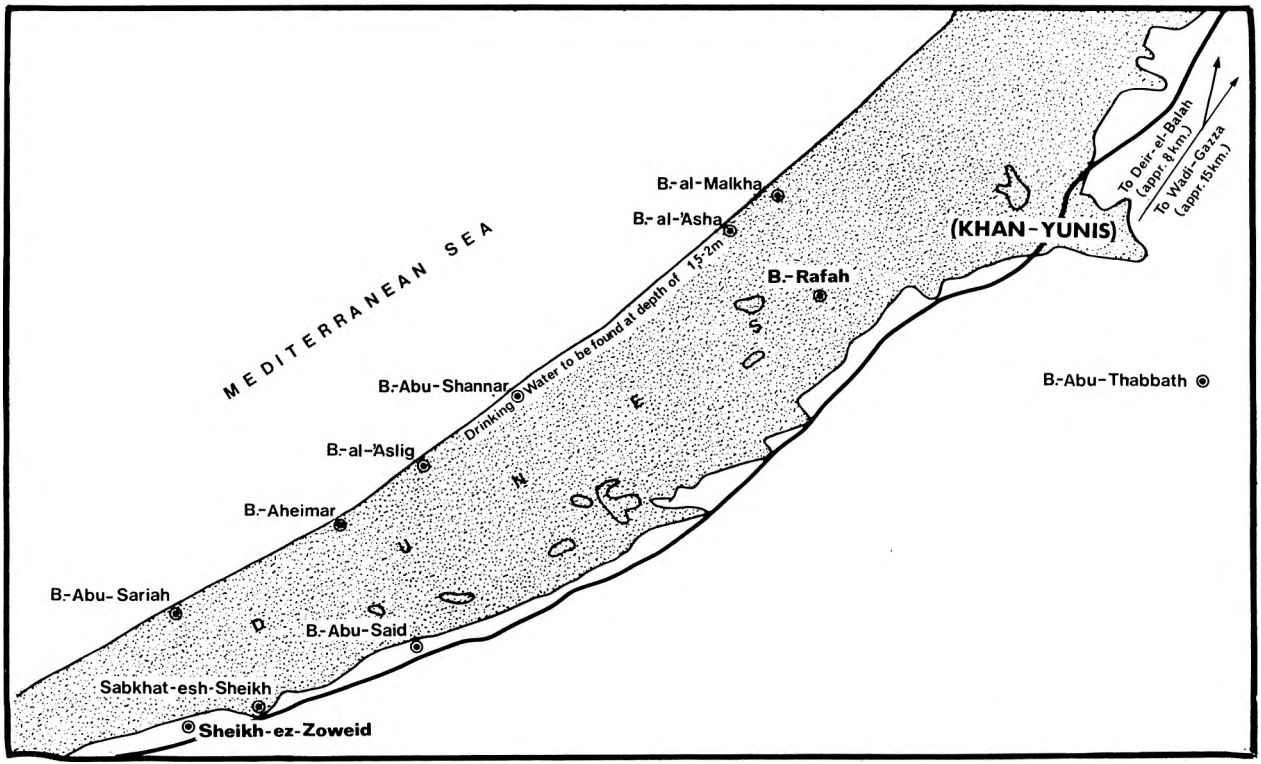
Old Raphia

couple of days later (June 19, it can be calculated), he moved his camp ("for a better position"), 5 stades closer to the enemy's. There ensued frequent skirmishes between the watering parties of the two sides (indicating some common, and disputed, sources of water); and missile-exchanges by cavalry and even infantry — evidence how narrow the No Man's Land was. After five days of stationary vis-à-vis, a daring night foray into Ptolemy's headquarters apparently stimulated him, on the morning of the 22nd, to lead his army out of camp and draw it up in the open field. Antiochos followed suit [cf. Maps A,D].

The troop strengths are given as 70,000 foot, five thousand horse and seventy-three war elephants for Ptolemy (79.2; cf. 65); and 62,000 foot, six thousand horse and one hundred and two elephants for Antiochos (79.3–13). The two opposing armies were rather symmetrically deployed (82). In the centre of each was stationed the great phalanx, the regular one and the additional *epilektoi*, "armed in the Macedonian manner" (non-Greek-Macedonian levies): Egyptians and Libyans on the Ptolemaic side, "men raised from the whole kingdom" on the Seleucid. On the phalanxes' right flanks stood the mercenaries from Greece, probably medium infantry; but while on its *left* flank in the Ptolemaic array we find approximate ("medium", or "medium-light") local counterparts of those — the peltasts and the "agema" — the Seleucid one makes do, in its corresponding left link, with a tribal levy of "Arabs and their neighbours." Antiochos' line is further extended, on both sides, by two Light Brigades, in the main Iranian. Their function appears primarily to be to make up partially for the lesser width of Antiochos' phalanx-front, but they probably have also to do with the elephants' two battle-lines, on the right and on the left, which stood before the cavalry wings — probably also covering the "Light Brigades" in whole or in part (implied in 84. 9; 85. 3–4). Such functional connection is not hinted at all in Polybios, teamwork between light troops and "the beasts" being practically axiomatic. In Ptolemy's line there is no clear parallel to these "Brigades." In both armies there are, farther from the center, some other light units, in the main missile troops, who happen to be Cretan in the two fronts' western extensions, Balkan or Asiatic in the eastern ones. These, in part, seem already to belong organically, as more or less permanent supporting-troops, to the cavalry wings, and perhaps were even intertwined tactically with the cavalry formations — as tempting

**B WATER SOURCES**



analogies from other actions (e.g., Liv. 42 58. 6–10; 12–13, on the fighting in 171 near Callinicus) would suggest. For the sake of clarity, it seems best to point out here that the cavalry on Ptolemy's right (eastern) wing were "mercenaries from Greece and elsewhere", and those on the left (western) — local horse.

In short, the ordre-de-bataille preserved by Polybios seems to indicate that the "ideal", schematic, battle-array strived for by the tacticians of Raphia (and presumably — of the period) was: heavy infantry in the centre, medium on its flanks, light troops as connecting-links with the wings — and the latter formed of cavalry and selected missile units organically joined with it. In both armies the elephants were drawn up in two separate battle-lines, in front of each cavalry wing and adjoining light units — but not in front of the heavy phalanx in the centre and its medium-infantry flanks [See the Diagram].

Polybios describes the preliminaries, which were along the lines of a ritual opening of a Battle of Kings (83; 84. 1). But the details also reflect certain situations and circumstances of this particular battle which are not unimportant for our final appraisal: the prestige of the phalanxes, the role of their commanders, the incentives, the partial need for translation of royal addresses. We can wonder whether the hallowed custom of pre-battle orations was feasible along the entire extent of the lines, many kilometers long (perhaps, indeed, the easternmost parts were still being formed-up). There follows a colourful picture of the initial fighting of the elephants in the west, in which Antiochos' won decisively (84. 2–7). The three salient events in Polybios' tactical account are three practically separate combats: Antiochos' victory in the west (84. 7–10); that of Ptolemy's general, Echecrates, in the east (85. 1–5); and Ptolemy's final victory in the centre (85. 6–12). On both wings the dynamic factor was the cavalry, Antiochos' working in conjunction with the elephants, the light troops and, marginally, the mercenaries, Ptolemy's hired force combining with Galatian and Thracian, and Greek-mercenary, infantry bodies. In the centre, apparently the push of Ptolemy's heavier and wider phalanx was decisive; and the decision was brought about on the *eastern* sector of the Seleucid phalanx frontage — (85, 10), whose flank had recently become exposed by the "Arabs' and Medes' flight" (85. 4) [See Maps C,E].

The two left wings put to flight, and the right ones pursuing them (85.

6; Antiochos headlong advance in the west — 85. 11, implied prolonged pursuit by Ptolemy's right — 86. 1), are, from now on, not mentioned directly. Polybios concentrates his attention on the two centres — and on Antiochos' troops returning from the south-west. Ptolemy's centre, having pushed Antiochos' off the field, retired to their own camp (86. 1), and only rather late the next day advanced on Raphia. The Seleucid phalanx (and presumably some troops of the Seleucid left) retreated to Raphia (86. 3). Antiochos, returning hastily with his victorious troops and elephants, wanted to deploy all these in a battle-encampment outside the town; but was thwarted by the earlier arrivals' having already entered the town.[2]

Antiochos, with his army, spent the night, undisturbed, at Raphia; the next day he retreated unpursued to Gaza, encamped there, then sent a message to Ptolemy asking leave to bury his dead. His request granted, he dispatched burying-parties to the battlefield; and, having fulfilled this obligation, he withdrew to his kingdom (86. 4, 8). Again, no pursuit is mentioned. Ptolemy began a round of the towns of the province "Syria and Phoenicia", now festively renewing their allegiance (86. 8–11).

The dead are given as 1500 foot and seven hundred horse for Ptolemy (86. 6). The unusually large proportion of cavalry is obviously due to Antiochos' severe and prolonged pursuit in the west. Antiochos' losses (86. 5) are given as "not much less than ten thousand foot and over three hundred horse". In the battle's wake, the Seleucid army probably did become smaller by some fifteen thousand men; some four thousand were prisoners. But, both the tactical circumstances of the eastern combat and the structure of the army — and the battle's general framework — make it likely that among those missing there were thousands of quick-footed men, "Arabs and neighbours" from Transjordan, quite alive but now with many valid reasons to get back home as soon as possible. (cf. 85. 4; 86. 1; 71. 4).

Polybios reports (86. 6) that Antiochos lost three elephants in the fight, and two died of wounds; sixteen of Ptolemy's were killed and most

[2] W.R. Paton's translation of συστήμασι πεφευγότας(56. 3 in *Polybius, The Histories* LCL 1940) as "scattered groups of fugitives" (apparently, following his translation earlier in 85. 10, of ἐγκλίναντες ὑπεχώρουν by "turned and fled") seems far from adequate; it should rather be "those who withdrew in units" (so, Schweighäuser). In that case, the king's first intention is much more understandable, given the combat possibilities.

of the rest captured. This is a good illustration of the thesis that Polybios made use, perhaps indirectly, of military returns of both sides. Conflicting evidence appears in the Raphia inscription which, after fulsome praise of Ptolemy's heroic deeds (1.1. 11–14), says he captured not only many of Antiochos' men (cf. "over four thousands" of Plb 5. 86. 5), but also "all the elephants" — a sheer physical and tactical impossibility, yet accepted by several historians. This acceptance is symptomatic of the tendency to belittle Seleucid capabilities and achievement in the whole war and specifically in this battle.

What Polybios leaves here unsaid is no less important than his narrative; but the eloquence of his silences is often overlooked. Most significantly, no one has bothered to compare Antiochos' withdrawal to Antigonos' camouflaged departure after Paraitakene (Diod. 19.32) or Demetrios' hurried (and — harried) retreat after Gaza (Diod. 19.84f)! Antiochos' withdrawal, on the evidence of the facts, as distinct from the sneering tone of some of Polybios' remarks, seems to have been measured and self-assured. Modern historians have ignored this aspect of Polybios' account. Yet, the unstated, though manifest, character of the circumstances of the withdrawal and non-pursuit, and of the two opponents' behaviour, sheds instructive light on the consequent evacuation and Ptolemaic re-occupation of Koile-Syria, and the war's concluding chapter. The figures on losses as given by Polybios do not imply that from then on Antiochos was necessarily inferior tactically; and this goes far to explain his behaviour after the battle. In mobile forces he now had a decisive edge: 5700 against 4300 in cavalry, a formidable force of elephants against perhaps a score; in infantry however he had only some 48,000–50,000 against Ptolemy's more than 68,000. (In all these calculations the wounded have to be omitted for lack of data). The crucial figures for *phalanx*-losses are not given by Polybios, and are hard to determine. To judge by his narrative, on the Ptolemaic side the loss was probably next to nothing; on the Seleucid — in my view of what happened to a large part of the left wing's light troops, and given the conspicuous brevity of pursuit in the centre (cf. also 86. 1) — phalanx-losses could be put at a very few thousand. Now, an almost double preponderance in phalanx strength (say, 48,000 to 27,000–28,000) would not, according to Polybios' thinking (on what happened the following year, at Cannae — 3.117.5), necessarily have guaranteed

victory to Ptolemy even in a pitched field battle; and the battle which now could have faced Antiochos was not one in the middle of the plain but before the gates of Raphia; and the next one would have been part of a semi-mobile campaign in the hilly country beyond Philistia, where phalanx numbers are less crucial.

Indeed, unlike Porphyry[3] — or the Inscription's (1.1. 12–14) rapturous gloating — Polybios depicts no abjectly fleeing thirsty and desperate Antiochos; and his chain of dry facts and dates — however incomplete — contradicts such pictures, old and new.

The impression Polybios conveys, of a measured withdrawal by Antiochos (86.3–4) may seem inconsistent with what followed — the total evacuation of Koile-Syria and no more fighting contacts with Ptolemy (86. 8). Yet Polybios in fact spells out the actual cause (87. 2): his need to return to the capital speedily, out of grave concern lest Achaios attempt to seize it and the reign.[4]

As Tarn once summed up, generals of the Macedonian school understood first principles; here — the overriding need to preserve his base; and to move quickly.[5]

Conversely, paragraphs 86. 8–11; 87. 6–7, express the dominant Ptolemaic interest, first and foremost, to resume sovereignty and the administration of the regained province, "Syria and Phoenicia" — echoed, with Egyptian religious overtones, in the Inscription (1.1. 15–22). Into this symmetric picture of apparently tacit agreement on disengagement, evacuation and re-occupation, a novel and discordant note was introduced by another, and much-discussed, part of the "Inscription" (1.1. 23–25). The various translations and interpretations, from 1925 to 1932, of this difficult Demotic text agree on one basic fact : that a Ptolemaic force, later joined by the king, crossed the border, and held an undefined Seleucid territory for some time. The main issues here

[3] *F. Gr. Hist. 2* D 260 44; apud Jerome, *Comm. in Dan.* 11.10.14. Porphyry was probably following the official Ptolemaic version, parallel to the Inscription.

[4] Previous growth of this worry is signalled in 5.57; 58.1; 61.6; 66.3; 67.12 f.; and differently, 73.4. The concern was now increased by doubt as to the mood of the troops following the reverse, 87.2.

[5] Tarn, *Hellenistic Military and Naval Developments*, (Cambridge 1930), 37–39; cf. *Greek and Macedonian Art of War* (Berkeley and Los Angeles-Cambridge 1957) 70–71.

relevant to a general view of the war's concluding phase are the fact of a Ptolemaic incursion — and, more specifically, the meaning of the expression of "21 days". Was this the length of that *occupation*, as originally accepted, or the time it took Ptolemy to *re*-occupy the whole of *his* possessions — in other words to *reach* the border — as in Spiegelberg's revised and "final" version (1932) ? Some commentators drew far-reaching conclusions from Polybios' omission of such an incident, and Antiochos' seeming powerlessness.

Antiochos arrived at Antioch (87. 1) — no doubt with at least part of his army (cf. also 86. 8), and thus probably not before the last days of July — and sent envoys to Ptolemy, who promptly agreed to a year's truce. Sosibios went to negotiate peace at Antioch (87. 4–5), while Ptolemy, staying 3 months in Syria and Phoenicia, arranged matters in the cities, unsettled after so many upsets (87. 6). The "Inscription" (1. 25) mentions — *after* the withdrawal from the enemy's land — only that Ptolemy now "confided in Antiochos" ("2 years and 2 months since the generals' treason" — clearly a reference to Theodotos' call to Antiochos, 61. 4–5); while Polybios refers to a final settlement confirmed at Antioch (87. 8; presumably, 15. 25. 13). This discrepancy, too, gave rise to several theories, which in my view are misleading. Actually there is no conflict, in matter or in time, between Polybios and the inscription. The historians' surprise at an invasion by Ptolemy "*after* having granted the truce" stemmed from an elementary disregard of the physical realities, such as distances and rates of troop-movements and travel. These make it impossible for the sequence of events, and the procedure of initiating peace-talks described by Polybios (86. 8; 87. 1. 4–5), to have been at all accomplished *before* the incursion's start (partly defined by the Inscription's "21 days"), or even finish. The preliminary truce (87. 4) must have *followed* the incursion; if so, the puzzle's pieces would fit. The military-political background, and the broader significance of the generally assumed settlement, will be indicated later [See Table].

### *B: Modern Theories*

As early as 1899, J.P. Mahaffy voiced doubts as to Polybios' account of a 45,000 strong Ptolemaic phalanx : 25,000 of "the phalanx" — obviously non-Egyptian cleruchs; and twenty thousand "Egyptian

phalangites".[6] His reasoning was accepted by Tarn,[7] and later, in a somewhat emended version, by Griffith.[8] M. Cary disseminated this view amongst generations of students.[9] The main points of the Mahaffy school were textual, psychological, and numerical. Polybios (82) allegedly[10] *omits* the Greco-Macedonian phalanx in his Raphia Ordre-de-Bataille but mentions it, 25,000 strong, *and* the twenty-thousand Egyptians, in the detailed troop structure in 65. 4, 9 — while including the *combined* strengths in the summing-up ("seventy thousand foot, and five thousand horse"). So, "Polybios must have muddled the two Ptolemaic phalanxes; ... the *combined* phalanx was 25,000, of which 20,000 the new Egyptians".[11] Now, it is clearly a misreading of 82. 2 — where the Ptolemaic centre's "phalanx" and "picked troops armed in the Macedonian manner" plainly stand, respectively, for the cleruchs and the newly-raised Libyans (65. 8) and Egyptians (65. 9) (corresponding to "the phalanx" and "the ten thousand selected from the entire kingdom, armed in the Macedonian fashion" in the ranks of the Seleucid army drawn up opposite them (79. 4–5; 82.2)) — that must have led to the assumption of the Mahaffy school that the Greco-Macedonian phalanx is omitted in the *ordre-de-bataille.* Another argument for the Egyptians necessarily having made up the bulk of the decisive phalanx was found in the Egyptians' pride in their part at Raphia (107. 2–3). This was accepted as a major argument — notwithstanding analogies, in which a few took the credit for a victory won by a large force of which they were only a small part (like the Aitolians after Kynoskephalai). The fact is that here the Egyptian phalangites (82. 6 — combined with 85. 9–10) had to their credit being the first to drive the enemy back, charging on the easternmost sector of Antiochos' phalanx-front, a feat decisive both tactically and psychologically.[12]. Hence there is no need to see the

6 *Hermathena,* 10 (1899) 140 ff.

7 *CAH.,* 7 (1928) 730.

8 J.T. Griffith, *Mercenaries of the Hellenistic World* (Cambridge 1935) 122–123.

9 *A History of the Greek World* (London 1932/1957) 92, 405.

10 E.g. Griffith (n. 8) 122.

11 Griffith 123.

12 Cf. Plb. 5.82.2, 4, 6, 10 (text apparently corrupted), 12; 83.3; 84.9; 85.6, 9–10 [cf. Diagram and Map E]. For symbolic meanings of a battle's turning moment and point — cf., also, W.K. Pritchett, *The Greek State at War,* 2 (Berkeley and Los Angeles, 1974), pp. 252–253; and, for historical relevance, 262–263.

Egyptians' pride as based primarily on their numbers in the battle.

An argument from numbers served also as the basis for a further claim : that had Ptolemy's combined phalanx really been 45,000 strong, Antiochos would not have dared to face it with his twenty thousand in the open field; for he would have been swept off it right at the start. There is a striking arithmetical fallacy here. The actual ratio of phalanx troops was 48,000 for Ptolemy ("the phalanx" being 25,000 (65. 4) the Libyans armed in the "Macedonian manner", three thousand (65. 8) and the "Egyptian phalangites", twenty thousand (65. 9)) — to 30,000 for Antiochos ("the phalanx" being twenty thousand (79. 5) and "men selected (or raised) from the whole kingdom, armed in the Macedonian manner, mostly Silver Shields", ten thousand (79. 4)). This halves the presumed Ptolemaic advantage, from 125 per cent to only 60, and substantially changes our perspective on the battle; which is liable to change even more when we survey the direct tactical circumstances in the combat of the phalanx centres and the whole battle's grand-tactical and logistic framework.

The notion of a "mainly-Egyptian Ptolemaic phalanx" held sway for most of this century. It was shared even by writers like Griffith[13], with a shrewd and basically realistic appreciation of the roles, in Egypt's coming inner struggles, destined for the Raphia army's various components; though it did not affect one eminent authority, J. Lesquier.[14] Its influence on historians' concepts and attitudes was perhaps deeper than might be thought at first glance.

