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THE DHEMA PASS AND ITS
EARLY BYZANTINE FORTIFICATIONS.

by

William Joseph Cherf

A Dissertation Submitted to the Faculty of the Graduate
School of Loyola University of Chicago in Partial
Fulfillment of the Requirements for the Degree of
Doctor of Philosophy

June

1983



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The author would first like to thank Professor Edward W. Kase, the director of the Loyola University of Chicago Phokis-Doris Expedition in Central Greece, for his encouragement to study the late remains of the Dhema Pass.

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Finally, I must turn to my parents and sister, without whom the completion of this project would not have been possible.

VITA

The author attended grammar school in Chicago and received his secondary education at Glenbrook South High School in Glenview, Illinois. After his graduation in June of 1970, he first entered Loyola University of Chicago, but then transferred to Indiana University in Bloomington where he majored in Anthropology. During the summer of 1973, the author participated in the excavation of Tel Beersheva in Israel. He was awarded the Bachelor of Arts degree in Anthropology from Indiana in May of 1974. He then spent the following spring and summer of 1975 abroad in preparation for his graduate studies.

In September of 1975, he enrolled in the Department of History at Loyola University of Chicago, and received his Master of Arts degree in Ancient History in May of 1978. He then broadened his graduate experience by participating in the Loyola University of Chicago Phokis-Doris Expedition in Central Greece during the 1976 through 1980 seasons. During his graduate career at Loyola, he was awarded teaching assistantships (1976-80), an instructorship (1980), and the junior faculty position of lecturer for 1981-83.

William Joseph Cherf, is the son of Frank J. Cherf and Audrey I. (Zeigler)Cherf. He was born on August 30, 1952 in Chicago, Illinois.

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ABBREVIATIONS

All periodical and journal citations are abbreviated according to the guidelines of the American Journal of Archaeology.

Agathias

Agathias Historia, in Corpus Fontium Historiae Byzantinae, vol.2, ed., R. Keydell, Berlin, 1967.

Amm. Marc.

Ammianus Marcellinus, ed., trans., J.C. Rolfe, in Loeb Classical Library, Cambridge, 1935-1939.

ANRW

Aufstieg und Niedergang der römischen Welt. Geschichte und Kultur Roms im Spiegel der neueren Forschung, eds., H. Temporini, W. Haase, Berlin/New York, 1972-.

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CSHB

Corpus Scriptorum Historiae Byzantinae, ed., B.G. Niebuhr, Bonn, 1828-1897.

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FGrHist

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FHG

Fragmenta Historicorum Graecorum, eds., C. and Th. Müller, 4 vols., Paris, 1851.

GGM

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HGM, Dindorf

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Hierokles

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Prokopios bella

Prokopios anecdota

Prokopios de aedificiis

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INTRODUCTION

In the year 539,¹ the Dhema Pass was successfully taken by a horde of 'Hunnic' raiders,² who by means of this passageway easily penetrated the mountainous frontier of north central Greece (see Maps I and II). By breaching the defenses of the Dhema Pass, the barbarians gained direct access to central Greece, while simultaneously circumventing and compromising the roundabout coastal route and fortifications of Thermopylai. Once beyond the Dhema Pass, the invaders devastated all of central Greece up to the walls of the Korinthian Isthmus. As soon as the shock of the raid had reached Konstantinople and the damage had been assessed, the emperor Justinian I (527-565) ordered his logothete Alexander 'Psalidios', while he was enroute to Italy, to visit and restore the beleaguered defenses of north central Greece. Prokopios of Kaisareia, court historian of the period, has described the results of that imperial directive in his panegyric work, the *de aedificiis* (4.2.1-22). According to Prokopios, the defenses of the entire Thermopylai region were rebuilt and renovated. In addition, a permanent garrison of about two

¹ Prokopios *bella* 2.4.10, eds., J. Haury, G. Wirth, (Leipzig: Teubner, 1962).