## *"Egyptian and Libyan Cavalry"*

The most immediate example of such influence may be seen in the theory that assumes the entire *cleruchic cavalry* was absent from the Ptolemaic line-up at Raphia. The thesis is that the 2300 horsemen who, together with seven hundred Household cavalry, made up Ptolemy's left mounted wing were "Egyptians and Libyans", corresponding to their countrymen in the phalanx. This assumption is clearly formulated by Griffith[15]; and was echoed, primarily from the *ethnic* angle, by M.

[13] *Op. cit.* (n. 8) 121 f.

[14] *Les Institutions Militaires de l'Égypte sous les Lagides* (Paris 1911) 5 n.1.

[15] *Op. cit.* (n. 8), 118 f.

Launey.[16] Rostovtzeff shared the view[17] and Tarn apparently found no grounds to oppose it, — surprisingly in view of their general concepts and grasp of "cavalry-producing classes" in the Hellenistic world. In fact, the virtual absence then of horses in Egypt's agricultural economy[18] — and hence, too, the absence of a natural class of riders and horsemasters there — would obviously make it impossible for a serviceable cavalry force to have been improvised out of Egypt's "fellaheen". We have to look elsehwere for the source of the Left Wing's mounted force.

Active participation in the Fourth Syrian War of at least two of the nine known cleruchic hipparchies is clearly documented.[19] The second one at least, it is expressly stated, participated also in the 217 campaign. This is conclusive proof of the presence of, at least, some of the cleruchic hipparchies in the Raphia army. True, the well-established fact that these units were in existence for a generation or two before Raphia, and after, should in itself have precluded any easy assumption that they were absent from a Ptolemaic army mobilized, refurbished and reinforced to the hilt in 217 (Plb. 63. 14; 64. 1–4). That scholars like Griffith,[20] and Launey,[21] acquiesced in a total omission of these organized and existing forces was evidently due to their having read Plb. 65. 5 not as "cavalry from Libya and local", but as "Libyan and native Egyptian horse"; thus one of the possible readings (and in the narrative's context, it appears, the far less likely one) dictated a "battlefield revision" of the historical character and composition of the Ptolemaic army; on the face of it, a case of uncertain philology producing wrong military history.

Griffith appears to have sensed the incongruity of such a cavalry force evaporating into the air; for having defined as "Egyptian and Libyan" the 2300 horse (apart from the seven hundred Household Cavalry) he

16 *Recherches sur les Armées Hellénistiques* 1 (Paris 1949) 100.

17 *Social and Economic History of the Hellenistic World* (Oxford 1941) (hereafter *SEHHW*) 1, n. 126 to ch. IV.

18 M. Schnebel, *Die Landwirtschaft im hellenistischen Ägypten* (Munchen 1925) 332; C. Préaux, *L'Économie Royale des Lagides* (Bruxelles 1939) 217 f.; M. Rostovtzeff, *A Large Estate in Egypt in the Third Century B.C.* (Madison 1922) 167; *SEHHW* 1, 293.

19 *P. Enteux.* 48; *P. Frankf.* 7, col. 1.

20 *Loc. cit.* (n. 5).

21 Launey (n. 16), 1, 100.

went to the extreme of broaching the possibility that Polybios was "including both the numbered and the racial hipparchies in his mercenary cavalry," i.e. in the two thousand mercenary horse of the right wing. This conjecture seems impossible, but it may reflect unease in face of the impressive picture presented by the numerous mentions of the various hipparchies and their men in third century military papyri. Admittedly, our documentation for 217 is only fragmentary: we don't have for 217 the field list of the five hipparchies known by number and of the four bearing national of tribal designations.[22] Still, the two attested cases are enough to set aside the "native horse" interpretation.

There is thus a strong presumption that in this battle all nine were present; though, if so, they would have apparently been at half-strength. For according to the theoretical "establishment" of the period, current in the writings of the tacticians (e.g., Asclep., 7, 11; cf. Arr. *Tact.*, 26. 4; Ael., *Tact.*, 29. 1–2. 8), a hipparchy was composed of 512 cavalrymen; if each hipparchy was present only with half its men, the total number will equal almost exactly the number we know *was* present, 2304 being nine times 256. This would be fully consonant with the selective character of the cavalry units' mobilization for the Fourth Syrian War,[23] and with the whole tenor and content of Plb. 64. 1–2. Of course, this calculation is speculative; and made even more so by the fact that it leaves apparently no room to accomodate the "horse from Libya". This horse (65. 5) is left undefined in numbers or character. The literary and epigraphic evidence for Cyrenaica's pre-Ptolemaic and Ptolemaic mounted forces — which, even as late as the fourth century, were wholly or predominantly based on the chariot — strongly suggests they were small even by prevalent contemporary Hellenistic, or Sicilian, standards. Thus Diodorus (20.41.1) mentions only six hundred horse in the forces of a great expedition by all the cities of Cyrenaica in 308 — and these, it seems, were mainly foreigners — compared with "over ten thousand foot" and more than three hundred in the crews of the hundred chariots, who were clearly Cyrenaican; and in 162 we find in Polybios (31.18.13) five hundred Cyrenian horse to eight thousand foot, either

[22] Lesquier, *op. cit.* (n. 14) note 5 f.; cf. Launey, *op. cit.* (n. 16) 2, 1296 (index).

[23] *P. Frankf.*, 7, col. I, 1.1. 1–12; incidentally, a 256 horse half-hipparchy was known to the Tacticians.

possibly including some allies; and both these figures clearly derive from situations of maximum effort. Hence it seems likely the proportion of horse from Libya in the army of 217 was rather small as well. Whatever the precise number may have been of the Libyan contingent, and whether it was composed of cleruchs or of city troops,[24] the impression is that it could only marginally affect the number of 2300 of Polycrates' cavalry; i.e. it can lessen only by a little the possible strengths of the cleruchic "regiments" documented from the papyri, even if all nine were present. Anyhow, the unargued assumption that Ptolemy's non-mercenary, or "regular," cavalry at Raphia was composed not of cleruchs but of Egyptians (and Libyans) can be shown to be groundless; and another result is that the basic, cleruchic ("permanent reserve") force of the Ptolemies is shown to have been composed predominantly of phalanx and horse — the normal base for a self-sufficient Hellenistic army.

The corrections proposed above as to numbers and composition of the phalanx and the horse should remove a major distortion in the widespread picture of Ptolemy IV's army; and, inevitably, his state. By Griffith's calculation,[25] the cleruchic component hardly reached 15,000 in an army of 55,000. He is, though, in doubt concerning the two thousand peltasts; and he includes four thousand settled Gauls and Thracians. On his assumption, in the best case, the cleruchs would be twenty-seven per cent of the whole. With the 15,000 hired foreign troops there still was, in Griffith's view, a "non-Egyptian" (though not entirely Hellenic) majority within the army: say, fifty-four per cent; but if we take as a base the troops from the country's permanent population only, the relation would have been 14,700 "Hellenic" (in the Ptolemaic, extended, sense) to 25,300 Egyptian-Libyan troops : 36.75 per cent to 63.25. Thus, also, the two basic components, the phalanx and the cavalry, would have been four-fifths "African," non-Hellenic, even in that specific Ptolemaic sense: altogether too narrow a military base for the maintenance of the Ptolemaic regime.

[24] cf. Plb. 31.18.9–11, 13; Epigraphic evidence (*S.E.G.*, IX, 46, 49) for 4th century Cyrene's chariotry force — reinforcing the picture (for 321) in Diod., 18.19.4 — was kindly pointed out to me by Prof. Sh. Applebaum of Tel-Aviv University.

[25] *Op. cit.* (n. 5), 123.

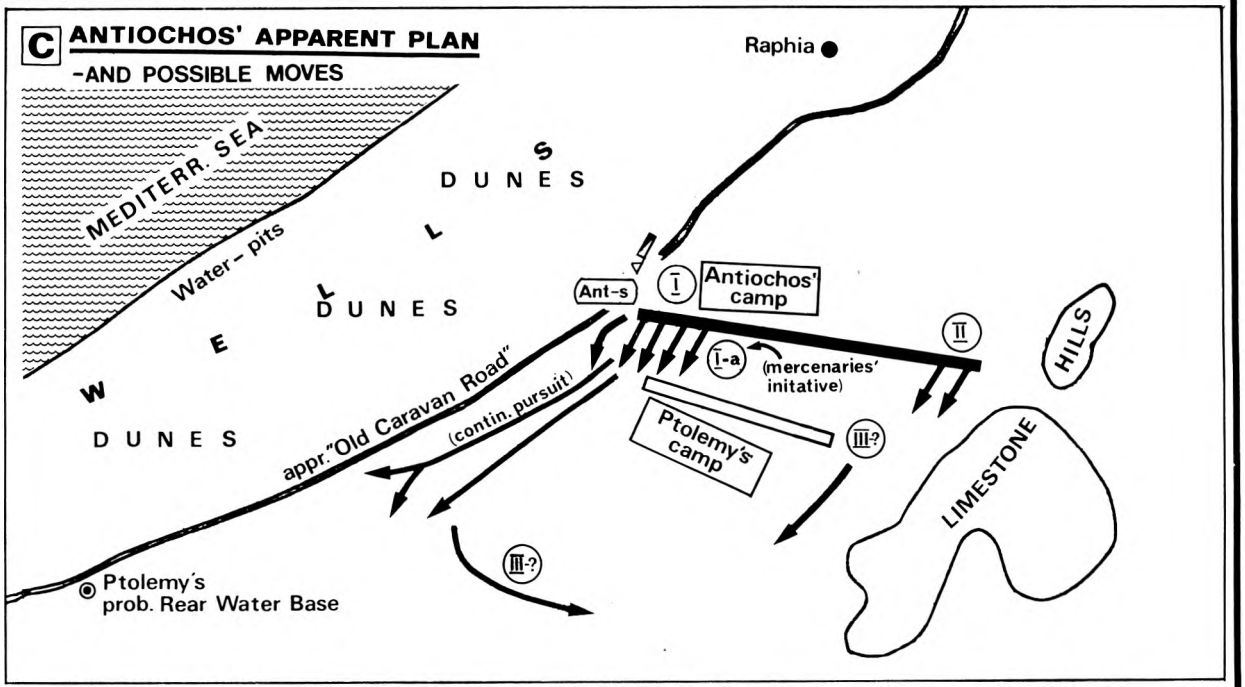
Launey's remarks in his summary[26] paint a basically similar picture. He certainly was in some doubt concerning the phalanx and presented two sets of figures, one for an army of 55,000 and one for one of 75,000. For the first, his percentage, like Griffith's, for the "Africans" is 46, (like Griffith he, too, considers the peltasts may perhaps be Greek); though for "Polybios' version" it is only 33.73. It is not hard to imagine that had there been that kind of imbalance between the ruling and the ruled in the state — an imbalance expressed in Griffith's figures and equally implied in Launey's first set of figures — the Ptolemies' reign, and the country's social and power regime, would have been incomparably shakier even than they were in the 70 years between the end of the Fourth Syrian War and Philometor's 146–145 campaign into Syria. The connection between military rosters and political history is plain enough in Plb. 5.107. And the corrected facts may contribute to a better understanding of how the Ptolemaic state was somehow able to carry on even after the tragic and chaotic years alluded to in Plb. 14.12 and elsewhere.

### *The Elephants' Combat and its Aftermath*

The case of elephants concerns *both* armies. Polybios' dramatic but factual tale of the beasts' fight, and its technique, refers to the two *western* wings (84). In a series of duels along the whole length of that front Ptolemy's force was smashed and put to flight — breaking the array of the troops behind. Thus opened the general onslaught by Antiochos' right wing; with half his cavalry outflanking — and the rest clearly attacking, with the light troops, in his elephants' wake [Map C].

Between the *eastern* wings it never came to a direct encounter, Ptolemy's elephants being reluctant to engage. It is clear from the narrative there (85) that the Seleucid side held the initiative; and their force of elephants was on the point of attacking (possibly, through the opposing beasts' inert battle-line), with the cavalry in its wake; but they struck into empty space — for the horse and foot on Ptolemy's right wing had managed to side-step eastward, in an apparently well-concealed turning movement, ultimately from the east and north-east,

[26] *Loc. cit.* (n. 21).




**PTOLEMAIC DEPLOYMENT INDICATED HERE ONLY FOR THE CENTRAL PHALANX SECTOR.**

**Correction:** (mercenaries' initiative)
**Roman numerals** — indicate apparent sequences of moves.
**Question Marks** — Probably, or possibly, intended moves.

(But including the peltasts on its left).

against the Seleucid left wing's flank and rear; in concert with a frontal attack by Greek infantry farther west. The two rather widely separated Ptolemaic tongs crushed Antiochos' whole front east of the phalanx; but judging from Polybios' spare report, wide open spaces resulted in the rear of those attacking troops — through which conceivably the enemy's elephants might have returned from their forlorn charge. At any rate, it is clear that the casualties among the beasts (as distinct from captures — see above) were all in the west. Thus far — Polybios' account, with its more obvious implications.

Polybios also voices an opinion: the result of the fight in the west was due to the fact that Antiochos' Indian elephants were bigger and braver than the African. This view has been disputed endlessly. Delbrueck quoted a zoo director's observations to the contrary.[27] Tarn charged Polybios with a fallacious "literary commonplace."[28] Others took up the gauntlet against Tarn — mainly arguing from West African experiences. The matter was ultimately settled by Sir William Gowers who pointed out that the "forest" elephant of Ethiopia and Eritrea, whence the Ptolemies drew their supply, was somewhat smaller than the Indian[29] — and Polybios was exonerated. Now, the really piquant aspect of the long-lived argument is that at no time was the point raised that all along a clear distinction between *three* breeds of elephants, Indian, African and "Ethiopian", was found in well known literary sources.[30] The whole issue may also have been confused by the fact that Polybios, who surely knew where Ptolemy's beasts came from, here used the word "Libyan" — then the normal Greek expression for African — to designate them.

Other reasons have been given for the outcome of the elephants' combat at Raphia. One of these is that Antiochos had an advantage in having mahouts of Indian descent or tradition[31] — a dubious assumption, since at the battle of Gaza in 312 B.C.E. Ptolemy had captured some of these elephant-drivers; namely, those who remained alive when

[27] *Geschichte der Kriegskunst* 1.251.
[28] *CQ* 20 (1926).
[29] *African Affairs, Journal of the Royal African Society*, 47 (1948) 173 f.
[30] Thus, much seems to be implicit in Pliny, *NH*, 8.24, cf. 26; 32; Aelian, *NA*. 2.11. "Ethiopian", is applied to the elephants of Ptolemy III's forces in *OGIS 54*.
[31] E.g. Delbrueck, *op. cit.* (n. 27), 1.252.

their beasts were captured.[32] A far more likely explanation would seem to be that the Seleucids had superiority not only in the number of elephants they had, but also in *support and protection troops* co-operating with the elephant force and interspersed in its battle-lines. Polybios, understandably, omits this aspect of the encounter, which must have been axiomatic to him. But in Antiochos' battle-array — and precisely in the two sectors where elephants were stationed — there must have been some of the by now traditional elephant-support troops, and other similar units, equally suited to the task, who were not meant just to "stand behind the beasts" (85.3; cf. 82.5.7).[33] Much of the battle's presumed dynamics can best be understood if this crucial circumstance is kept in mind.

For example, the fact that obvious elephant-support troops were present is relevant to another controversy, one which arose when W. Otto accepted the general tenor of the Inscription's version of the battle and above all its categorical statement (1.14) that Ptolemy "took all the elephants."[34] Egyptologists tend to view this, along with the other exaggerated accounts of battle-exploits in the inscription, as "an old-established literary convention," normal in traditional Egyptian priestly or Pharaonic commemorative inscriptions.[35] It is odd that Otto, not unacquainted with Egyptian lore, took them here as factual evidence without explanation. As it is, one material factor may suffice to dispose

[32] Diod., 19.84.4; cf. Kallixeinos of Rhodes, *F. Gr. Hist.* 627 F2. 32, more than 50 years before Raphia; cf. also Gowers' and Scullard's observations, *Numism. Chron.*, 6th Series, 10 (1950) 276, as to the possible acquisition of Indian elephants (and, presumably, mahouts) in 246 B.C.E. — if *OGIS 54* provides the inference.

[33] Seleucid elephant sectors: *west*, 82. 8–9; 84. 8–9; *east*, 82.13; 85.1.3; Light troops (not including Cretans, obvious *cavalry*-co-operation troops, and similarly Lydian and Cardac acontists): *west*, 82.10; cf. 79.3; *east*, 82.11 (79.6); 82.12 (79.7) — evidently, only in part (for that cf. 85.2.4). The traditional example, still the best, of accompanying-troops, would be Diod. 19.82.3 (69.1 — cf., 14.5; 17.4.6; 21.3; 27.5). There and in Plb. 5.79.6 alike there appear, both in 312 and 217, "Persian bowmen and slingers", along with javelinmen; and in both cases in a comparable proportion to the number of elephants [See Diagram].

[34] *Beiträge zur Seleukidengeschichte* (München 1928) 83 f. Otto's general uncomplimentary attitude to Antiochos' role and achievements in the campaign is made as clear here as is his basic agreement with the picture emanating from the Inscription, rather than with the Polybian one.

[35] H.J. Thissen, *op. cit.* (n. 1), 54–56; cf. H. Sottas, *Revue de l'Égypte Ancienne* 1 (1927) 232f. (esp. n. 1) 241; cf. W. Spiegelberg, *Sitz.-Ber. Muenchen* (1925) Abh. 4, P. 19; (1927) Abh. 2, pp. 8–9.

of the Inscription's rather obvious propaganda: there do not appear to have been available, in the respective sectors, even toward the battle's conclusion when the Seleucid troops were retiring, any Ptolemaic troops of the kind that could subdue elephants, or protect them;[36] yet precisely such light missile units and sometimes horsemen were practically omnipresent in the Seleucid arrays, and some of the former were surely attached to the beasts, during and after the attack.[37] We must assume, on tactical and organizational grounds, that attached units did indeed remain both with the right (west) wing's returning victorious elephants and with the left wing's "lost" assaulting force, which probably sought to find the way back to their bivouacs in the main army's rear. Whether or not such a reconstruction represents precisely what actually happened, the fact remains that virtually none of Ptolemy's forces within reach were capable of seizing the enemy's elephants or protecting their own; and that the reverse was true of Antiochos' army. It is this estimate that makes full sense of Polybios' account of the elephants taken (86.6).

Thus Polybios' version is consistent, and makes good sense. The evidence of the Inscription would have us rewrite the whole story of the

[36] Cf. Diod. 19.38.2–3, where a force is sent to capture over a hundred enemy elephants, and another sent to protect them, each composed of several thousand light troops and cavalry. It could, of course, be argued that on this occasion the choice of troops suited the need for *speed;* but the two requirements would coincide. A broad chorus of evidence, from Eumenes' and Antigonos' campaigns in Iran (Diod. 19) to Phyrrhus' in Italy (Plu. *Pyrr.* 21.6) tells us, in a score of battle situations, of the constant use of light troops (preferably or entirely, missile-units) for fighting at the side of the elephants, undoubtedly protecting them and trying to shoot down the enemy's mahouts. The indispensability of light missile troops for hampering elephants (preferably by removing their riders) — *and* capturing them — is perhaps best illustrated by Ptolemy's and Seleucos' arrangements for the battle of Gaza (Diod., 19.83.3; 84.1.4), even though the beasts' capture was no doubt also facilitated there by the spikes, which also effectively separated the animals from their own, (attested, Diod., 19.82.3.), attendant protective troops. On the other hand, normally troops of the heavy-infantry type, were neither able to shoot down nor in any way subdue the *mahouts,* in order effectively to *master* the elephant. This was amply exemplified on numerous occasions, but perhaps the most succinct example is Livy 36.19.6.

[37] These troops were apparently attached to their elephants at least for the campaign (Cf. Diod. 19.69.1 — *and* 82.3). Such force-combinations could not be improvised overnight, and required protracted joint exercises and training, aggressive and defensive. These, in fact, are attested in widely varying situations, from the campaign of the Carthaginian army in Sicily in 254 B.C.E. to that of Caesar and his opponents' forces in Tunisia in 46 (Plb. 1.38.4; [Caes.] *Afr.* 27.72.).

battle, and ascribe an opening victory in the west to Ptolemy. This is a manifest impossibility; and yet, once the Inscription was discovered, it was almost inevitable that suggestions would be made to revise or "read aright" some key passages in Polybios' text.[38] However, Polybios' meaning is clear, and his account is in accordance with the tactical facts. Thus, in the matter of battle casualties, it is fantastic to ascribe the "three elephants killed and two who died of wounds" to Ptolemy (instead of Antiochos) and the "sixteen killed" to Antiochos (instead of Ptolemy); for obviously the encounter in the west, which alone produced casualties, could not account for such losses to the Seleucid side, the one that had the upper hand.[39]

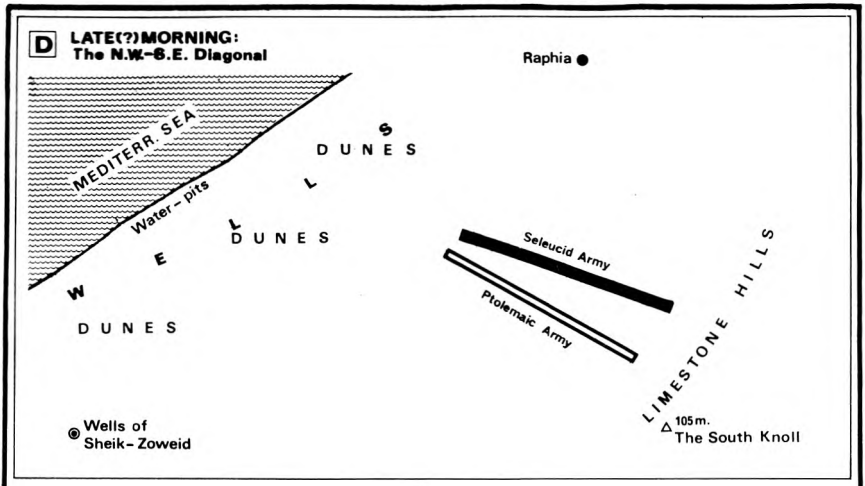
Neither is it possible to give any credence to the Inscription's report of captures of Seleucid elephants. Of the sixty elephants on Antiochos' western wing there were now clearly left only fifty-five and possibly fewer; for some wounded did not perhaps die before final returns of casualties were in. These, probably did not career down the road to Sheikh-Zoweid, their participation in pursuit having become superfluous and wasteful; for there were probably no more formed bodies of cavalry to attack. Instead, no doubt, when regathered, they retraced their steps northwards, in the midst, or at the head, of the entire victorious western troop-complex — that is, the two horse brigades, the Cretans, and the "Light Brigade" — that now streamed back, in the wake of the Royal Ila (5.85.12) [See Map E].

There was nobody to threaten them, or even to attempt to block their way, west of the Ptolemaic phalanx — now distant, whether engaged or already in pursuit towards the north-east (85.12–13; 86.1). It was, obviously, these elephants and attendant troops that Antiochos *could*

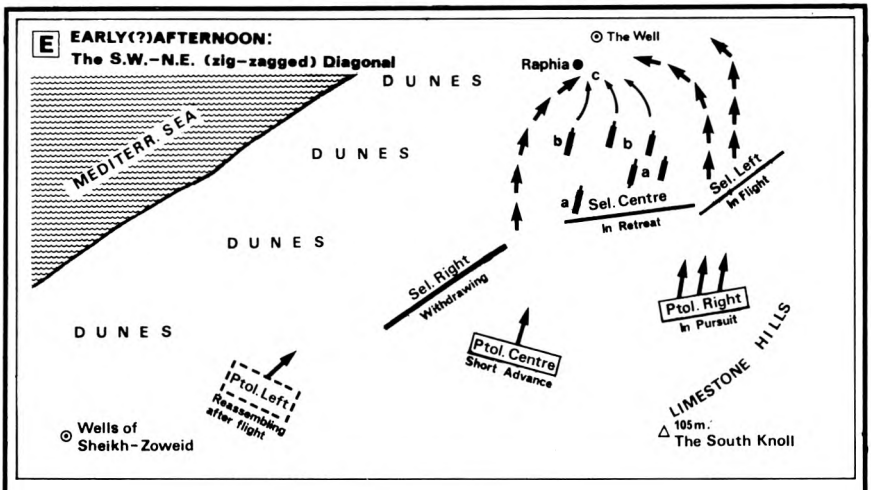
[38] Thus Sir William Gowers and H.H. Scullard, *op. cit.* (n. 32), 277 and n. 22, proposed so to transpose the data on elephant casualties in Plb. 5.86.6 (which include both deaths and captures). Their article also contains an interesting argument for the presence of some *Indian* elephants in Ptolemy's force. Were there any such, they would obviously have been amongst those who showed fight on the western wing; but this, even if proved, hardly affects the issue under discussion.

[39] The obviously factual statement about "3 elephants killed and 2 died of wounds", which can not possibly refer to the Ptolemaic side, bears also on the question of *captures* : the side that was able to give an accounting of those of its animals which had died of wounds could not be the one from which "all the elephants" (*Inscr.*, 1,14) — or even "most" (Plb. 5.86.6) — had been captured.

## THE BATTLEFRONTS (1)




## THE BATTLEFRONTS (2)



envisage as a powerful flank-guard for the army he stubbornly hoped to deploy anew before Raphia — or as a mighty stiffening for a cavalry curtain to cover such deployment. In the event, they probably served to protect his retreat on the morrow. So much for the plausibility, in the west, of "all Antiochos' elephants having been captured" — the transparently boastful claim of the Memphis Synod's decree.

On the eastern wing things were not very different. There, the forty elephants and their attached *praesidia*[40] did not find Echecrates' force in its former dispositions; it had sidestepped, and their assault-impetus was spent uselessly. The Galatians and Thracians were now far away to the north-east, beyond the "kurkar" (limestone) ridges. Ptolemy's Greek mercenaries, having pushed "the Arabs and the Medes" away, were by now a couple of miles distant, hard at work pursuing and mopping-up (85.4-5; 86.1). The nearest division of the Ptolemaic phalanx, the Egyptian, facing north, was about to begin converging — perhaps with the easternmost files inclining diagonally to the left — on Antiochos' phalanx, deployed for battle, and his camp. What forces were there now to come and engage the eastern elephant battle-team, surely with troop-escort, or to surround them ? It is not difficult to picture the "lost" elephant force finding its way, unobstructed, between the camps to the west and the area of the mercenaries' pursuit to the north-east,[41] ultimately to rejoin the discomfited army near Raphia. For its capture, it appears, there existed no practical pre-conditions.

The assumption that Echecrates' elephants, having refused to fight, must have fled the field has nothing in the text to support it. On the contrary : if they *had* fled (cf. below), they must have struck the Ptolemaic right wing *prior* to the evading movement by its troops. However, Polybios tells of those troops disappearing flankwards, to get out of the elephants' assault zone, by which he obviously means that the *enemy* was now forming up for the attack — and not that Echecrates' own animals were making a rearward disruptive rush, like that in the

[40] "Cum adsueto praesidio" — Livy 36.18.4 (at Thermopylae, 191 B.C.E.). Was the expression a rendering of Polybios' φυλακή, or perhaps even φρουρά But Appian (*Syr.* 18) supplies a different term — here perhaps a *terminus technicus* : "their accompanying στιφος" — a word, which in Greek military parlance mostly meant a column.

[41] Cf. map. The battlefield developments at the Nemea Stream and at Gaugamela may be recalled (Xen. *Hell.* 4.2; Arr. *Anab.* 3.14–15; Diod., 17.59–60).

west (cf. 84.7). There is another decisive objection, aside from this textual one, to such an assumption — one of a tactical nature, which will yet be pointed out. But here one may ask: is it really possible that there was no flight ? Briefly, it seems that there was employed here too the time-honoured Indian method of capturing elephants by approaching them on two or more sides, and hemming them in, with trained elephants under expert direction (and here, of course — while putting appropriate pressure on their drivers).[42] In general, capture of war-elephants mostly became practicable when the animals somehow got hemmed-in — whether by becoming involved with systems of walls, palisades and moats, or through entangling themselves in camps, baggage-trains, etc.; or when they were surrounded by the enemy elephants, in a movement calculated to capture them. In all these cases, naturally, it was easier to achieve the vital aim : to impose one's will on the remaining mahouts. The extant descriptions are uneven in structure, mostly summary, and only seldom explicit on the actual methods used. Still the above conclusions seem fully warranted — especially in the light of one illuminating example derived from the *combined* accounts of captures at Panormus, 250 B.C.E.[43]

Whatever methods were used, Polybios' tactical picture, with all its implications, stands. Echecrates saw that his animals did not engage (85.1); he started his cavalry, and "the troops behind the elephants", on their evasive *and* turning movement — thus removing them from the beasts' assault zone (85.3). Following the narrative, and in accordance with the topographical data, the Ptolemaic elephants' battle-line could hardly have stood more than a few hundred meters in front of Echecrates' wing : if the battle-shy animals had then stampeded, they would have hit that array within a couple of minutes at the utmost —

[42] For the persistence of ancient Indian methods of capturing elephants cf. Strabo 15.704–705; Arr. *Ind.* 13; Plin. *NH* 8.27; also *PW* 5, col. 2251; and for their employment even today, *Enc. Brit.* (1954), 8, p. 349; G.S. Casdale (formerly, superintendant of the London Zoological Garden), *Animals and Man* (London 1952) 110. Prof. A. Shulov of the Biblical Zoological Garden, Jerusalem, has kindly discussed the subject with me.

[43] Plb. 1.40 — esp. 15; Dio Cass. 11.14; Zonar.8.14.

and Echecrates' manoeuvre could not have worked.[44] On the other hand, if the passive beasts were being taken prisoner, or otherwise removed — and the Seleucid battle-line was perforce reforming for the assault — the situation could be observed by Echecrates from his nearby observation point [See Map F]; and the time would be just sufficient for his superbly calculated exploit — which, most likely, had been contingently planned beforehand [See Map G].

One more paradox of Raphia is that though the battle went ultimately to Ptolemy, the elephants went to Antiochos. Polybios' account (82. 84–86), here, though it is in parts exceedingly laconic, and needs to be filled in with other data, fits the tactical possibilities and impossibilities of the battle; and, as to the elephants' fate, it defies any attempt to supersede it with a diametrically opposed hypothesis.

### *Tactics : Questions and Clues*

For over a hundred years historians have cited Raphia prominently in rather pessimistic analyses of the development of the Hellenistic art of battle after Alexander. These analyses, of Rüstow-Köchly, of Droysen, and of Bauer, are dismissed by Kromayer in his summing-up as "the totally unjustified statement that in the battles of the Diadochi no unified battle-structure remained; the various sectors of the front, the centre and the wings, battled planlessly each on its own, and there was no longer any organic cooperation such as there had existed in Alexander's battles."[45] He then proceeds to analyze, and largely rebuts, this statement.[46] But Raphia had received its full measure — particularly in some more contemporary works — also of specific, and emphatic, censure as a conspicuous illustration of the assumed decline in Hellenistic tactical craft — as compared not only to Alexander, but also

[44] An elephant's normal running pace is 8–12 km/h (cf. *Brehm's Tierleben,*[4] "Mamals" 3.547 [Leipzig 1915]. Even in the event (not impossible, judging by each sides apparent initial disposition, and the ground) that Ptolemy's elephants in the east were stationed farther forward than on the left, western, wing — the distance could hardly have been more than, say, 200 to 400 metres at the utmost.

[45] J. Kromayer, G. Veith, *Heerwesen und Kriegführung der Griechen und Römer* (München 1928) 142.

[46] *Ibid.* 142ff.

to the Diadochi.[47] Ironically, some aspects of such criticism, as we shall further see, can actually help us to understand, and to explain rationally, this battle's tactical peculiarities.

Two fundamental, and interconnected, questions may be asked here.

1) Why in fact were there "three battles," instead of one ?
2) Why did the victorious cavalry wing, and its allied arms, not swing inwards to crush the enemy's central phalanx and roll it up from the flank ?

Questions, which apparently imply a lack of inter-arm cooperation and planned cohesion in combat.

The separateness of the "three battles" was discussed twice, each time with a different, and not quite exact, emphasis, by Tarn;[48] it was echoed, with some imprecisions of his own, by Cary,[49] restated, with stress on the missed flank and rear attack, by Griffith,[50] and referred to critically, though more moderately and justly, by Will.[51] Delbrueck, rather unexpectedly, qualifies the criticism of Antiochos — made originally by Polybios himself (85.7.11) — with the symmetrical query (our 2 above) : why did not Ptolemy's successful right cavalry wing deliver a flank assault on the phalanx?[52] Indeed, this query is perhaps harder to answer than the parallel ones directed at Antiochos. Remarks in a similar vein will be found in a Soviet work by Gen. Razin.[53]

Critics of Antiochos at Raphia drew analogies with his other great battle (and defeat) — Magnesia, 189 B.C.E. The most prominent concerned Antiochos' right-hook charge at Magnesia, so parallel to that of Raphia. Indeed, Kromayer included both in his sample of battles "where the victorious cavalry, indulging in pursuit, forgot to wheel against the enemy's centre".[54] Tarn, too, matches the two.[55] Now, such comparison ultimately casts its light on a generally neglected aspect common to *both* battles though even more pronounced at Raphia.

47 Clearly indicated, e.g., by Tarn, *op. cit.* (n. 5), 67; also 26f.
48 *CAH.* 7 (1928) 730; *op. cit.* 27, 68.
49 *Op. cit.* (n. 9), 92, 211, 239.
50 *Op. cit.* (n. 8), 123.
51 *Histoire Politique du Monde Hellénistique* 2 (Nancy 1967) 31.
52 *Loc. cit.* (n. 31).
53 *History of the Art of War* 1 (Moscow 1955) 258. (Russian)
54 Kromayer-Veith, *Heerw. u. Kriegsf.* 143.
55 *Op. cit.*, (n. 5), 68.

Let us proceed from the more general ("separate battles") to the more specific. The "three battles" phenomenon, discernible in most clashes between Hellenistic armies, was simply the almost inevitable product of the size of the contending forces — resulting in the great length of the battle-lines', which in the case of the battle of Raphia, with its singularly huge armies, meant enormous frontages, six to seven km. wide. A general's eye could not normally discern what was brewing three to four km. away; what he sometimes saw were results. Delay in reports brought by dispatch-riders over long distances made on-time intelligence, not to speak of changed directives, impossible.[56] So, "three battles" were a necessity — and sometimes they became a virtue, as in the case of Echecrates.

Thus, the supreme commander was in a real predicament (optical — *and* physical) even while making decisions and giving directions; how much more so were the troops in executing them. Even so, much depended on the particular case. Let us take as illustration an extreme, but basic, problem : the transfer during battle of cavalry forces from one wing to the other. It was done, on the spur of the moment, by Eumenes at Paraitakene, and saved the day; and again, with less success, at Gabiene — both times behind *his own* line.[57] The same manoeuvre was successfully executed — with apparent fore-thought and clearly behind the enemy foot — the next year after Raphia, at Cannae; and it resulted in a deep envelopment, that led to complete encirclement:[58] a commander's ultimate dream, from the time of Eumenes' battle with Craterus in 321 B.C.E. (where the combats on the two wings were so successful that it never came to the encircling attack) — to Schlieffen's day.[59] These feats seem to invite critical comparison with Raphia. But are there grounds for such a comparison? At Parataikene the line of Eumenes' infantry was about one km. in width, as it was also at Gabiene — where he probably also took the shorter route, over the infantry's earlier

[56] This was ironically illustrated by the well-known, and controversial, case of Parmenio's request for aid (Gaugamela, 331 B.C.E.): Arr. *Anab.* 3.15.1; Diod. 17.50.7–8; Curt. 4.15.6–8; 16.1–4; and Plut. *Alex.* 32.3–4; 33.7.

[57] Diod. 19.30.3–4; 42 (if details exact).

[58] Plb. 3.115 1–4; 116.5–8; Livy 22.47–48.

[59] Diod., 18.30.4–6; 31.1.5; 32.1–3; Plut. *Eum.* 4–7.

position (from which it had advanced), for the cavalry's transfer.[60] Even at Cannae, the Roman infantry array's exceptional density and depth appear to have narrowed its width to about one km., or slightly more.[61] Yet at Raphia the front-line of the Ptolemaic phalanx should have extended about 2 3/4 km., even if we postulate a double depth of thirty-two men, as at Sellasia, for the twenty thousand Egyptians; that is — if we include the westward end of the camp, close behind, which probably protruded here farther to the left; while the mercenary medium infantry on their right added another, say, five, or even nine, hundred metres.[62]

Hence, in tactical and physical terms, the examples of Cannae and earlier battles are not relevant. For it seems that sheer distance, and the exertion and time necessary to master it, played its decisive part in the Raphia Approaches and in the centre of the field.[63] To a lesser and

[60] The estimate of the length of Eumenes' infantry line in a 16-deep phalanx is based on Diod. 19.27.6; 28.1–2; 40.3. For his manoeuvre at Gabiene cf. 42.7, with 43.1.

[61] Accepting the *figures* to which Walbank, *Commentary on Polybius* (Oxford 1957) 1.439, seems to incline — that is, around 70,000 foot in the field, of which presumably some fifty thousand, or a bit more, were infantry-of-the-line — along with his tentative *estimate of depth* ("hardly less than 50," *ibid.* 444). Incidentally, the combined two lines of the Roman cavalry ought to have been up to 1.5 km. long, by "Hellenistic norms"; but apparently, the river-wing had to be narrower than normal (Plb. 3.115.2–4; cf. 116.6; and esp. Livy 22.47) and it seems that was one reason for the horsemen's unusual head-on clash (which is absent from Polybios), but thus also allowing a swifter sidewards swing by the pursuing victors [cf. also Marlborough's switch at Ramillies, 1706].

[62] Plb. 5.65.4, 8, 9; "The Phalanx" of 25,000, plus three thousand "Libyans armed in the Macedonian manner", gives 28,000; divided by sixteen it yields a line of 1750 men; if we assume a 32-men depth for the twenty thousand Egyptians, which is militarily and psychologically the most plausible, their frontline will have numbered 625. Together we have 2375 men, giving a line of some 2200 metres, assuming no unit intervals. We must add eight thousand mercenary foot, whose line most likely extended for nearly nine hundred metres (assuming depth of 8) rather than for 450 metres (if 16). A tentative assessment for the assumed westward protrusion of the camp beyond the phalanx' left, is seen on the basis of an estimated 200–250 metres for the 2000 peltasts and, say, 170–180 metres for *half* of the *agema*, that is 1500 men, (if we divide by eight and deduct 10%), or under a hundred metres (if we divide by sixteen); probably these together occupied some 350–400 metres. The total phalangic-and-stockade line to be enveloped, then, was 3000 to 3500 metres long.

[63] The area to the southwest, in the direction of Sheikh-Zoweid and beyond, now commonly called the Raphia Approaches, was that of Antiochos' furthest pursuit (Plb. 5.85.11–12). Simultaneously, the two phalanxes clashed in the field's centre (ib. 85.6.9–10, 12–13) [cf. Maps C,E].

varying degree the same applies to other battle situations. Still, even such wide lateral distances, and the encumbering weight of unusual numbers, can only in part explain the absence of a "roll-up" movement against the centre. Its specific root lay here probably in the extraordinarily narrow tactical arena between the two camps: narrow absolutely, but even more so in *relation* to the exceptionally extended fronts and huge formations. This tactical arena was naturally much narrower between the *arrays.* Initially (for the latter half of the 5-day-long vis-à-vis under arms), only eight hundred to one thousand meters may have divided the fortified encampments probably 1 1/4 to two km. broad; later much less space must have separated battlelines several miles long: a combat-situation clearly exceptional, though not entirely unique.[64]

At Magnesia, the camps and armies were contraposed somewhat less closely;[65] but the Seleucid line appears to have been even longer. *Mutatis mutandis,* the situation paralleled that at Raphia, and it can serve as a useful check in analysing the latter. For in both cases there existed at the field's centre a tactical bottleneck : the two camp stockades, with a corridor-like cockpit in the middle. These played a determining role in making unfeasible a roll-up by flank attack; and they necessarily contributed to the battle's "dismemberment" into three distinct, though not unconnected, combats. Descriptions are extant which make graphically clear how these factors worked in the field of Magnesia. Now, a succession of historians have stressed similarities between prominent aspects of the battles at Raphia and Magnesia. Indeed, certain instances of circumstances-and-effect in accounts of Magnesia apply even more forcefully to situations of Raphia.