² Prokopios' stylistic preference for archaic terminology when referring to the barbarians of his time is often misleading and troublesome; hence my use of the single quotation marks surrounding his ethnic term 'Huns'. Concerning this knotty problem, see: Alan and Averil Cameron, "Christianity and Tradition in the Historiography of the Late Empire," *CQ* 14(1964):321.

thousand professional soldiers was established there to replace the former local troops. This Justinianic reform of the frontier defenses of north central Greece, sketched by Prokopios, proved to be effective, for during the Kotrigur invasion in 559, central Greece was successfully defended by those who manned its frontier defense system.³ But within a generation, this staunch frontier system was overrun by, or was abandoned in the face of, fierce invasions of the Avars and Slavs who descended upon central Greece during the last quarter of the sixth century.⁴

The security of north central Greece was dependent upon a carefully conceived and unified defensive strategy that included the entire length of its northern frontier; yet, although numerous topographers have focused their attention upon the pass at Thermopylai and its early Byzantine fortifications, no study has sufficiently taken into account the western extreme of this frontier with its direct passageway into central Greece.⁵ The present study fulfills this need, for it is con-

³ Agathias 5.23.6, ed., R. Keydell, (Berlin, 1967).

⁴ See pages 81-87 below.

⁵ See J. Farrell, "Note on the Position of Rhoduntia," CR 24(1910):116-117; G. Kolias, "Σιδέρροκαστρο," ΕΕΒΣ 10(1933): 72-82; id., "Ἡ μετὰ τὸν Καταλανῶν καὶ μεγάλου δουκὸς τῶν Ἀθηνῶν μάχη (1311)," ΕΕΒΣ 26(1956):358-379; J. Koder, F. Hild, Hellas und Thessalia, (Österreichische Akademie der Wissenschaften, 1976), s.v. 'Thermopylai' and 'Sideroporta'; 256; A.R. Burn, "Thermopylai Revisited and Some Topographical Notes on Marathon and Plataiai," in K.H. Kinsel ed., Greece and the Eastern Mediterranean in Ancient History and Prehistory, (New York/Berlin: Walter de Gruyter, 1977), 89-105; W.J. Cherf, "A Justinian Fortification near Thermopylae," Seventh Annual Byzantine Studies Conference, Abstracts, (Boston University, 1981), 7-8; and most recently, W.K. Pritchett, Studies in Greek Topography, Part IV (Passes), (Berkeley/Los

cerned with the so-called 'Dhema Pass' and the role that its fortifications played in the frontier defense of early Byzantine Greece.⁶ This passageway into central Greece, long overlooked and ignored by scholars, was a crucial topographical feature in the southern Malian Basin during the fourth through sixth centuries because: 1) it was the only strategic passageway from the Malian Basin south through the mountains of the Oite-Kallidromos frontier barrier; 2) it was strategically fortified in order to preserve the integrity of the frontier of north central Greece; and 3), during the fourth through sixth centuries, it and its fortifications played a decisive role in the frontier defense of north central Greece.

As a result of the research conducted by the Loyola University of Chicago Phokis-Doris Expedition (hereafter PDE), the use of a descriptive nomenclature based upon recognized and local toponyms was necessary in order to describe new (or newly rediscovered) geographical trends and topographical features.

Angeles: University of California, 1982), 225-228.

⁶ The investigation of the Dhema Pass and its fortifications was conducted between 1976 and 1982 by the Loyola University of Chicago Phokis-Doris Expedition in Central Greece (hereafter PDE). Funded in part by the National Endowment for the Humanities and Loyola University of Chicago under the title, The Historical Significance of the Natural Geographic Corridor Connecting the Malian and Corinthian Gulfs, this research has provided original archaeological evidence that this topographical passage has been almost continuously used from prehistoric into modern times. As a member of the PDE, I had the opportunity both to study the Dhema Pass at length (seasons of 1976 to 1978, 1980 to 1981) and to participate in the expedition's many-faceted activities. This dissertation, once revised, will become part of the published research of the PDE.