Yet some of the parallels thus pointed up may "boomerang" on the

[64] For the distance: ib. 80; on the two lines' unusual length cf. n. 62 supra. For Ptolemy's camp being a fortified one cf. Plb. 5.81.6. Antiochos' could not possibly have been otherwise, at so short a distance from the enemy, particularly in view of the possibility of night forays.

[65] At Magnesia the camps were probably about 1 3/4 km. distant. Here, Kromayer, *Schlachtfelder,* 2 (Berlin, 1913), 172 n.6, 173, apparently somewhat miscalculates; cf. Livy 37.38.5, 8; 39.5; App. *Syr.,* 30. Furthermore, for deducing field-arrays' depth between the camps, cf. Caes. *BC* 1.82f. His estimate complements that of Kromayer; though based on *cohort*-legions, by his tactical data it cannot differ so greatly from manipular legions. In Antiochos' case, the distance from his camp wall (cf. Livy 37.38.9) — which surely was also needed for possible internal manoeuvring, within the array and behind it, of his bulkier forces — should be added, to give a similar total depth.

very pictures evoked by their authors in respect of both battles. Let us look at Raphia once again. There, the camps must have been not at the true centres of the fronts but somewhat more to the west, closer to the water supply and to the main route to Egypt, i.e. the Road of Kings, Darb-es-Sultani. The fact that the Ptolemaic camp extended so far westward should clearly have narrowed Antiochos' lane of pursuit in the west to the sectors of Ptolemy's horse and Cretans, and probably part of the Agema. By the standards quoted in Polybios (12.18. 3–4), Polycrates' horse, those troops of Ptolemy who were nearest to the sands, may have occupied 650–700 metres along the front; and the Cretans — some 300–450 metres. The camp was presumably at least 1.5 km. (to two km.) broad;[66] and for reasons mentioned above, it could hardly have been situated more than, say, one to 1.5 km. distant from the road, which ran along the edge of the dunes — where the trek only began, over two to four kilometres of sand, to the nearest area where a water supply of sorts was to be found close to the sea; even that a nightmarish distance for any quartermaster. If so, the peltasts and at least part of the Agema must have deployed in front of the palisade-and-ditch — which blocked further flight, and offered a haven as well. The comparative paucity of casualties, during so prolonged a pursuit, in the Ptolemaic foot — 1500 killed of the left wing's eight thousand (compared with seven hundred

[66] Assuming it was more or less equivalent in area to one for two, or 2 1/2, Roman consular armies (Plb. 6.32; cf. Kromayer and Veith, *op. cit.* (n. 45) 340, 343, 345; *CAH* 7. 317, plans opp. p. 322; Walbank, *Commentary*, 1.709–711, 715). In the given tactical situation of "Two In a Corridor," between the sands on the west where a body of troops in formation could not manoeuvre, and the range of limestone hills on the east, with the arid zone, and difficult patches of sand, beyond them — and with the size of the armies to be deployed on battle-day — the broadest feasible camp-disposition could be expected. The *depth* of a Roman one-army *or* two-army camp, some "600 metres plus" (Kromayer–Veith *op. cit.* 340, 342, 345; Walbank, *Commentary*, 1.710 — plan, 711, 715) was apparently the minimum considered sufficient (Plb. 6.32.7) for a camp's defence, even against all-round attack (taking into consideration also the range of bow and sling : Plb. 6.31.14). As to over-all area, various irregularities and empty spaces in the layout here probably balanced the Roman reglementary open spaces and the broad empty strips near the vallum (ibid. 11–14); for an apparent analogy cf. the Macedonian Amphipolis Regulations, (V. Launey, *op. cit.* (n. 16), 2. 694, 695 with n. 1), which mention intervals in camps between a unit-area and a perimeter. The latest summaries of Roman camp acreages (Harmand, *L'Armée et le Soldat à Rome, 107–50 av. notre ère* (Paris 1967) esp. 126–128) apply primarily to the conditions at the blockade of Alesia, and thus are hardly relevant here.

killed of three thousand mobile horsemen) — agrees with the hypothesis that a refuge for much of the foot was early available nearby.[67] At all events, Antiochos may have had a good grand-tactical reason for continuing his pursuit-in-depth, instead of making a left wheel and flank attack, but more of that later. The question now is: Was a flank attack *practicable?*

Theoretically, it could either have been made on the troops arrayed before the camp, or on the camp itself. It is characteristic of the approach generally taken to the battle that, in this context, all the critical formulations allude to the first possibility, simply overlooking the camp.

But was taking these field troops in flank a possibility ? From so narrow a cockpit, the first real push by Antiochos' horse and light troops forward — preceded by storming elephants — would perforce have carried them south, past the front of the Ptolemaic camp; to call them back at once and reform them would be a messy and lengthy business, with cavalry probably getting into the elephants' path. Even had they not been borne south that way, wheeling a 1.25 to 1.5 km. broad frontal deployment to the left, at a right angle, in the narrow space between the camps was hardly feasible. The only practical thing was probably for Antiochos' brigade of mercenaries, having presumably pushed the peltasts to the camp wall, to have struck the left flank of the "Libyans armed in the Macedonian fashion" — in a left turn, perhaps — and so to have started the rolling-up process.[68] (Incidentally, though, by doing so these five thousand would also have effectively sealed the approach to the enemy phalanx's flank or rear in the face of all the other troops of Antiochos' victorious mobile complex). Yet even this brigade would not have been able any more than the entire wing to pivot its frontage — which perhaps extended from 550 to six hundred metres — to the left; and it would thus have to attack in a broadish, yet quite lengthy, column

[67] 5.86.6. *Strengths:* left wing's foot — 65.2, 7; horse — 65.5. Compare cavalry losses here to the three hundred out of Themison's two thousand on the Seleucid east wing, attacked "from the *rear* and the flank" (79.12; 85.3; 86.1). Clearly, virtually all Ptolemy's losses were in the west; and almost all of the Seleucid horse's in the east.

[68] Cf. Plb. 5.65.8; 82.4; the Libyans presumably were superior to the mercenaries in their sarissa-type armament; but, one imagines, liable to be affected by a threat from the flank.

which might have measured thirty-two by 160, or sixty-four by eighty metres. Now, such an attack would have passed under the palisade-and-ditch of the camp, parallel and close to them, with its right, unshielded, side within easy range even of archers and slingers, and partly too of dart-throwers,[69] not to speak of the mechanical artillery presumably mounted behind the camp's palisade or in improvised towers; for these weapons, along with ammunition for them, must have been carried with the army, and included in camp defences,[70] as we learn from contemporary analogies. In the peculiar and inherently improbable situation here envisaged, of the mercenaries' attacking parallel to the palisade in column and at close quarters, they would have been exceptionally vulnerable to sustained attack on their flank and perhaps to skirmishers' sallies; the price would have been too high.

The whole point, of course, is that to all intents and purposes the unusual configuration of the fighting space and its closeness — both originally due to tactical, and probably also hydrographical, factors in the battle's preparatory stages — left no way open for a roll-up move against a field array still keeping reasonably close to the broad palisade.[71] Now, the mercenaries, having presumably pushed the peltasts into the camp, might have attempted to storm it; that would have been a difficult task, though perhaps not an impossible one. But such an

[69] For the most recent range estimates cf. McLeod, *Phoenix* 19 (1965) esp. 134; and *JHS* 89 (1969) 197f; Harris, *Greece and Rome* 10 (1963) esp. 34–36.

[70] Cf. Diod., 20.73.2–3; 75.3; for composition of a Macedonian army's artillery force at the time (217; here with an eye to siege) Plb. 5.99.1;7; specifically for camps (and emplacements there) — App., *Syr.*, 18.30; Livy 36.16, 1f; 37.37. 9–11; ammunition carried — Livy, 42.53.4; Ptolemaic artillery units — Launey, *op. cit.* (n. 16), 2. 957, 1015. Cf. E.W. Marsden, *Greek and Roman Artillery* 73–77, 169; Diod., 20.73.3. It is normal for no mention to be made of ordnance when the composition of a field army (as distinct from situations of intended *siege*) is being discussed; thus it is alluded to only as an element in a difficult logistic operation (Diod., 20.73.2f) — or in an instance when actually employed (Diod., 20.75.3).

[71] This is one of the many situations illustrating, *mutatis mutandis*, Caesar's later dictum (*B.C.*, 1.82). Speaking of two armies, and camps, contraposed at an "inter-camp" interval nearly identical to that at Raphia, he explained in strictly practical terms the futility, to his mind, of attempting a decisive field action in such circumstances, with the enemy's troops being too close to their camp's support and refuge. This assumption has been shown on occasion wrong, before and after his day, and in some of his own exploits as well; but its validity has been far more often borne out; and certainly, in this respect, no basic discrepancy between Roman and Hellenistic experience can be discerned.

attempt was hardly practicable here as long as the Seleucid phalanx had not engaged the Ptolemaic, or vice versa. It is not hard to come to the conclusion that, in view of Antiochos' presumable over-all plan to balance his phalanx's smaller size and pushing-strength with initial shock-effect attacks on the wings, it was too early yet for such an advance in the centre. So the "straitjacket" between the two camp oblongs did not lose its hold. Could that hold be challenged ?

It seems there was only one moment when Antiochos might have succeeded in even a partial tactical envelopment : when Ptolemy's great phalanx had actually advanced to charge (5.85.9), and perhaps already pushed its adversary back (85.10; 12); but before it had driven him off the field, or even beyond his encampment — leaving Antiochos no attackable, and still frontally engaged, enemy objective (85.13). The vital difference in time may have been a few minutes to half an hour. We have already mentioned the obstacles to effective battle-field surveillance; and in a time before radio communications, to synchronize movements in a battle ground extending over scores of square kilometres would be largely a matter of luck.

Again the real, crucial, issue may have been that of Ptolemy's camp. It must have been not only fortified but also defended. Apart from the original camp guard and, presumably, artillery crews, the camp now probably contained the remaining peltasts and part of the Agema, and very likely some of the Cretan archers too, in its western part. Only part of Antiochos' mobile forces, his light troops, were at all suited to mounting an attack on a fortified camp; at all events it is unlikely that he would have abandoned his first priority : to put out of commission Ptolemy's wells and coastal-water supplies around Sheikh-ez-Zoweid and farther down the road to Egypt, and so force him to retreat speedily into Sinai and beyond [cf Maps B,C].

It seems clear that the water factor was of paramount importance; this largely explains the fact that Ptolemy and the Household Troops were stationed on the left, western, wing — nearest to the sea. Antiochos' apparent battle plans reveal a similar motivation. Considerations of logistics play a vital role in his tactics and Grand Tactics; partly in view of his numerical inferiority in phalanx, he had chosen a position whence the water factor could be exploited by the side which was strategically the defender. No doubt he must have seen the chance to put both the

enemy's army and his camp "in the bag"; or, perhaps even better, to force him to withdraw by an attack in depth in the direction of the wells. The attack launched by the elephants, the cavalry and the light troops in the east will have been made in conformity with this strategy; there, we must remember, most probably the camp-entrenchments did not possibly extend in the back of either side's field-troops. This attack was frustrated by Echecrates' dexterity in the event, and by the fact that on the Seleucid phalanx' eastern flank there was no proper counter-weight to Ptolemy's mercenary medium infantry; only the "Arabs" constituted an ineffective substitute.[72] The purpose of the attack may have been not only to inhibit an early advance by the enemy's phalanx in the centre, but also to join, at least symbolically, forces with the western wing of the Seleucid army deep in Ptolemy's rear; that way, at least, there would be an envelopment of sorts — which might have become decisive in the context of Grand Tactics and, ultimately, of strategy, even if it was tactically not fully effective.

It may well have been the case, as hinted above, that Antiochos did not consider his mobile shock forces particularly suited for an assault on an entrenched camp, not yet under attack from any other direction. It is hard to know whether this consideration played any role in the decision the Seleucid command had to make between an attempt to follow up the early success in the west at once with a direct flank attack on the enemy's field-array — perhaps the alternative string on the planner's bow, but one which was impracticable as long as the Ptolemaic phalanx was stationary — and the continued pursuit of a presumable, more distant, logistic objective.

### *Magnesia's Parallels and Lessons.*

As far as the roll-up movement he may have intended at Raphia is concerned it is instructive to compare what a much more experienced, and perhaps wiser, Antiochos attempted to do, and in part achieved, in a tactically and physically not dissimilar situation at Magnesia. Livy's account of this part of the battle is quite clear (37.42.7f),[73] while many modern views of it are strangely unreal.

[72] Cf. Plb. 5.85.1–5.

[73] Livy seems much closer to the Polybian tradition here than App. *Syr.*, 31.

Tarn classed Magnesia, like Raphia, with those "Hellenistic battles..." where "...a cavalry fight on the wing led to nothing but a useless pursuit of the defeated."[74] Kromayer tried to find justification for Antiochos' not having "swung against the centre at Raphia and Magnesia."[75] Holleaux wisely refrained from going into particulars: "broke the Roman left and threatened their camp," but echoed the accepted mood in the suggestive phrase: "impetuous as at Raphia";[76] in this he was outdone by Cary with a cliché redolent of Cavaliers and Roundheads: "at Raphia and Magnesia... Antiochos played Prince Rupert..."[77] Yet it is much more misleading when he writes: "Antiochos... routed the Roman left; ... repeated the mistake... of Raphia; instead of turning in upon the Roman centre, he carried on the pursuit of the broken Roman wing" (as if the two were here *two distinct* courses of action!)

Now, the irony of the matter lies in the fact that there is hardly any other battle-account in preserved Hellenistic literature that contains so factual, vivid and sensible a description, in laconic and logical stages, of an attempted breakthrough and roll-up attack that largely succeeded. This attack was lateral from the start, with directly subsequent folding-up of the enemy's front from the flank.

Livy writes: "Antiochos, on the right flank, as he did not see any supporting-troops — because the Romans trusted in the river — except for the four turmae of horse, and these were keeping close to their main front, thus leaving the river-bank bare — made an attack on this sector with auxiliary forces [light troops][78] and mailed horse; nor did he charge frontally only, but, enveloping from the river, thrust from the flank until, first, the horsemen were routed and fled, and then the nearest body of foot was compelled to retire hastily, in disorder, towards the camp."

Here, clearly, the first penetration through the river-bank "corridor," resulting in a subsequent flank attack, was the primary tactical lever; but, both penetration and attack became almost instantly much broader. For, whatever Livy's "four turmae" were in reality, their possible

[74] *Op. cit.* (n. 5), 68; also: "the successful charge of Antiochos III at Magnesia — which lost the battle."
[75] *Op. cit.* (n. 45), 143.
[76] *CAH.* 8.223.
[77] *Op. cit.* (n. 9), 239.
[78] Cf. Livy 37.42.7; 40.8f; App. *Syr.* 32.34.

frontage, along with the strip of river-bank left bare, was perhaps one or two hundred metres broad; but the massed bulk of the mail-clad horse — Antiochos apparently applying here, under changed conditions, his attack-column formula of Raphia — was to convert, in fact, the whole of this frontage into a *manoeuver corridor*[79] where, quite naturally in the unequal contest, "first, the horsemen... were routed," and fled. It is here, it seems, that many historians go astray[80] overlooking the implications of Livy's words "towards the camp," *and* the preceding "thrusting from the flank." Some of the Roman cavalry must have escaped to the rear, into the open field behind them (which would perhaps account for Appian's "prolonged pursuit"). Livy describes what happened to the bulk of the Roman left wing's forces. This — including the *proximi peditum* meaning the Latin *ala,* — under double attack, front and flank, was repelled "in disorder" towards the camp;[81] that is, it did not disappear from the contest, like those hapless few horsemen, but was driven to retreat *to the centre,* i.e. the camp, with a probable frontal extent of about 600-700 metres, which naturally lay behind the two Roman legions that held the middle of the line.[82] The legions' first line ought to have been (at the start), perpendicularly, somewhat under a kilometre away from the camp. The left sector of the Roman front extended laterally for perhaps slightly over half a kilometre From these

[79] It is practically certain that Livy's four *turmae* are identical to Appian's "four *ilai*" (*Syr.* 31; cf. Kromayer *op. cit.* (n. 65), 2.180, n. 4). The detachments' actual size is not quite clear. Though Livy, almost certainly translating from Polybios, calls them *turmae,* these were obviously larger than regulation legionary *turmae,* normally of 30 or 33 horses. However muddled Appian's descriptions, the *ilai*'s association there with the alleged commander (Domitius) appears to lead to the *extraordinarii;* which, normally, should have counted here 600 horse (Plb., 6.20.9; 25.1 — supported by 3.107.11–12); but, actually, probably less (say 400?) — though, then, why *four* sub-units? There seems to be no answer to this, little apparently being known about the extraordinarii's organisation. The numbers, in themselves, it can be seen, do *not* clash with Livy's and Appian's overall figures.

[80] Some, perhaps, influenced by Appian's twice-repeated vague and rhetorical phrase "prolonged pursuit" (*Syr.* 34, 36).

[81] This pursuit of Roman foot towards the camp (perhaps up to 1/4 km.) is confirmed by App. *Syr.* 36 and echoed in Justinus 31.8.6.

[82] Livy 37.39.7f. The camp was probably 1/2 — 3/4 km. from the river: 100–200 metres for the horsemen's frontage and the strip of river-bank; about 400 metres for the "Latin ala"'s equivalent of a legion; perhaps a hundred metres for the greater breadth — compared to the camp's estimated frontage — of the two Roman legions' combined deployment.

figures, there follows the rather limited average time of pursuit — in an oblique, rather diagonal, direction. This, actually, was not so much pursuit in the accepted sense, as a tactically realistic folding-up, or rolling-up, of a wing attacked in its flank, towards its army's centre. Conceivably, the fact the camp was there also somewhat influenced the direction of the troops' retreat.

Here we can see how valid Caesar's dictum is: "... because of closeness of space between the camps, even making the enemy flee cannot contribute much to over-all victory... the camp's propinquity giving speedy shelter to the vanquished" (*BC* 1.82).[84] In several respects this estimate is even more applicable to Raphia, but certainly it expresses what happened at Magnesia, where it was not a result of a straight repulse from the battlefield back to the walls of the camp, but of a gradually developing roll-up from the wing; one, that had already in large measure succeeded, but was foiled in its diagonal movement by the closeness of an entrenched and well-defended camp.[85] Kromayer seems to have been the only one to have pointed out this crucial factor — although without comment.[86]

Antiochos' horse and light troops might have fallen on the back of the Roman legionaries of the centre — who were already engaged and extended, but still sufficiently within reach and striking range — were it

[83] Kromayer's estimate here (*op. cit.* (n. 65), 2. 193f; cf. 172 and nn. 4, 6; 173 and n. 4) is perhaps slightly excessive.

[84] *'Receptum'* obviously means haven and support — and the chance to fight again (Cf. Paullus' speech, twenty years after Magnesia — Livy 44.39.2–4).

[85] The clearest illustration at Magnesia of Caesar's dictum is in the re-formation of the "Latin" troops, beaten but not destroyed, under the walls of the camp and supported by its guard (Cf. Livy 37.43.2–4; App. *Syr.* 36). Similarly, Ptolemy's peltasts too, and probably part of the Agema — and the Cretans — must have retired towards their camp.

[86] *Op. cit.* (n. 65),2 193f. Here, where his treatment is more detailed and factual, he differs somewhat from the later summary allegation of "continued pursuit" (*Heerw. u. Kriegf.*, 143).Though this analysis (*Schlachtfelder* 2 (Berlin 1913) 193f), is the only modern one in which the tactical leverage gained by initial flanking penetration and attack is duly stressed, it contains no word about the *direction* taken by the Roman retreat, with Antiochos in pursuit, "towards the camp"; and it mentions only the camp's *perpendicular* distance from the battle-line. Thus Kromayer managed entirely to overlook the fact that Antiochos actually swung diagonally to the left. He followed in his translation the meaning of Livy's text, on the face of it, where the Roman horse joins in the flight "towards the camp." Hence he leaves vaguely the impression, quite misleading in tactical terms, that the Roman left wing retreated, on the whole, straight back.

not for the delay occasioned by the fact the camp to which the foot fled was in their way, and its guard actively defending it, with the "Latin Ala" as unplanned reinforcement; a crucial matter of perhaps a quarter of an hour or so. To be sure, the past is strewn with "if"s of battles won and lost; and such conjecture has, itself, become one of historians' clichés; but this conjecture — deriving from the almost photographic accounts of developments recorded (probably through Polybios) in this sector at Magnesia — comes astonishingly close to what happened, or was prevented, at Raphia. The situation at Magnesia, where the camps were, after all, not quite as close as at Raphia, is so clear that it may, indeed, throw some instructive light on the questions also posed by the earlier battle: Why three battles in one? Why was no roll-up attempted?

### *The Terrain*

All descriptions of the battle of Raphia ignore the topography. P. Pédech went so far as to attempt to justify this omission.

Pédech's presentation of Polybios' views on the dependance of operations on terrain is erudite and perceptive. However, it is not always easy to distinguish his source quotations and paraphrases from his own opinions. Yet, when discussing matters *not* treated by Polybios — such as, in the case of Raphia, topography — he clearly expresses his own view. Thus he assigns Raphia to the category of battles where topography did not actually matter: "Dans les vastes plaines asiatiques les troupes peuvent se déployer à l'aise, et chaque secteur de la ligne de bataille livre un combat distinct au point de se laisser souvent entraîner trop loin, en découvrant les autres corps; l'issue finale est la résultante hasardeuse de ces actions particulières; c'est ce qui est arrivé à la bataille de Raphia, à celle du mont Panion, enfin à Magnesie-du-Sipyle (n. 131: Pol. 5. 82–85; 16. 18–19; Livy 31. 39–43). Aussi l'historien ne perd-il pas du temps à décrire les lieux; le lecteur n'a qu'à imaginer la plaine classique où se sont déroulées les batailles d'Arbèle, de Gabiène, d'Ipsos."[87]

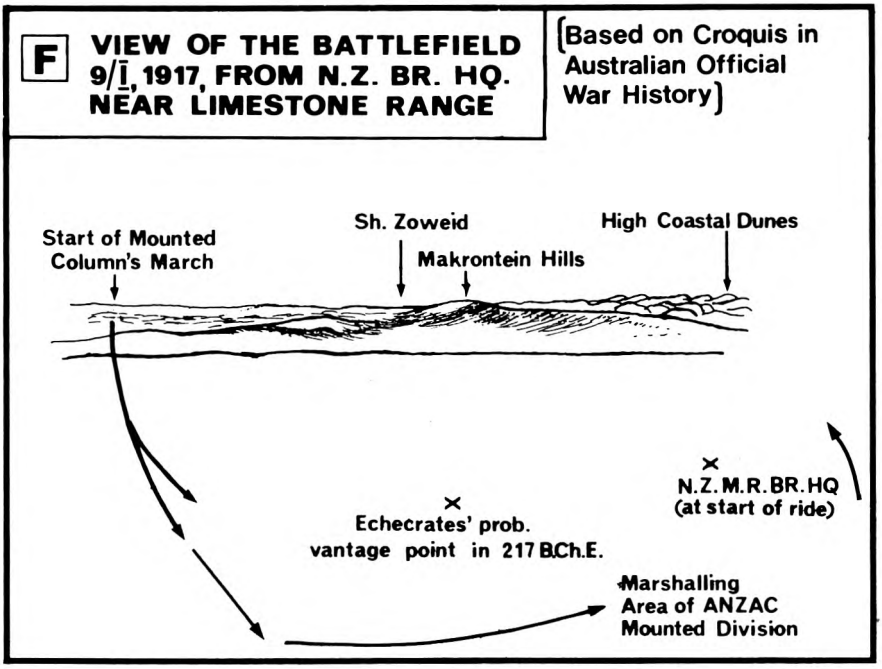
[87] *La Méthode Historique de Polybe* (Paris 1964) 538. Uncharacteristically, here some of Pédech's examples are misplaced or inexact; Panion is obviously so. Even if Polybios may here perhaps have somewhat distorted Zeno of Rhodes, anyway his account does not at all

One could hardly give a crisper expression to the notion that the battle was fought on a virtually featureless tactical chessboard.

Now, though the "Field of Raphia" (Inscr., ll. 10–11) is not particularly accidented, it is far from featureless; it has its fair share of factors which can influence combat. This can be seen at once if we correlate Polybios' narrative with the actual terrain, or with the map. Furthermore, vital information on the physical and tactical significance of the lay of the land at Raphia is given by a unique series of journals, troop histories, and official battle-reports, not only from Napoleon's Syrian Campaign in 1799, but also, in increasing abundance and detail, from the much more recent past: the British-Anzac operation in January 1917; the Israeli-Egyptian fighting in December 1948–January 1949, in November 1956 and in June 1967. Descriptions often include still clearly indentifiable hillocks, gullies, and seemingly insignificant ridges. The military meanings the various folds in the rolling terrain had in the days of the phalanx were different from those which they possessed in the tactical realities and military technology of, even, 1917. But, while the practical *function* of, for instance, high ground changed, the fact of its *influence* and importance did not; its hillocks served perhaps more for observation in the past, and for concealment in modern warfare. Yet even such a generalization might be rash; the many battles of Raphia illustrate the fact that one and the same hill-range functions in precisely the same way (it obstructs, vitally, the view) in 217 B.C.E., in 1917, 1948–1949, 1956. Thus, the assumption of a vast featureless plain is here proved wrong not only by physical geography but also by military history.

Most important, there is no scientific evidence for any substantial change in the geological structure of the coastal strip of Philistia; nor, more particularly, for any alteration in the configuration and lay of the

square with Pédech's scheme. Indeed, development *not unlike that of Cannae* is indicated by Zeno — Plb. 16.19.10; but, first and foremost, the *topographic* setting of the battle (16.18.4–6.8) is the very opposite of the one pictured by Pédech, who disregards the data in the text and, perhaps even graver, neglects the physical *realia* of the battle area. His characterizations of Arbela and Gabiene, also, neglect to consider the tactical significance of certain topographical features of those battlesites: in battlefield surveillance — in the preparatory stage at Arbela, cf. Arr. *Anab.* 3.9; and as to defensive high-ground, or protective obstacle — in the concluding stage at Gabiene, cf. Diod. 19.43.3;5.


F
VIEW OF THE BATTLEFIELD 9/I, 1917, FROM N.Z. BR. HQ. NEAR LIMESTONE RANGE
(Based on Croquis in Australian Official War History)
Start of Mounted Column's March
Sh. Zoweid
Makrontein Hills
High Coastal Dunes
N.Z.M.R.BR.HQ (at start of ride)
Echecrates' prob. vantage point in 217 B.Ch.E.
Marshalling Area of ANZAC Mounted Division

kurkar hill-range on the battlefield's eastern fringe, in the last several thousand years.[88]

Why, then, if ground was here so important, did Polybios omit any mention of it? Why, above all, did he ignore a factor so often and thoroughly stressed by him: *water?*[89] Precisely here the whole campaign from beginning to end, and the battle's basic configuration, with its resultant "centres of gravity" (to use Clausewitz's term), were decisively shaped by this elementary factor. Did Polybios omit it out of ignorance — his, or his sources? Or was he compelled, by limitations of space and plan, to sacrifice topography and logistics to his comparatively lengthy narrative of "straight combat"? Whatever the reason, an understanding of the battle remains dependent on using the physical data — and here, luckily, also historically verified tactical experience — to fill in Polybios' omissions.

It is not possible here to analyse the tactical topography of the centres of the contending armies; nor is it absolutely essential, since the key to deployment and stratagem lies in that of the wings.

How did Antiochos' outflanking cavalry attack in the west come about? The usual assumption is that his two thousand strong horse brigade — standing "en crochet" to the other, frontally-deployed one (Antipater's) — was arrayed at a forward angle to the main line; this, clearly, following the accepted classification into "offensive" and "defensive" angle-deployments.[90] The universal validity of this classification is, in itself, dubious.[91] Here, at all events, a forward angle was

[88] Personal communication from the Director and staff of the Marine Geology Department of the Israel Geological Institute, Jerusalem, April 1970. Dr. Y. Yitzkhaki, of the Dept. of Geology of the Tel Aviv University, kindly discussed this subject with me in February 1969 [cf. Maps A,G,H].

[89] Cf. e.g. Livy 35.28.6;8;10–11; 99.1–2 (clearly from Polybios); or the similar stress on the water factor in the introductory skirmishing before Cannae (Plb. 3.112.3; Livy 22.44.1,3; 45.2–3).

[90] Cf. Walbank, *Commentary* 1. 611, 614; Kromayer *op. cit.* (n. 45), 142, 144, esp. 145 (n. 3).

[91] Without entering into the complicated questions connected with the great battles of the Diadochi, two simple instances will suffice: A) at Issos, as is well-known, a manifestly "defensive" flank was stationed forward (Arr. *Anab.*, 2.8.7; 9.2–4; for reflections of this situation cf. Curt. 3.8.27f; 9.10; 11.2; cf. Tarn, *Alexander the Great* (Boston 1956) 26; B) In Antiochos' battle with Molon (Plb. 5.53.5) the two offensive flanks, which were meant to undertake an enveloping movement, obviously were initially "refused," or echelonned backwards from the main line.

simply impossible, on several counts. First, and foremost, topography prevented it. A forward and potentially enveloping deployment at an angle ("en crochet") of a cavalry wing makes perfect sense when there is enough room for it to "hover": to move, to threaten, to retire and return. Now, the relative size of the battlefield and of the armies — and their deployment, from encamping to battle-array, affected as it was, from the start, by the water-factor in the west — show that Antiochos' right flank must have practically rested on the belt of the dunes; which means that a cavalry formation deployed at a forward angle would have had the deep sand immediately at its back, hindering virtually any of the combat evolutions practised by Hellenistic cavalry;[92] any backward movement would have got them into deep sand, and have played havoc with the units' alignments and tactical structures.[93] Polybios himself, in his Advice to Commanders,[94] says: often the character of "a place ... proves the seemingly unfeasible feasible; and the apparently feasible unfeasible". It is hard to imagine a more fitting illustration of this than the inevitable influence of the dunes on the way Antiochos' mounted flank must have been deployed in the west — as distinct from the theories currently accepted.[95]

Secondly, in the few hundred metres between the armies, and with the obstacle of the dunes nearby on the flank, a customary linear arrayal — like that of Antipater's "frontal" brigade — at a forward angle, was not at all open to the horse destined for the outflanking attack; for it would

[92] Cf. Plb. 10.23. Clearly, some paths over the dunes were practicable for mounted patrols and watering parties; but they hardly would have allowed tactical drills and evolutions of formed bodies of Hellenistic cavalry.

[93] A palpable sense of the dunes as a tall, and often steep, obstacle to the west of the old caravan road, "Darb-es-Sultani", and the deep sands, is given by two battle photographs (*N.Z. in Sinai and Palestine*, 77f), of columns moving from northeast to southwest, on that road, along which most likely the outflanking attack was carried out.

[94] Plb. 9.13.8; esp. 12.25f.5.

[95] Polybios' emphasis on the relationship between troop employment and topography can be seen, (though *not* at its best), in his over-schematic and perhaps carping comment on descriptions of Issos (12.17-22); and, better, in his analytical remarks on the 362 battle of Mantinea, where he treats of places he knew well (12.25f. 4-5 - cf. W.K. Pritchett, *Studies in Ancient Greek Topography* 1 [Berkeley, 1969] p. 71-72). Among examples of his fascination with topographical features as the unexpected key to military success are his descriptions of Antiochos' penetration into Sardis (7.15.18) and of Scipio's attack on New Carthage (10.11.14f.).

simply have offered their right flank to the oncoming clash with Ptolemy's elephants and cavalry. Thirdly, a protruding column, perhaps some hundred to two hundred metres deep, would not do here either, in the narrowish belt where both the elephant forces were ranged. Besides, it might have been too revealing, at this stage, as to tactical design.

Now there was, it seems, a suitable hollow,[96] parallel and close to the dunes, behind the presumed Seleucid front line. The only picture consonant with Polybios and the topography which can explain what was to happen soon, appears to be an arrayal as an offensive flank, echelonned backwards, in a deep column — forming only a narrow sector (the westernmost) of the frontline, and partly concealed; ready to emerge in an outflanking and striking movement, "riding around the elephant line's flank":[97] like a bravo's stiletto, springing out of an innocuous walking-stick. For deep cavalry attack columns there were several precedents in Hellenistic warfare.[98] Whether this formation precisely was here adopted, or not, there can hardly be any doubt that the "hook" here could only be a rearward one into the hollow: this would best explain Antiochos' tactical arrangements, and his success.

In the east too it appears that a move which vitally affected the battle's development was only made possible by the topography.

On the east-south-eastern fringe of the battlefield's rolling plain there is a real, if not quite continuous, curtain of low, and in part rather abrupt, hills, which effectively obstruct the view from east to west — and also, diagonally, from the southeast to northwest — and vice versa. There is no way to know to what extent the command, on either side, was conscious of a significant fact: that east of the battlefield proper, which extended from the dunes to the limestone range, most stationing and movement of troops — e.g. for ambushing or envelopment — was hidden from the hills in its centre, probably used for command and observation posts; the ones occupied by the Seleucids apparently being — as suggested also by later parallels — the twin hills at present known

[96] Its potential tactical usefulness as shelter was probably illustrated also on Jan. 9, 1917, when British mobile machine-gun units were placed there: cf. *Military Operations, Egypt and Palestine*, 1 (London 1928) 267.

[97] Plb. 5.84.8.

[98] Apparently so. Arr. *Anab.* 3.15.2; certainly Diod. 19.83.4. and more doubtfully *ib.* 27.2.

as El-Maqrontein and Tawil-el-Amir.[99] Yet, it seems that, at some stage, the Ptolemaic command paid attention to it. In any case, Israel reconnaissance-officers and commanders and, to judge by their dispositions, the Egyptians too, were fully conscious of this feature, from December 1948 and onwards, especially in November 1956; and so were the British and ANZAC ones in December 1916–January 1917, as is made clear by contemporary reports.[100]

The sequence of events most directly relevant to what happened in 217 B.C.E. on the battle's eastern wing took place on January 9, 1917. The Turkish troops, which were later attacked by the British and ANZAC force coming from the southwest, from Sinai, were entrenched on and around the two central hills; and the German howitzer battery was close by, with the hills' commanding position and view at the service of artillery observation. The British command looked for a suitable area in which to assemble and marshal the mounted division which it had to move up from around Sheikh-ez-Zoweid preparatory to the attack — obviously seeking a place not too distant from the objective, yet not exposed to gunfire. Reconnaissance reports suggested a little half-enclosed plain (Shaukat-es-Sufi), in the lee of, and southeast from, the southernmost, and highest, part of the limestone range — rising there almost a hundred feet over that flat plain; so that the hills would shelter

[99] *Survey of Israel* (1965) 1:50,000, Sheet III, 13 ("Rafiakh"), 0760 / 0755 / 0769 / 0760; The commanding position of these hills in the centre of the plain has been stressed in contemporary reports of staff officers and war correspondents; cf. *Military Operations, Egypt and Palestine*, 1 265, 267, Map ("Sketch 13"); *Australia in the 1914-1918 War* 7 (Sidney 1923) 232f., Maps 10,11; *New Zealanders in Sinaï and Palestine* (Auckland 1922) 65, 69f; Maps oppos. 64, 80 [cf. a reflection of the 1917 impressions in Map F].

[100] For the Turkish position on the central hills, with perfect all-round observation for a couple of kms., see *Military Operations, Egypt and Palestine*, U263,265; *Australia in the 1914-1918 War* 7, 232f; *New Zealanders in Sinaï*, 64,66. For the vantage ground rising in the direction of the limestone range (which may have been the area of Echecrates' observation post) cf. *Mil. Op.* I, 263,265; and, esp., sketch in *Australia in War* 7, p. 232. For the assembly area, to southeast of the range's highest part and in its lee (where there is a difference of approximately eighty to one hundred feet between the hill-range's level and the salient of plain) cf. *Military Operations* I, 264–265, — - "Sketch 13"; *Australia in War* 234, Map 10; *New Zealanders in Sinai* 70, Map opp. p. 80. For the New Zealand Brigade's encircling ride through the limestone range and behind it — "in artillery formation" — indicative of the Turkish-German guns' range — cf. *Military Operations* I Map ("Sketch 13"); *Australia in War* 7, 234 (Route-map 10); *New Zealanders in Sinaï*, p. 71 — (route-map opp. p. 80) [cf. Maps F,G,J].

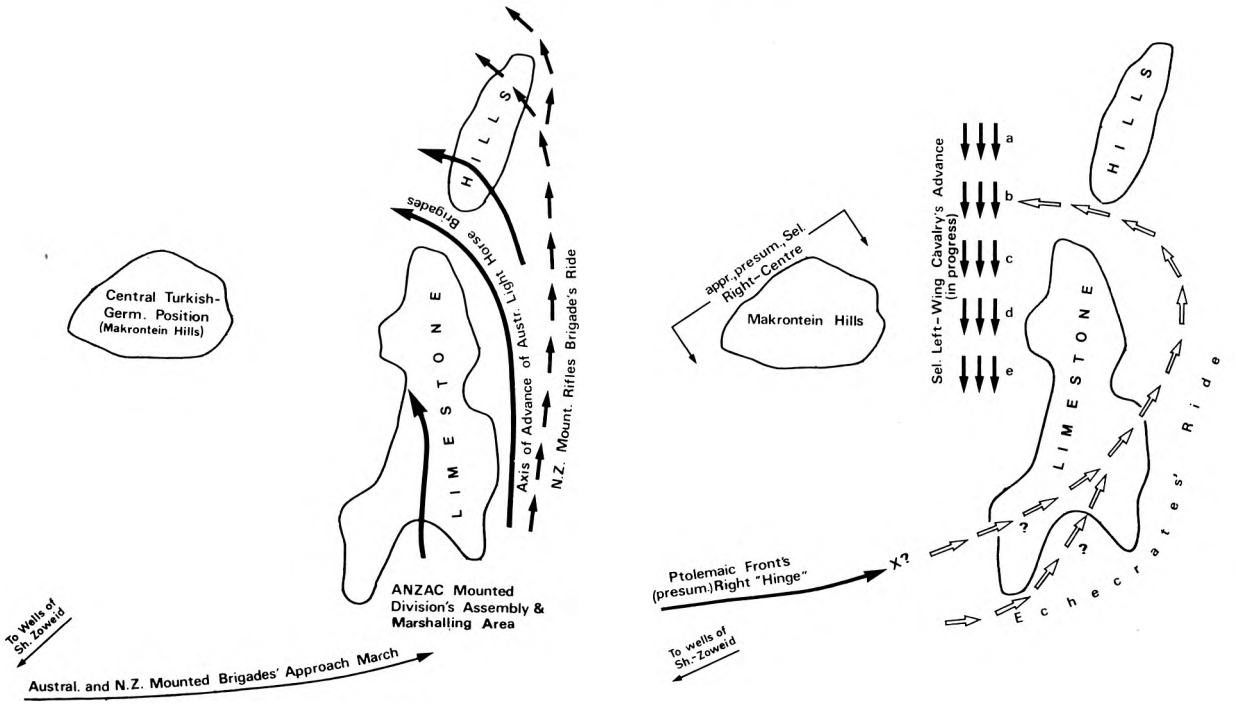
the assembly area from sight, and probably gunfire, the distance from the presumed gun positions being some 5–5.5 km. — close to maximum range. The other part of the picture was soon illustrated when the New Zealand Mounted Rifles Brigade started out from the north of the assembly area, riding to attack Rafah town, ultimately from the east. It moved east of the limestone range, but, apparently, also over paths inside it; and then, turning north of it, issued into the plain, scattered in "artillery formation." The route of this advance, and its utilization of the ground for cover, alone can explain an otherwise hardly comprehensible sentence in Polybios (85.3). Echecrates, Ptolemy's commander in the east, Polybios tells us, "led his horse, and the foot that stood behind the elephants, in a column towards the wing and out of the battlefield thus escaping the enemy elephants' assault; and then he charged the enemy cavalry from the rear and the flank, speedily routing them."

If we assume an open plain — where, apparently, there had been no earlier intense fighting, or furious movements by large bodies of troops, to raise some immense and dense dust-cloud[101] — how was it possible to carry out such a wide turning movement against an enemy force not yet engaged and in full sight? Certainly not without having been observed. Echecrates, under those circumstances, would have been met, in time, by an echelonned change of front — particularly practicable in the tactical circumstances, of deployed and advancing Seleucid cavalry. The only answer is that it was *not* possible. Only the ground, i.e. the intervening hill-range, can explain Polybios' account and show it to be plausible, and indeed, perfectly fitting[102] [See Maps H,J].

[101] For a dense dust-cloud could, on occasion, make "the unfeasible" — unseen movement on the battlefield — feasible. Yet the best-known example, at Gabiene (Diod. 19.42.1-4), was rather exceptional. There, the blinding dust of the salt-desert had been raised by vigorous combat and the manoeuvring of certainly over a hundred elephants and probably ten to twelve thousand cavalry. Clearly, on the eastern wing at Raphia there had as yet been nothing to produce comparable results (cf. 5.85.1-4).