One such term is the 'Isthmus-Corridor'. This delineates the shortest, most efficient, all-weather passage from the Malian Basin to the Korinthian Gulf. This overland passage consists of a series of mountain passes, upland plains, and valleys about 37 linear kilometers long, about 80 kilometers by way of existing roads. Along the entire length of this route⁷ coursed a strategic road system in early Byzantine times which was used for conventional overland communications.⁸ By conventional overland communications is meant travel undertaken in the course of normal administrative, military, economic, social or religious activity by means of wheeled vehicles, pack-animals, horses, or even on foot. On the other hand, non-conventional overland communications describe the haphazard practices of grazing pastoralists, local inhabitants, and exceptional situations of emergency, purpose, or adventuresome endeavour. To these latter groups and situations, geographical barriers to overland communications do not exist.

Another such geographical-topographical term is the 'Oite-Kallidromos frontier barrier' (see Map II). This formidable topographical barrier of north central Greece refers to the eastern slopes of Mt. Oite's

⁷ E.W. Kase, G.J. Szemler, "The Amphiktyonic League and the First Sacred War: A New Perspective," Transactions of the VIIth International Congress of Classical Associations, (Budapest, 1979), 525, n.1; and id., "Xerxes' March Through Phokis (Her. 8, 31-35)," Klio 64(1982):355, n.9.

⁸ Koder/Hild, 95. The extant remains, course, and route of the Isthmus-Corridor's road system from Gorgopotamos in the Malian Plain to Amphissa was discovered, traced, and photographed by E.W. Kase, director of the PDE, between 1975 and 1981. Full reports of this ongoing research were filed with the National Endowment for the Humanities in each of these years.

Tsouka promontory (1617 meters),⁹ the Trachinian Cliffs, and the Kallidromos Range. The Trachinian Cliffs, which are located south of the Malian Plain and east of the Katavóthra massif, form a narrow and low (700-1000 meters) mountain spur that is delineated by the upland valley approach to the Dhema Pass from Vardhátēs on the west and the narrow and steep-sided Asopos River Gorge on the east. In this context, the precipitous Kallidromos Range (modern Sarómata) is considered the eastern continuation of the Trachinian Cliffs beyond the Asopos River Gorge.

The term 'Dhema Pass' defines a narrow constriction, about 500 meters long by 200 meters wide, formed by the sheer western end of the Trachinian Cliffs and the steep Petséta area slopes of Mt. Oite's southeastern Tsouka promontory(see Map II). Its location in the foothills of Mt. Oite is approximately 13 linear kilometers west of Thermopylai and about 300 meters southwest of the modern village of Káto Dhió Vouná. By itself, the Dhema Pass is only a local topographical feature, but as part of a geographical trend, the pass defines the only easily negotiable, all-season, north-south route through the Oite-Kallidromos frontier barrier. Furthermore, the significance of the Dhema Pass can only be understood and appreciated when seen as the northern entrance to the strategic Isthmus-Corridor and its road system.

A term frequently used in this study that requires definition is

⁹ A. Philippson, E. Kirsten, Die griechischen Landschaften, 4 vols., (Frankfurt am Main: Klostermann, 1950-1959), vol.1:330. The spelling of topographical or geographical features, unless otherwise stated, follow those of the 1:5000 scale, Greek General Staff Map, Sheet Lamia, (1943), Philippson/Kirsten, or MacKay.