[102] A partly analogous development is related by Thucydides (4.96). In the battle of Delion (424 B.C.E.) the Boiotians' success was finally determined by a concealed movement, *behind a hill and around it.* Two cavalry units unexpectedly appeared on the right flank, and perhaps the rear, of the Athenian array - which had the phalanx in its middle, with cavalry on the wings. Cf. Pritchett *Ancient Greek Topography* 2. 35f.; also, Kromayer-Veith, *Schlachtfelder* 4 (Berlin 1931) 196-198.

# TWO RIGHT-HOOK ENVELOPMENTS
# 22/VI/217 B.Chr.E.-9/I/1917



Echecrates' astounding manoeuvre had most likely been prepared, partly, by stationing beforehand some of the cavalry (and perhaps some troops of the Galatian and Thracian division), sheltered from view, in the area where later the ANZAC Mounted Division assembled, and even further to the northeast, inside the southern part of the ridge and behind its knolls. If so, it would be easier to understand the distance and time factor in the subsequent three to four km. long turning movement. The timing, at any rate, must have remained "a damned close thing", to use Wellington's famous phrase. However this may be, the ambitious outflanking movement clearly used initially the same paths followed by the New Zealand Mounted Rifles 2133 years later; although Echecrates must have proceeded in parallel, and hence shorter, columns. This fully explains the fact he was not discovered until almost the last moment and was able to appear suddenly "on the enemy's rear and flank"; a thing also made possible, on the Seleucid side, by the fact that Themison's cavalry had undoubtedly in the meantime moved forward (south) in the wake of the elephants — and beyond the short stretch of plain, a "saddle" in the middle of the hill-range, through which Echecrates' horse were probably to issue westwards: evidently much nearer, and sooner, than the New-Zealanders later did. This saddle is a space between links of the hill-range running to the north-northeast.[103] As mentioned, it constituted a route for Echecrates' turning movement much shorter than the one taken later by the New-Zealand entirely mounted force; and hence it, too, may help to explain how the combined horse and foot manoeuvre became feasible.

Even assuming that detachments were stationed beforehand along the first stretches of the prospective route, and that, perhaps, devices assuring mobility — like mounting some of the foot behind cavalrymen, or "horse-tail running" for the lightest of them, — were adopted, only this shortest route could enable the rapidity with which the entire exploit was carried out — and help produce the "revolving-door effect" (the tactical simile coined by Sir Basil Liddel-Hart), which was also due to the Seleucid cavalry's simultaneous advance to the south. Polybios' phrase, "charging them in rear and flank", becomes entirely logical once

[103] It begins approximately at 082/075, *Survey of Israel*, 1: 50,000, sheet 13-IV ("Nir-Yitzhak").

Themison's left cavalry-wing had already advanced past the saddle's outlet into the plain, its left and *rear* now open to the unexpected onslaught from the northeast by the suddenly debouching Ptolemaic horse. The *flank* attack could then most reasonably be ascribed mainly to Echecrates' foot, now turning left (from column into line) and crossing the here far from unscalable ridge; thus also, as it were, sealing the battlefield, and the escape-routes from it to the east, off — and providing at least partial justification for Ptolemy's claims to a great killing of Seleucid troops there (86.1).

So far we have stressed the southernmost, and tallest, link of the limestone range; for it must have acted as a blind, against observation from the two central hills which were in Seleucid hands, for the stationing and subsequent northward movement of an enveloping cavalry force. In this the experience of 1917 paralleled that of 217 B.C.E. However we must not disregard the influence of the eastern hill-fringe as a whole.

This longish landmark is rather inconspicuous, but perhaps just through this deceptive; and its influence should not be disregarded. As a visibility screen between east and west it may have contributed, in the five days during which the sides became familiar with the battlefield, to what looks like the Seleucid side ultimately forgetting that the potential battlefield, there unobserved, extended beyond the line of hills; and that it might, as it in fact suddenly did, affect also what was happening farther westwards. Tactical examples, and parallels, for the chain's considerable rôle are historically known mainly from the experience of the Israel Defence Forces.[104]

[104] For this see the following Hebrew publications: for the operations of December 1948 — January 1949, see the Golani Brigade's War Book, *Ilan ve-Shelakh*[3], (Tel Aviv 1959) 317f, 365f, 371ff; for the battle of November 1956, see "*Ma'-arakhoth*", (Israel Army Magazine) 107-108 (July 1957) 9f, 12; 109 (September 1957) 10-12, 14; photographs of positions and view, 18f; 112 (March 1958) 10-12, 39. Here the maps show the interesting fact that while, of the three Israeli attacking forces, the southern and central ones, infantry, moved to capture Egyptian strongholds on the eastern rim of the range — at least the vehicle component of the northern one (Gen., then Col., Ch. Bar-Lev's armoured and lorried-infantry brigade) fought its way to the vital road-junction inside the Raphia battlefield mainly along the axis of apparently that very gap (the "saddle"), *between* groups of hills, where Echecrates' horse is supposed to have issued into the plain.

To sum up, Echecrates' wide and deep surprise envelopment — quite unlikely in open terrain — was here made possible by the specific lay of the land. Hence all is explained; and Polybios' words, "the impossible made feasible", exemplified in action.

It remains to be added that estimates of the total width of the Ptolemaic deployment, by the tactical norms of the day for the various arms, are completely in harmony with the view that its right wing stretched to the southern heights of the limestone range;[105] as is the probable vantage-point of Echecrates that enabled him to follow the dust-cloud of Antiochos' pursuit from the western wing of the front line towards Sheikh-ez-Zoweid[106] [Maps A,D,F,J].

Thus topography, which Polybios does not mention, corroborates him fully; and it also makes his narrative more understandable and meaningful.

### C: *Battle Realities; Factors in Campaign Strategy*

We have recapitulated the main evidence of the sources and probed into some of the various theories and assumptions. It remains to present several views regarding the circumstances and conduct of the Fourth Syrian War and the Raphia campaign. Many of these views are rooted in issues I have already raised here. Their argued presentation will, I hope, sustain my version of the battle, and help towards reasonably justified conclusions based on it.

Let us consider some of the battle's aspects on three levels: 1) Strategy; 2) Grand Tactics and Logistics; 3) Tactics in Combat.

1. The Raphia campaign of 217 was for Antiochos not a prelude to an intended invasion of Egypt but part of a strategy for a two-theater war on "interior lines".[107] He apparently envisaged two possible ways of

[105] A realistic frontage for Ptolemy's army will be about six km, or somewhat more, as is indicated by Kromayer, *Schlachtfelder* 1, 321; 2. 187 n.1; cf. Hammond, *Klio* 31 (1938) 198f. Thus the assumed line "from the dunes to the limestone hills" agrees with the Ptolemaic army's order of battle in Plb. 5[65],82.

[106] The most likely route of the pursuit. Approximate reference points: 080/071, *Survey of Israel* (1965), 1:50.000; sheet 13–III ("Rafiakh"). Cf. *Military Operations, Egypt and Palestine*, 1, 265: the view "from the higher ground near Karm-el-Musallakh" [See Map F].

[107] Detailed consideration of many of the relevant issues, with summaries of available data and reference-material, will be found in my study of the Fourth Syrian War, to be published (in Hebrew) by the Bialik Institute and "Ma'arachoth" Publishing House.

forcing Ptolemy's withdrawal to Egypt: mainly through logistic "blockade" — or, this combined with a major battle; but his chief concern remained to free his hands for the really urgent task of ending the strategic and political threat to his rear, posed by Achaios, and of reuniting Seleucid Asia-Minor with his kingdom. To the defensive character of Antiochos' strategy Polybios (79.3) bears witness; and he repeatedly mentions his preoccupation with the danger from the North, and his apprehension of being kept too far from his capitals and bases of power for too long. This strategic "short rein" was to leave a deep imprint on the whole conduct of the campaign. It must have dictated general attitudes, campaign aims and choice of basic positions; but distribution of forces, the permissible duration of a given operation, and eventual "interior-line" strategic manoeuvres also were influenced by it.

The very choice of the Raphia Approaches as the battleground was postulated by Antiochos' limited interior-lines strategy of active defence, which it expressed and served. It was primarily conditioned by the area's location between the extreme scarcity of water in Sinai and the increasingly ample sources in the Plain of Philistia. It represented Antiochos' endeavour, of which apparently only Holleaux[108] had an inkling, to establish a firmly defensible border, where the waterless desert could act as a logistical "moat." Antiochos may well have arrived at this conclusion in his war council on the basis of accumulated experience in war and peace. Ptolemy, too, must have been aware of these considerations.

Far from expressing the balance of strength between the two great Hellenistic empires, the armed confrontation near Raphia was rather a freak occurence. In 217 both armies were impressively large. But owing to Achaios' secession in the years 220–216 the one on the defensive, the Seleucid side, had its effectives substantially reduced.[109] Both its nucleus, the phalanx and the Macedonian-type cavalry, both presumably composed of cleruchs — and its medium (or medium-light) Anatolian infantry, whether mercenary "allies", subjects or tribal levies — were affected.

By contrast, the opposing side was heavily reinforced, it seems to a

[108] *CAH* 8.173.
[109] Reflected in Plb.5.79.3-13.

rather exceptional extent (5.65), both by hired troops from overseas and by a large and unusual levy of Egyptian "natives." In sum, there existed for this campaign an imbalance, with one force abnormally augmented and the other temporarily depleted.

2. Polybios leaves it to his readers to draw the implications from seemingly casual remarks such as "through the waterless waste" (of Ptolemy's march, 80.2), or "skirmishes between watering-parties" (on the No Man's Land hostilities during the wait for battle, 80.7). This is why his introductory tactical narrative seems at first to be almost devoid of any explicit mention of causes and purposes. Actually, however, every aspect of the opening operations was fundamentally logistical — and logistics were often the essence of the operational. Both expressed the strategies adopted in the war — and determined the battle's "grand tactical" considerations — and hence the development of tactics in the battle to come as well. Polybios' spare account, properly understood, is itself the clue to the battle. His scattered hints, once placed in the topographical context, explain elements of his narrative: like Antiochos' decision (80.6) to move his camp up, to a distance of only five stades (instead of ten) from that of Ptolemy's, "in order to occupy a more suitable position." The structure of the terrain, per se, could hardly have dictated such a far-reaching move; though a longer, and broader, forward slope for the phalanx's central deployment might have been desirable in order to facilitate tactical coherence. Still, it was this move that touched off an intensified struggle for water; for it obviously helped Seleucid fighting-patrols to get closer to the paths leading to the wells used by Ptolemy, all of which were in the area of dunes, as well as to the water-pits, probably constantly dug anew on the narrow beach.[110] Yet, the situation here was not "the usual state of affairs, wherever both armies are using the same water source;"[111] for Antiochos' troops did

[110] For the arc of wells in the coastal zone v. Abel, *Revue biblique* 48 (1939) 209, 228 and map on p. 532; *Australia in the War of 1914-1918* 7.254; for water at 1.5 to two metres deep on the beach v. Abel, *op. cit.* 209; id., *Géographie de la Palestine* (Paris 1967) 1.151; De La Jonqière, *L'expédition d'Égypte*, 1798-1801 (Paris 1898–1907) 4, 213, n. 2; *Journal du Capt. Gerbaud* (Paris 1910) 296f; *Survey of Israel*, 1:100,000, Sheet 13 ("Nirim"), Map reference approx. 69/76 to 71/78 [cf. Map B].

[111] Livy 35.28. 10f (clearly from Polybios).

have abundant sources of water directly in back of them,[112] much superior to the scant supply at their adversary's rear, as at Sheikh-ez-Zoweid.[113] Antiochos' aim here must have been to hamper Ptolemy's watering parties. With this we come to really "Grand Tactics", revealing the two sides' purposes and chosen means. For the determining factor now was Northern Sinai's "waterless waste," deeper in Ptolemy's rear; and sources were scarce even beyond that to the east, all quite inadequate for so huge an army.[114] Hence, water was the weakest link in Ptolemy's logistic chain. If we go by what is known of Antigonos' march to Egypt in 306 B.C.E.[115], Ptolemy's troops' other needs could have been

[112] Especially the wells of Raphia and Khan-Yunis: see Abel, *Géographie de la Palestine* 1, 151: *Revue biblique* 48 (1939) 209; 49 (1940) 74f; Napoleon, *Campagnes d'Italie, d'Égypte et de Syrie* 3 (Paris 1872), 14f, 37f; De La Jonqière, *op. cit.*, 213 n. 2; 215 and n. 1 (to 214); "puits de Refah", 234 (croquis); *Journal du Capt. Gerbaud* 298 (Khan-Yunis); *Military Operations* 1.270f, 279, 362; for a detailed news-item, concerning the renewed use of the water-rich Hellenistic-Roman well at Old Raphia (Sheikh-Suleiman - *Israel Survey*, I;50,000, Sheet 13-III, appr. 77,5/78,5), *Jerusalem Post* of 28 July, 1970, p. 7.

[113] Abel, *Géographie de la Palestine* 1. 151; *Revue biblique* 48 (1939) 209, 228; De La Jonquière, *op. cit.*, 213 n. 2; 234 (croquis); *Journal du Capt. Gerbaud*, 297 (Sheikh-Zoweid); *Military Operations* 1. 262f; v. Kress, *Sinaï, Kriegführung in der Wüste* (Berlin 1920) 5–6, photo p. 6.

[114] Plb. 5.80,2; cf. Hdt. 3.5; Strabo 16.760; Jos. *BJ*, 4.661f; also, Plut. *Anton.* 4.6. This "waterless" stretch - say (going from Egypt to Syria), approx. from neighbourhood of Romani or Qatiah to that of El-Arish, is surely identical with Napoleon's (*op. cit.* (n. 112,) 3.13) arid middle of the route, with its three day-march stations; with scarce water even further eastwards: where, indeed, El-Arish too, "with its six wells", "suffices for an army of fifteen to twenty thousand" only. Now, in July 1916, a Turkish-German force, precisely of sixteen thousand men and about seven thousand animals, concentrated around the then seven wells of El-Arish (area of ancient Rhinocorura), in the relatively water-rich zone to the east of that barren desolation — this preparatory to operations westwards; but *after about a week*, these had to be distributed over the smaller oases, even those south of lake Bardawil, because the wells were exhausted (cf. Kress v. Kressenstein, *Mit den Tuerken zum Suezkanal* (Berlin 1938) 179, 181). Judging by the above strength, they were apparently distributed in bodies of one to two thousand per oasis; which, taking into consideration much improved water exploitation one hundred years later, is in accord with Napoleon's "one to two battalions [then, several hundred men] per oasis", *op. cit.* p. 13; thus, obviously, water resources were here insufficient even for the mere re-supply of an army like Ptolemy's.

[115] Diod. 20.73. The eighty thousand foot and eight thousand cavalry were issued ten days' rations (cf. *ibid.* 19.37.3), and perhaps three million man-rations, and fodder, were carried on camels in addition. For Hellenistic and Roman rations cf. Launey, *op. cit.* (n. 16), 2. 762f; Griffith, *op. cit.* (n. 8), 305, does not mention the size of rations when discussing Philip's operations in 218 B.C.E., but his source, Plb. 5.1.11 and 5.2.11, may

provided, say, for more than a fortnight; thirst must have been more pressing. Ultimately, it was hunger that forced Antigonos, in 306 B.C.E., to lead his mighty host back from the gates of Egypt; but he had the Nile to supply him with water.[116] Ptolemy, here, did not. So, at Raphia the opponents' "operative" (in the sense of "Grand Tactical") purposes were largely shaped by considerations of water [See Maps B,C].

Clearly, it was owing to the location of the water sources that both kings were to fight in the west. Antiochos could compel Ptolemy's return to Egypt through logistical pressure, or by defeating him in the field; as alternatives, or in combination. Hence, his first objective would be Ptolemy's main supply and communications lines, his scanty wells and probable station at Sheikh-ez-Zoweid. We shall come back to the direct tactical problem, achieving a conclusive success in battle.

The fact that Ptolemy and his prestige troops were stationed on the western wing is equally revealing. A Hellenistic ruler, or his guard units, were usually placed on the attacking wing.[117] Now, ostensibly, purely battle considerations would have dictated that Ptolemy choose the right wing; for it was from there, at the right corner of the triangle, with the frontline for its base, the dunes as its left side and the limestone range as the right, landward, one — but whose apex was near Raphia, *with the fringe of the dunes there enclosing from the west* — that he could have possibly trapped the enemy's army: advancing over the shortest distance,

indicate a daily ration of about 2/3 kg per man (Walbank, *Commentary*, 1. 538-539 is noncommittal on this; Kromayer, *op. cit.* (n. 45), 280, 328 - estimates, for Rome, about 6/7 kg per man. Ptolemy issued rations at Pelusium (Plb. 5.80.2). Arrangements were very likely similar to Antigonos', and so provisions would just suffice for the five day march and the five day wait at Raphia; there probably was also a transported, eighteenth century style, "magazine reserve" — such as Antigonos' expedition had, as well as other well known Sinaï crossings. Cf. also Kress von Kressenstein, *Mit den Türken zum Suezkanal* (Berlin 1938), 86, 88-89, 179, 181 and Napoleon, *op. cit.*, 3.27 For water, on parts of the route some limited local supplies were also available. However the chief factor was the army's extraordinary size; for this, by attested analogies, must have made it drink those wells dry. Thus, for it, the possibility of refilling the water-skins from sources east of the desolate desert — at El-Arish and beyond, on the road to Ptolemy's camp — would have been very dubious; quite unlike Antigonos' equally large army in 312, which, having crossed the desert, had the Nile's water at its disposal.

116 (Diod. 20.74.5; 76.4).

117 Diod. 19.28.3f; 29.4f (Paraitakene); 20.82.1-3 (Gaza); cf. also Livy 37.40.5-7; 42.7f and perhaps Plb. 5.53.4;6;54.1. Plb. 10.49, 7 seems to be characteristic.

the triangle's right side, and leaving it no retreat but into the dunes [See Map I].

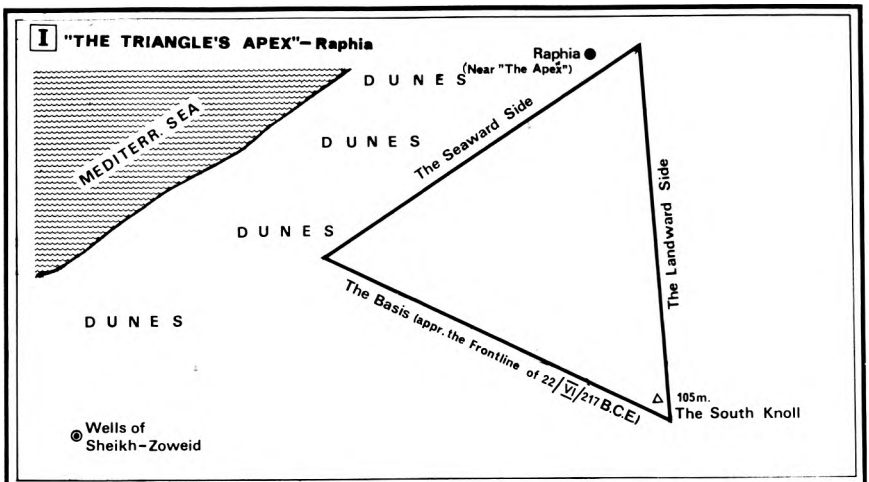
However, this whole side of the battlefield was destitute of water sources, while success in the west would have at least secured him the wells of the coastal zone and the water-pits on the beach, and perhaps the rich source at Raphia, with more prospects farther north as well; arrived that far, he might not have won the battle decisively, but at least he would have gained a much more secure foothold, this, the eastern side of the desert, for fights to come.

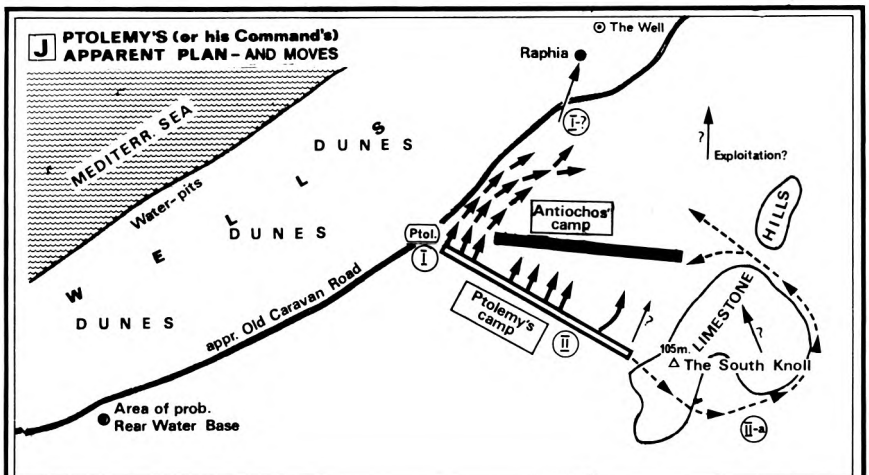
Moreover, a broadened water-base would not only allow Ptolemy to stay on longer in Koile-Syria; it would equally put Antiochos' ability to face him indefinitely to the test. For Antiochos had more water, but less time: to remain too long on the distant Sinai frontier would have meant increased danger to the capital and the empire's heartland from the pretender, Achaios[118]; one more reason for Antiochos to take steps, as we see he did, to interfere with Ptolemy's army's water supply, and so to shorten its endurance. Strategy, subsistence, tactical battlecraft were all intertwined.

The immediate aims of the contenders at Raphia, and their scope, appear to have reflected, in the short range, their respective situations. In the 217 campaign, it is likely that each side strove to achieve a relatively restricted aim. Antiochos, as we have seen, might have reinforced the water blockade on Ptolemy by an enveloping thrust in the west, even while only containing his army frontally, and so have forced him to withdraw from the whole Sinai Peninsula, thus consolidating his own hold on Coele-Syria and freeing his hands to act elsewhere. Here, too, this would not perhaps have been a thunderbolt victory, but it would have been a solid achievement, nonetheless.

Ptolemy's first need was, as we have seen, to gain a firm base on the

[118] This apprehension was constant throughout the years of the Fourth Syrian War and is a recurrent motive in Polybios' account; thus, variously, 5.57.2f. (autumn 220 B.C.E.); 58.1 (winter 220-219); implicitly, 58.7 (spring 219); 61.6f (summer 219); 66.3f (autumn 219); 67.12f (winter 219-218); 73.4 (implied, summer 218); 87.1f (summer 217). This aspect of the war had to be stressed because of E. Will's contention, in the face of Polybios prolonged evidence, that Achaios was not an acute threat and preoccupation to Antiochos in the course of the IVth Syrian War; cf. Will, *rég* 75 (1962) 71-129 (summary 122-128); *Histoire Politique du Monde Hellénistique* 2 (Nancy 1967) 18-21, 24, 38-40.




**Roman numerals** — apparent sequences of attempted or executed I — ? — possible final aim (the town and the well) in the West moves.
II — a — probable contingency-plan for the flank ride in the East.
III (*not* **drawn**) — final phalanx attack in the centre
**Question Marks** — presumed area of the "pursuit by cavalry and mercenaries" (Polybios 5.86.1); and also by the Gauls-and-Thracians?

**In part** — co-oper. w. elephants?

soil of his lost province. Even a success "on points" at Raphia, provided he would have got at the water sources there and beyond, and won a prospect of seizing a much-needed harbour at Gaza[119] (where there were also more wells and springs), would have given him such a foothold; and ultimately it would have meant that his army would have had a greater chance to apply its massed might to the task: impressive victory, and re-conquest. Clearly, in both cases, the two western wings were after water; and water was a reason for the general deployment and action of each army. Of course, both sides must have anticipated the possibilities of a general engagement — and of straight decision by combat on the field of Raphia. Even the limited aims evidently led on far beyond the battlefield, to affect the whole campaign; though, as far as can be seen, the ultimate goals of the campaign, too, appear to have been in harmony with the relatively limited purpose of both sides in the war as a whole: possession of Coele-Syria.

Given the accepted scheme of Hellenistic battles, the two western wings should be seen as the offensive ones. The initial Seleucid offensive was completely successful and had to stop only when things went wrong in the east, and later the centre, when it was already in an advanced phase of deep penetration; the Ptolemaic offensive was nipped in the bud (Plb. 84. 5–10; 85.5.7; 11–12).

In the east, the Seleucid left wing also assumed an offensive, but somewhat delayed, role (Plb. 5.85.1; 3); though the wing's composition — a great assemblage of light foot units, without the punch of medium infantry — might have indicated rather an offensive-defensive character.[120] The Ptolemaic right wing's part may be even harder to define: its attitude seemed defensive externally; but it undertook an apparently well thought out, large-scale, tactical "mobile ambush" (Plb. 85.1.3), which must have been prepared beforehand. The phalanxes' posture seems normal. Initially, such a centre was mostly uncommitted,

[119] For the contrast which was thought to exist in this respect between the coasts of Raphia and Gaza cf. Diod., 20.73.2f; 74.1-2. For Gaza's role in 218 B.C.E. as a naval and military base v. Plb. 5.68.2-4; corroborative evidence, a generation earlier, on maritime traffic there is found in several of the Zeno papyri (e.g. *PSI*-322, 863 g; *PCZ* - 59006, 59009, 59093, 59537).

[120] Plb. 5.82.11-13; 85.1-4. For a "defensive" wing becoming "offensive", cf. Diod. 19.29.1; 7; 30.1-3 (Parataikene).

and constituted in a sense a reserve force; for it was customary for the wings, with their cavalry and light-forces and often with elephants, to open the battle, with the phalanx biding its time.[121] This even became a set rhetorical image.[122]

At Raphia each side probably had also specific motives to hold its phalangic centre back at first. Antiochos' phalanx, numerically inferior and having only feeble support on its immediate left in the Arab levy, would be helped if there were opening success on the wings. Such success was perhaps taken for granted — given the use of concentrated force and a skillful plan — in the west; and it must have been hoped for, a little later, on the left. The victorious wings would then impede the enemy phalanx: *vide* Eumenes' tactics in the battle against Krateros;[123] but with an added deep thrust in the west, for a logistical objective and a Grand-Tactical aim [See Map C].

For Ptolemy, success in the west would open the way to the water at Old Raphia, along the fringe of the dunes, and thus into the rear of the Seleucid phalanx. This prospect must have been doubly attractive to him because he had so large an untried component, the new Egyptian levy, in his phalanx. In the east he may have hoped to achieve success, perhaps only as a second string to Echecrates' bow, through the "tactical ambush": the outflanking ride and the combined frontal strike. This indeed was achieved; and the exploit's execution, timing and dexterity were unexcelled by anything in the battles of the Diadochi. In the event, things did not work out for either side quite as anticipated; and "friction du guerre" had more than once its say [See Map J].

So far we have seen how water in the west dictated location of the camps close to each other. They most probably were two great oblong blocks, about two square kilometres each, stretching face-to-face in the west-central sector of the prospective battlefield.[124] Now, these man-

121 See Kromayer *op. cit.* (n. 45), 142 f.

122 Cf. Plb. 10.25.2f.

123 Diod., 18.30.32; cf. Plut., *Eum.* 7.

124 Greek camps were apparently less rigidly organized than Roman ones (cf. Plb. 6.41.9-12; 42). But even if Hellenistic camps were more uneven in layout, Roman ones too contained both strictly-measured blocks of tents *and* considerable regulation open spaces, so that the average area per man probably tended to balance out. The size of a standard camp for a normal consular army of perhaps some twenty-five thousand men was

made "topographical" features began themselves to condition the course of the battle; perhaps especially so in its earlier phases. Furthermore, the forward edges of the camps largely coincided with the battleday fronts of the two phalanxes — and so accentuated the division of the battle into three combats: that of the centres being most directly affected by the very shallow cockpit-area, here enclosed by the two fortified camp-fronts. Thus resulted the three great "semi-detached" sectors, the average width of each about two kms. Only the final clash in the centre appears to have decisively done away with the stranglehold of the camps' stockades.

3. Raphia is often presented as a disjointed series of actions between various hardly co-ordinated arms. As a matter of fact, the circumstances and course of the battle peculiarly inhibited that close co-operation between arms which had flowered, and become almost *de riguer,* since Alexander's day; yet, at the same time, demonstrated it strikingly. This seeming discrepancy has a simple explanation: what was feasible, in terms of distance and time, at Issus, or even Gaugamela, became less so in the still huger armies, and vaster battlefields, of later days.[125] But co-operation, or lack of it, should be seen here on three distinct levels.

*a.* Combined action by centre and wings, which in earlier and smaller battles had virtually meant co-ordination between phalanx and cavalry, became now less a matter of direct tactical collaboration and more one of broader, Grand-Tactical, design and execution.

Now, the very looseness of such distant cooperation on a Grand Tactical level makes it clearer how Antiochos' deep thrust was first channelled by Ptolemy's camp, and then led on farther southward by the absence, Yet, of an attackable flank or rear in the enemy phalanx; and how, even if his movements were dictated also by logistic objectives and Grand Tactical aims, they were thwarted by Ptolemy's success in the

calculated by Kromayer, *op. cit.* (n. 45), 340f, as 2/3 kilometer square; and as slightly less by Walbank, *Commentary* 1, 715; cf. also summaries in Harmand, *op. cit.*, 126-128. Assuming the depth of the camp to be similar to that fixed in Roman schemes, Antiochos' camp-frontage was about 1 3/4 km and Ptolemy's about 2 km. For the camps as "blocks", that had not only a considerable frontal *width* but also a substantial *depth*, there is a good illustration at Sellasia, in 222 B.C.E., where the palisade-and-ditch entrenchment (Plb. 2.65.9), probably remembered by some Ptolemy's commanders, was indeed perimeter-like (Plb. 2.69.6).

125 Cf. also the converse comparison with Cannae, p. 80 *Supra.*

east — and, perhaps above all, because Antiochos misjudged the time and the distance.

It is less clear why Echecrates' successful stratagem did not culminate, if not in a descent on the Seleucid phalanx's flank, at least in cutting off its withdrawal to Raphia. In the final event, Antiochos' right and centre did retreat unimpeded to the town.[126] This is the major Grand Tactical fact that helped make Raphia's result, in the short run apparently so paradoxical and decisive, strategically and politically inconclusive in the longer run; with the final decision coming only some twenty years later, in the battle of Paneion.

Thus, whatever the plans may have been on the eve of the battle, in the sequel the two right wings were victorious. Yet neither Antiochos nor Echecrates managed, or perhaps even attempted, to tie up his victory by encircling and subdueing the enemy centre. The consequence was that the campaign itself remained inconclusive; and the ultimate retrial came in the Fifth Syrian War.

For a proper estimate of the Hellenistic battle system it is, however, essential to remember that the seeming lack of purposeful cohesion on the Grand Tactical level was hardly paralleled on the more restricted tactical level.

*b.* Inter-arm co-operation there was, naturally, on the wings; since, within frontages of about two km., or less, it became practicable. The most impressive example is Echecrates' outflanking ride and Phoxidas' synchronized frontal strike, Cunaxa-style, with his mercenaries, surely medium infantry (Plb. 5.85.2–4). We may perhaps guess at similar co-ordination on the Seleucid right wing: when Antiochos charged the far outer flank, Hippolochos' mercenaries fell on Ptolemy's peltasts (Plb. 5.84.9). Hippolochos' move, seemingly on the spur of the moment, was conceivably implementing a contingency plan; although here too the intervening line of elephants, thrice mentioned by Polybios (5.84.7-9), obviously made direct cooperation unfeasible.

126 Cf. Plb. 5.85.13; 86.3f.

127 The conclusion of the Fifth Syrian War is usually dated 197 B.C.E. The battle of Paneion was fought in 200 (M. Holleaux, *Études d'épigraphie et d'histoire grecques*, 3 (Paris 1942) 326; E. Bickerman, *Chronology of the Ancient World* (London 1968) p. 217), as against the earlier dating in 198 (thus G. De Sanctis, *Storia dei Romani*, IV [Torino-Firenze 1923] 119).

Anyway, direct assistance (and presumably some combined training) was expressed in the very fact that the mercenaries so adroitly exploited the elephants' impact. Furthermore, it is likely — thus helping also to explain the firm initial stand by the Seleucid "Ten Thousand, mostly Silvershields"[128] — that Hippolochos' brigade subsequently stayed covering the exposed right flank of this westernmost Seleucid phalanx, opposite the "Libyans armed in the Macedonian manner".[129]

*c.* Another kind of inter-arm co-operation is nowhere explicitly mentioned by Polybios; nevertheless, there is implied a close relationship (even if of an *ad hoc* nature), in joint fighting, between different units of horse and foot — the latter, in general, light troops; and, in a somewhat differing manner, between elephants and light-armed troops.

The best and most comprehensive example of collaboration between horse and foot (which seems to have been the self-evident norm, and so mostly unmentioned) is the fight at Callinicus;[130] luckily, a detailed description of this battle had to be given, because actual collaboration so depended there — for obvious technical and tactical reasons — on relatively small units of either arm working closely together.[131] Paradoxically, it is from the very fact such cooperation is only rarely mentioned that we may infer that a degree of intermingling, and co-ordinated interplay, of cavalry and light-troops was often a must.

Polybios himself provides such an argument *e silentio* in the case of Raphia. The three thousand Cretans on the western wing of Ptolemy's army, and the 2500 on Antiochos' opposite, demand explanation. Even

[128] Plb. 5.85.10; cf. 82.10 (though the text here appears to be suspiciously muddled, and presumably garbled; probably, it should be read in accordance with 84.9, concerning the mercenaries' position: cf. 79.3-5, apparently suggesting partially the actual alignment).

[129] Plb. 5.82.4; 65.8. If this is so, Hippolochos' mercenaries, "close to the phalanx" (Plb. 5.84.9), will provide an additional explanation for the fact that the epilektoi "from all parts of the kingdom" stood their ground longer than the regular, presumably cleruchic, part of the phalanx; whose *left flank* appears by then to have been exposed directly to outflanking moves by the right, Egyptian, division of the Ptolemaic phalanx. We must assume that Hippolochos' brigade could not have taken part in the general forward movement by Antiochos' right for any considerable distance, because Ptolemy's entrenched camp was, most likely, directly in front of it; and so it must have remained close to its original station on the Seleucid phalanx western flank.

[130] V. Livy 42.58.6-10; 12-13; cf. 57.5. 7-8.

[131] For other instances cf. e.g. Livy 33.7.47.11 (cf. Plb. 18.19; 21.1; 5; 22.2;) 42.57,5,7.8; Plb., 2.67.2 and 6. For the "technical" aspects cf. 135-137.

if the one thousand Neo-Cretans on each side were in fact light spearmen armed with full-size shields *(aspis)*, whose function it would be to protect and reinforce the purely missile units,[132] there still remain 2000 and 1500 *archers* (possibly including some slingers), the first apparently stationed next to a cavalry formation of three thousand; and the second next to one of two thousand (and two thousand more at an angle with them).[133] Yet here Cretan was not to meet Cretan, in the style of an Eighteenth Century Swiss regiment in the French service clashing, by purest chance but most loyally and determinedly, with another in Spanish pay; for their function was to assist the horse, and impede the enemy cavalry — their acknowledged task for centuries.[134] Both duties could be carried out either by shooting straight ahead at the enemy cavalry or by covering the flank of the friendly horse, but shooting diagonally; yet in both cases the range could not be much beyond one hundred to 150 metres, and quite likely less.[135] Hence in practice the shooting-front probably had, in most cases, to be about fifty to one hundred metres wide. Shooting-fronts of, say, three hundred to seven hundred metres were neither feasible nor of any use.[136] It follows that in the field (as distinct from catalogues of forces, like Plb. 5.65, 82, or parade ground deployments) there were no such continuous missile-frontages; formal quasi-linear enumerations transmitted by Polybios notwithstanding. This applies with even greater force to Themison's 1500 attached javelineers for example, whose range must have been at best

[132] Cf. Plb. 10.29.6; 30.9; Griffith, *op. cit.* (n. 8), 144 n. 2; for documentation on armament, Launey, *op. cit.* (n. 16), 1.282ff.

[133] Plb. 5.82.3f; 9f; (65.5.7; 79.10.12).

[134] The thwarting of hostile cavalry was seen as the archers' natural task from as early as 415 B.C.E. (Thuc. 6.22.25; cf. 43) to 200 (Livy 31.39.12); also Plut. *Pyrrh.* 29.8; Livy 37.41.6-11.

[135] The estimate for effective bow ranges arrived at by McLeod (*Phoenix* 19 (1965) 13f; cf. *JHS*, 90 (1970) 197f), is almost the double of the previously accepted ones.

[136] There is no obvious reason to dismiss Arr. *Tact.* 38 and Ael. *Tact.* 16, who state that light missile troops stood four deep in battle formation, cf. Ruestow-Koechly, *Geschichte des griechischen Kriegswesens* (Aarau 1852) 132; E. Marsden, *The Campaign of Gaugamela* (Liverpool 1964) 30, 67, 74. With the necessary elbow-room, this could give about seven hundred meters for three thousand Cretans; or perhaps a third less if the Neo-Cretans were stretched out as a forward shield rather than inserted at intervals as stiffenings of "arme blanche" troops [cf. the Diagram].

about a third of that mentioned for the bowmen;[137] while their tactical versatility facilitated specifically intermingling and close team-work with units of the horse. Thus, the impossibly extended shooting-fronts, hinted by Polybios, themselves imply the need for closer teamwork between horse and light foot, exemplified in the fight at Callinicus.

Much the same has already been shown for the other example of close-knit combination: that between elephants and light-armed troops (see pp. 4–5, 16–18, and notes). Such cooperation undoubtedly occurred on the battlefield of Raphia too, to go even by the troop list, and stationing, on the Seleucid side. Our picture of the deployment of forces, and even more that of the action that took place on the wings, should be affected by this assumption. But it would also influence the view on the nature of the battle's final phase. For here emerges an element of resilience in Hellenistic warfare, often overlooked.

Since combined forces of this kind could have greater balance and staying power, e.g. for a large-scale covering operation,[138] this might be one explanation for the fact that Antiochos' army could re-assemble, spend the night at Raphia not far away, and only later retreat to Gaza undisturbed.

Thus, our survey of combined-arms operations at Raphia is perhaps of more than antiquarian interest. It has indeed illustrated some facets of Hellenistic warfare which do not readily emerge from most descriptions of *Roman* battles: from the battles with Pyrrhos (280–275 B.C.E.) to

[137] The javelineers were obviously attached to the horse on the left wing - Plb. 82. 11 (cf. 79.11). The most recent estimates for javelin ranges are given by Harris (*Greece and Rome*, (2nd Series) 10 (1963) 34-36). Leaving aside the differences between Hellenistic javelins and the Roman *pilum*, it is dufficult to attribute to such agile light missile troops the deeper formation assumed for a Roman *pilum*-throwing maniple of swordsmen even on purely tactical grounds; Plut. *Sulla* 18.6 describes a Roman formation at Chaeronea, which may be nine deep (cf. Hammond, *Klio*, 31 (1938) 198-199), whose rear lines were throwing their *pila* at the Pontic troops opposite; though this (if accepted) apparently refers to an *acies triplex* of *cohort* legions. Kromayer, *op. cit.* (n. 45), 287-288; Ed. Meyer, *Kleine Schriften*, 2 (Halle 1924) 219. The length of a solid front of the javelineers would equal perhaps eight throws of the javelin. Hence it would not allow teamwork with cavalry on the flank.

[138] The most obvious illustration seems to be Livy 42.59.4-5. The Thessalian horse covered the retreat of the Roman and allied Hellenistic forces, in cooperation with "King Eumenes' auxiliaries", which were obviously mainly light troops (cf. Livy 37.39.10-11; 41.9.11; 38.21.2; App. *Syr.* 31.33).

Pydna (168). It may also contribute to a broader understanding of the June 22nd battle as a whole; and, not less, of its effect on the remainder of the campaign, in preserving a relationship of strength that was to be expressed in the terms of armistice and peace settlement, so often wondered at by classical and modern historians alike.

For our reconstruction rests on the near-certainty that had, for instance, the main body of Seleucid horse not been victorious, and preserved — or had the force of elephants not remained intact — Antiochos' retreat could not have been undisturbed (cf. Plb. 5.86. 4, 8); nor could he have safely transferred his army to the north (5.86, 8; 87.1). Yet that he succeeded in doing so also helps to explain not a little of the post-217 military, political, and ultimately historical, developments in the Hellenistic East; for the campaign's result left open the road to a later consummation of an underlying Seleucid advantage of strength, already indicated in this article.

*Balancing Factors — Military and Economic.*

A short review of the factors is in order. The Ptolemaic phalanx, we have seen, was so large this time because it had been augmented, exceptionally, by native Egyptian troops. The frontal thrust and outflanking manoeuvre in the east were executed by the mercenary foot and horse, now strikingly numerous. Neither force was permanent. The native Egyptians soon proved (Plb. 5.107. 1–3) to be a double-edged sword. Their use now even caused in later years a reduction in the cleruchic forces available for foreign campaigns (follows from Plb. 14.12, 4). Their subsequent settlement in peace time was certain to be both costly and problematic,[139] and so were the raising of hired troops and

[139] For the cost, C. Préaux, *Économie Royale*, 32; Préaux, Sur les Causes de Décadence du Monde Hellénistique, *Atti del XI Congresso Internationale di Papirologia 1965* (Milano 1966) 490; cf. *U.P.Z.* 110, for the difficulty of getting Egyptian soldiers back to the soil in 164 B.C.E.; also Préaux, *op. cit.*, 495; also Reekmans, *Studia Hellenistica*, 7 (1951) 73; *id.*, *Chronique d'Égypte*, 24 (1949) 48, 33-38 and especially 37-38.

their maintenance. The difficulties of recruiting them were further complicated by distance and political uncertainty.[140] Ptolemy's advisers were surely aware that they could neither maintain such a large armed power as that employed in the Raphia campaign, nor remobilize it if once disbanded; and this awareness was reflected in their decisions. Indeed, many of the factors that must have been involved in their planning, almost from the start, surely went far beyond the direct requirements of mapping out a battle, or even a campaign.

Thus, much silver currency, for instance, was needed not only in order to raise and support mercenary troops, and generally to satisfy military and naval needs, but also to ensure an active imperial policy. For both, a certain monetary equilibrium was necessary in state and government, and income had to balance outlay. Income came mainly from Egypt's grain production and export (itself a changeable function of the economic health of the Aegean states), from tax-collection in the dependencies, etc.[141] In this period there was an unfavourable trend of the monetary balance, manifested in a progressive scarcity of silver money. In the very years of the Fourth Syrian War, the Ptolemaic state was compelled to go off the silver standard, "without which a state was

[140] For the growing financial burden of hiring foreign troops: Préaux, *Écon. Royale* 32-35; Préaux, "*Causes de Décadence*" 483-488, and especially 485-486 (also the *Raphia Inscription* Greek Text, 1.1:19-22; Plb. 5.83.6; *Maccabees*, 3.1.4); Plb. 5.63.8-9; 5.63.13; 65.4.6-7.10; 13.2.3-4; 15.25.16-17; 18.54.12; and Livy 31.43.5. In an attempted estimate of the total expenditure on the Raphia campaign, C. Préaux ("Causes de Décadence" 486) arrives at the sum of "six thousand talents - without the thousand talents of the end-of-campaign bonus"; this is clearly imprecise, and some details are suspect, yet it can hardly be far off the mark. Her conclusion (p. 487) is: "Quand on considère l'ampleur de cet effort, on concoit que Ptolémée ait hésité à le renouveler." For the persistent need for mercenaries cf. Plb. 15.25.16-18; 16.18.8; 19.1.4; 18.54.12; 22.17.6; Livy 31.43.4-6; Agatharchides, *Geographi Graeci Minores* 1, p. 119. For the political complications cf. Livy 31.43.5-7; Plb. 29.23.6.

[141] Cf. Rostovtzeff, *CAH*, 7. 110-111; 132-134; 141; *SEHHW* 1, 261ff; Préaux *Économié Royale* 254,265,275-278, 415ff, 433; Préaux, *Chronique d'Égypte*, 15 (1965) 364, 370-371, 375 (and n.n. 1,3); "Causes de Décadence", (n. 139), 478, 483-485, 487-489, 495-496. Reekmans, *Monetary History and the Dating of Ptolemaic Papyri* (Louvain 1949) 18, 21,28; also, *Economic and Social Repercussions of Ptolemaic Copper Inflation* (Bruxelles 1949) 324-325, 335; *The Ptolemaic Copper Inflation* (Louvain 1951) 67, 73-75, 77. E. Will, *op. cit.*, (n. 118), 1. 148-178, undertakes to classify and analyse the various aspects of the interdependence between the Ptolemaic economic structure in Egypt and the dynasty's imperial and foreign policies (cf. 152-154; 175-178).

no longer Greek";[142] which certainly means that it was no longer able to employ Greek troops.

These are questions that must have arisen even before the campaign was over; and some of them dictated immediate answers. An instructive illustration can be provided.

### *The Ptolemaic Intrusion: Controversy*

Ptolemy, his hands freed by result of Raphia, concluded his troop movements — combined with a festive Royal Progress — by "becoming master in twenty one days...of all his lands" (*Inscription*, 1.25, *in Spiegelberg's final translation*). After "taking Raphia and the other cities" (Plb. 5.86.8), thus "... totally regaining Coele-Syria" (87.3), he began "establishing order in the cities... in Syria and Phoenicia," (87.6); this, apparently, after having "shown all men that it was not good to fight against him" (*Inscr.* 1.1.24–25). This was a notable propagandistic aspect of his brief incursion into Seleucid territory (*Inscr.*, 1.1.23–25), a feat which has been widely discussed in the literature; largely, it seems, as result of a remarkable misunderstanding. Briefly, it was variously surmised (Otto, Momigliano; recapitulation by Walbank) that Ptolemy's incursion must have come *after* his having granted Antiochos' envoys a year's truce — thus apparently breaking his pledged word, and giving rise to assumption of modern historians that Antiochos had yet to be constrained into concluding a firm peace settlement.

Perhaps a more significant aspect of that incursion, however, and one which has been neglected, is the fact of his prompt withdrawal into his own hereditary territories (*Inscr.*, 1.25).[143] In the setting of the rest of the evidence, here is a clear indication of an early decision on a "moderate", self-restricting, policy. Ptolemy's incursion most probably occurred in coastal North Phoenicia; and, most enlightening, it appears

[142] C. Préaux, *Chronique d'Égypte* 40 (1965) 375.

[143] This mention of withdrawal is clearly one of those statements in the Inscription that must be accepted as historical fact; for nothing that would detract from Ptolemy's prestige, such as withdrawal, can be held to be one of the embellishments in this laudatory decree. The demonstration of power implied in the incursion is clear from Inscription 1.1. 24-25, which stresses action in enemy country and Antiochos' alleged helplessness in the face of Ptolemy's might; these are recurrent motives of traditional Egyptian propaganda.

that his withdrawal was not a result of imminent enemy pressure; but it must have *preceded* his granting the truce to Antiochos' envoys.

For we know that it was to Antioch that Antiochos went back with the main body of his troops (Plb. 5.86.8; 87.1). He could not have taken the coastal road but rather an inland, more circuitous, route to Antioch; because in Sidon there remained in 218 a Ptolemaic garrison (5.70, 2), too great a risk for an army in retreat. Hence, in terms of march distances, he simply could not have managed, within the two sides' probable time-tables, to come down from Antioch to the rescue of his threatened province in the south in time;[144] still more, before a Ptolemaic advance force — which could itself have been preceded by a spear-head attack by the garrison at Sidon, or perhaps even by that of Tripolis, and which now could also get sea-borne reinforcements — might have reached the southern "peraea" of Arados.[145] If so, the decision to withdraw could only have stemmed from a basic policy apparently adopted by Ptolemy's own government: not to try to change the pre-war frontier, once the demands of honour had been met through the demonstrative incursion into Seleucid Phoenicia.[146] Such a decision was further reflected almost at once in an unexpectedly propitiatory attitude soon exhibited towards the Seleucid envoys, and the easy grant

[144] For Sidon as a Ptolemaic "Tobruk" in 218-217, it is instructive to consider Sidon's key position not only in the earlier Syrian Wars of the Diadochi, but also in the latter part of the Fifth Syrian War (cf. Jerome, *op. cit.* (n. 3 above) XI 15-16 and Holleaux, *Études d'épigraphie et d'histoire grecques* 3 (Paris 1942) 326-327 (but also 320-321, 324-325). De Sanctis, *Storia dei Romani* (Torino-Firenze 1923) 120, is mistaken in seeing the operations around Sidon in the latter part of the Fifth Syrian War in purely land-war terms. Of all the towns on the coast of Phoenicia, Sidon and Tripolis alone lay some distance away from Mount Lebanon, and so facilitated the passage nearby of victorious invading armies which often found it advisable to take the costal route (5.68.7-9; cf. 70 1-3).
However they offered no safe passage to a *retreating* army, which was far more likely to take a more roundabout, but less exposed, route; much more so when amphibious intervention by the enemy was on the cards.

[145] To Arados and its *Peraea* — Plb. 5.68.7. The subject has been authoritatively reviewed by H. Seyrig in *Syria* 28 (1951) 215-220; and more recently, *Revue Numismatique*, 6th Series, 6 (1964) 19-21, 28-30.

[146] Ptolemy's retreat from occupied Seleucid territory is in contradiction to the surmise (E. Will, *op. cit.* (n. 118), 2.32) that the towns of Seleucid northern Phoenicia were held by Ptolemy between the Fourth and Fifth Syrian Wars. There seems thus to be no reason to revise the accepted view that the peace of Antioch left in force the traditional status *quo ante*, with the sole generally implied exception of Seleucia.

of a year's truce (87.4–5): clearly extending in practice to the spring of 215, as the nearest subsequent campaigning season. This behaviour expresses a developing new understanding with Antiochos, "once again trusting him", as the Inscription (1.25) has it. Spiegelberg[146a] stresses Ptolemy's "exceptionally friendly attitude to his recent enemy." Antiochos' name appears repeatedly "with the Royal Shield and the honorific adjunct, quite like a reigning Egyptian ruler's", in the Inscription.

As already indicated, our view of the order, and meaning, of the developments in the concluding phase of the Fourth Syrian War differs from that accepted by several historians, among them W. Otto,[147] and A. Momigliano.[148] We date Ptolemy's incursion into Koile-Syria not after, but before, his first meeting with Antiochos' envoys, and the truce; thus, *inter alia*, dispensing with the necessity of explaining Ptolemy's alleged sudden violation of a truce he himself has granted with such ease (Plb. 5.87.4): for in fact he will have proceeded forthwith to negotiate a formal peace (Plb. 5.87. 6; 8). It will be noted that these historians, and others, based their view on Spiegelberg's *unemended text.*[149]

## *The End of War's "Paradox"*

Now, a probe of distances and times, which regrettably cannot be detailed here for reasons of space, indicates that, in fact, the Seleucid envoys, dispatched from Antioch, could not have reached Ptolemy before the incursion. Support for this comes from Spiegelberg's ultimate version. The Peace of Antioch (Plb. 5.87.8) is clearer seen in this light: as a Ptolemaic acquiescence, albeit a half-hearted one, in what it entailed; perhaps above all Antiochos' immediate effort, subsequently, to liquidate Achaios' secession (5.87.8; 107. 4).

This surely joyless willingness apparently to leave Achaios in the lurch may be a major clue to subsequent Ptolemaic policy. Actually, Alexandria could hardly have wished to see Achaios, a general of

146a *Sitz.-Ber. Muenchen* (1925) Abh. 4.16.Scholion V.
147 *Beiträge zur Seleukidengeschichte* (1928).
148 *Aegyptus* 10 (1929).
149 See note 1 above.

proven worth and an experienced ruler, on the throne of a yet stronger, united, Seleucid kingdom — regardless of any undertakings once made to him genuine or fictitious.[150] Thus it may be easy to understand that now Ptolemy was not eager to cooperate in an attempt to seize the heart of the Seleucid power, the capital and its prestigious harbour-city, and to have Achaios installed there. Yet, Achaios embattled in his Anatolian capital of Sardis, and keeping the division in the Seleucid ranks alive, was a valuable asset even now, just as he had been in the preceding years. This raises the question of why Ptolemy showed such seeming readiness to acquiesce in his prospective removal. In fact, Ptolemy must have been aware of the danger in leaving to Antiochos sole initiative in Asia Minor: a strengthened power base for further expansion (cf. Plb. 5.58). The court at Alexandria still attempted, in underhand ways, to help Achaios resist Antiochos' attempt on Sardis, his last stronghold; and, later, Ptolemy tried to preserve him as eventual pretender to the Seleucid throne. It is indicated by Polybios[150a] that such activities relied on a network of agents and middlemen at Rhodes and Ephesus supported from Egypt. The treaty of peace and friendship concluded at Antioch in 217 (Plb. 15.25.13) was, evidently, not incompatible with support for a handy anti-king.

One answer to this enigma can be given in terms of the immediate situation. After a supreme effort — and peril — of both sides at Raphia there was no going back to the uneasy balance of partial threat and local response that had obtained in the early years of the reigns of the two kings, and, it seems, for some time before that. In 221, for instance, it was possible for Antiochos (Plb. 5.45–46) to make an abortive attempt on the Ptolemaic province of Syria and Phoenicia without full-scale war breaking out. One reason for this may have been that at that time Ptolemy's ministers rightly discounted Antiochos' ability to rally his disjointed empire's forces for a really massive assault; another, that they still hoped to avoid a total confrontation (cf. Plb. 5.34–35). After Raphia, things were different. This was indeed a total confrontation, that

[150] The alleged Ptolemaic overtures to Achaios can be found in Plb. 5.42.7; 57.2; 66.3; 67.1; cf. 4.51.1-5. The differences of opinion among historians (e.g. Niese, Holleaux, Schmitt, Will) as to the authenticity of such promises cannot be discussed here.

[150a] Plb. 7.16.7 with Holleaux, *op. cit.* (n. 144), 3.125-139; cf. Plb. 8.15.8.

upset the former unstable and delicate balance. New combinations of military, economic and political factors now prescribed policies. So, for Ptolemy, renewed war (or even protracted stalemate) would make necessary further to maintain the huge field army; in the state's already overstrained financial position, an unbearable burden. On the other hand, in all matters relating to Achaios' status Antiochos by now was thoroughly alarmed (Plb. 5.87. 2) — and aroused (Plb. 5.67. 12–13). Now nearer home, with his army in the main intact, he no longer was willing to delay the elimination of Achaios and his pretensions, a long-cherished plan (Plb. 5.58.1; 61. 6; 87.8). Ptolemy's worries as a paymaster, and Antiochos' stubborn purpose, helped to produce a peace of provisional expedience.

But Ptolemy had his basic home (and imperial) problems too; and the answer implied in those was of the structural, lasting, variety. By the last third of the third century B.C.E., in the years before Raphia, some signs of imperial arrest and retreat were evident. Active meddling in the affairs of the Peloponnese was on the wane even in the last years of Euergetes.[151] Regular subsidies and frequent handouts alike became rarer, and finally ceased.[152] Egypt's scarcity of silver is progressively mirrored in amounts. Whereas Euergetes had nurtured Aratos, and in the years 225–222 apparently still supplied Cleomenes with sums that may have amounted to some hundreds of talents,[153] his grandson Ptolemy V Epiphanes gave the Achaians practically no ready cash, but only copper money, with the value of less than two silver talents, as well as bronze weapons that he evidently could spare at the time, in 187 (22.9, 3). And when a few years later Ptolemy gave ten light warships to the Achaians, they were duly gratified "for the gift's worth was not much less than ten talents" (Plb. 24.6.1–2).

In Asia Minor, control over an important coastal area, Pamphylia, was relinquished. It was still held by Euergetes (Plb. 5.34.7), but undoubtedly

[151] Cf. Plb. 2.47.2; 51.2; 63.1.3.5; Plut. *Aratos* 12.1;14.1; 24.4; 41.3; *Cleom.* 19.8, 22.4-9.

[152] Cf. Plb. 5.34.4,9-10; 35.1.4; 7-8, 12. See also Tarn in *CAH* 7.718, 722, 726, 756,759; Walbank, *Aratos of Sicyon* (Cambridge 1933) 39-40, 93, 106, 110-111, 176,177,200-201; Errington, *Philopoemen* (Oxford 1969) 3, 163.

[153] Cf. Plb. 2.63.1-2, 4-5; and Plut., *Cleom.* 27,2. Expenditure surmized on a 4-6 months campaign.

given up before 218.[154] The Macedonian penetration into Caria in the years before Selassia is even more remarkable, in view of the fact that Ptolemy maintained a naval presence in the Aegean.[155] In the Aegean islands a large-scale incursion was made by the Illyrian pirates in 219 B.C.E.; and it was the Rhodians, unaided by the Ptolemaic navy, still a fleet-in-being at the time (Plb. 5.35.11), that hastened to the defence of the sea-lanes and the isles (4.16. 6–8; 19.7–8).

Another example of the piecemeal retreat of Ptolemaic power is the surprising détente with Macedon, seemingly developing in 222–217 and perhaps reflecting also the looming struggle for Koile-Syria, as historians have long suggested. Thus, in the Ptolemies' far-flung Greek and Aegean dominions and outposts there was a gradual withdrawal from forward positions and expansionist policies. Obligations were being reduced, some bases and protectorates given up, and arrangements were sought with former rivals and adversaries. The retreat was sometimes military or territorial, sometimes diplomatic; and it appears that in all cases economic and monetary internal realities played a primary role; which they must also have played in influencing the way the Fourth Syrian War was concluded, — and its ultimate effects. The enquiry into the social and economic factors peculiar to Ptolemaic Egypt that now contributed to this phenomenon of imperial retreat has been greatly furthered in the last few decades by the exhaustive studies of historians, amongst them C. Préaux and T. Reekmans.[156]

It would be too much to say that the only cause for the anticlimactic outcome of the Raphia campaign and the entire war, and for the policy now adopted by the Ptolemaic government towards Achaios — by which it gave up the chance to maintain a dominant position in the Hellenistic

[154] Plb. 5.12.9-1; 73.3-4; 77.1. This change is reflected in coins of the period: Seyrig, *Revue Numismatique*, 6th Series, 5 (1963) 40ff.

[155] Plb. 5.35.11, but cf. 20.5,7-11.

[156] Cf. nn. 139, 140, 141. T. Hacken's article in *Studia Hellenistica*, 16 (1968/69), 35., touches on the connection between the crisis of the silver standard and the difficulty Ptolemy had in hiring troops and maintaining his Greek alliances. His view is based on coins of the period found in hoards from the Peloponnese and on literary evidence which shows how hard it was actually to raise large sums of silver money, e.g. around 227 B.C.E. when assistance had to be offered to Rhodes (specifically Plb 5.89. 1, 3, 6).

East through this divide-and-balance factor — was the shrinking of the Ptolemaic commercial, and ultimately monetary, base. Still, such contraction must have been a major underlying influence. "Cette pénurie d'argent, que révèle avec précision l'abandon de l'étalon-argent en 210, peut servir de point de départ à l'explication d'une certaine politique de replis à l'égard du monde grec, et d'un refus de l'acte guerrier pour lequel il faudrait acheter des mercenaires."[157]

Here may be a key to understanding the supreme paradox of the Fourth Syrian war: why, having apparently culminated in a Ptolemaic victory, it actually became the starting-point for an over twenty year long continuous process of extension of Seleucid power, now strengthened by the resources of the Anatolian provinces, over most of Western Asia, from the Hellespont to the Hindu Kush.

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Among the major feats of war in Hellenistic times, the Field of Raphią occupies a somewhat solitary position. The string of battles of the Great Diadochi possessed "three unities": of central personages, competing for the same prize of war; of time — a tight score of years; of continued action, with a shared historical background and human milieu. The combats against Romans had a fateful clash of military systems for a common theme. Raphia seems to stand alone; very likely, because of loss of sources for other great Seleucid-Ptolemaic confrontations. Thus, the study of a campaign is called here to reflect a "Hundred Years' War" of the Hellenistic East, that exercised considerable influences on contemporary situations, and the sequel of which gave rise to important evolutionary developments; not the least of the more direct ones being, 50 years after the Day of Raphia, the historically pregnant Hasmonean rebellion against hellenisation and Seleucid rule.

[157] C. Préaux, *Chronique d'Égypte* (1965) 375. Perhaps here she somewhat overstates her case. Undoubtedly, even a Greek mercenary often could, and did, make use of copper money for everyday expense; still, it was probably the silver that kept him.

Today, it is the IVth Syrian War, with its double campaign in 219–8 from the passes of Lebanon to Rabbat-Amana, and especially the Campaign of Raphia in 217, that provides the only realistic avenue for a close and matter-of-fact — if very fragmentary — look at the military establishments and battle tactics that characterised the world of late Hellenistic powers.

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