'frontier', and consequently, this study best conforms to the historical genre of Limesforschung, which began with Ernest Fabricius and is continued today under the general title of Roman and Byzantine Frontier Studies.¹⁰ By 'frontier' is meant either a distinct militarized borderland or settlement area between a civilized region on the one hand or an uncivilized region on the other. In either case, "The frontier is considered to be a zone."¹¹ But it was Frederick Jackson Turner, in his thought-provoking article, "The Significance of the Frontier in American History," who first theorized that "the frontier is the outer edge...the meeting point between savagery and civilization."¹² To Turner a frontier

¹⁰ E. Fabricius, "Limes," RE 13(1926): 572-671. See also: E.B. Birley, ed., Congress of Roman Frontier Studies, 1949, Newcastle on Tyne, July, 1949, (Durham University, 1952); E. Swoboda, ed., Carnuntina: Ergebnisse der Forschung über die Grenzprovinzen des römischen Reiches, Vorträge beim internationalen Kongress der Altertumsforscher Carnuntum, 1955, (Graz, 1956); Limes Romanus Konferenz, Nitra, (Bratislava, 1959); Quintus Congressus Limitis Romani Studiosorum, (Zagreb, 1963); Studien zu den Militärgrenzen Roms: Vorträge des 6. Internationalen Limeskongress in Süddeutschland, (Cologne, 1967); S. Applebaum, ed., Seventh International Congress of Roman Frontier Studies, April 1967, (Tel Aviv, 1967); E. Birley, B. Dobson, M. Jarrett, eds., Roman Frontier Studies 1969, (University of Wales Press, 1974); Actes du IX^e congres international d'Études sur les frontières romaines, (Bucharest, 1974); and J. Fitz, ed., Limes. Akten des XI. Internationalen Limeskongress, (Székesfehérvár, 1976); and Roman Frontier Studies 1979: Papers Presented to the 12th International Congress of Roman Frontier Studies, eds., W.S. Hansen, L.J.F. Keppie, (British Archaeological Reports, 1980). See further for example the regional series, Limesforschungen, vol.1ff. (Berlin, 1959-), and the numerous articles pertaining to this field in JRS. For example: J.B. Ward-Perkins. R.G. Goodchild, 39(1939):81-95; H. Schönberger, 59(1969):144-197; and H. von Petrikovits, 61(1971): 178-218.

¹¹ See: J.R.V. Prescott, Boundaries and Frontiers, (London: Croom Helm, 1978), 31, 33.

¹² Annual Report of the American Historical Association for the Year 1893, (Washington, D.C., American Historical Association, 1893), 200.

connoted a militarized zone or borderland between opposing or competing cultures.¹³ This modern notion of frontier is in close accord with the early Byzantine definition of frontier in the codex Iustinianus: a militarized zone, between opposing cultures, that had to be maintained with fortifications and garrisons.¹⁴

Such military frontiers are usually defined by topographical or man-made barriers, which can be maintained in various ways. Luttwak, in his book, The Grand Strategy of the Roman Empire,¹⁵ has described the essential function of the Roman military frontiers in the northern Balkans during the second and early third centuries as the regulation of

¹³ Turner's frontier thesis has made a considerable impact upon American, European and Ancient historiography. See, for example: G.R. Taylor, ed., The Turner Thesis Concerning the Role of the Frontier in American History, (Boston, 1949); J.F. McDermott, "The Frontier Re-examined," in J.F. McDermott, The Frontier Re-examined, (Urbana/Chicago/London: University of Illinois Press, 1967), 1-13; J.C. Wieczynski, The Russian Frontier, (Charlottesville: University Press of Virginia, 1976), 1-9; and W.W. Savage, Jr., S.I. Thompson, "The Comparative Study of the Frontier: An Introduction," in id., The Frontier. Comparative Studies, (Norman: University of Oklahoma Press, 1979), vol.2:3-24. Turner's thesis has even found adherents among ancient historians. See, for example the pioneer work of: P.L. MacKendrick, "Roman Colonization and the Frontier Hypothesis," in W.D. Wyman, C.B. Kroeber, eds., The Frontier in Perspective, (Madison: University of Wisconsin Press, 1957), 3-19; J.W. Eadie, "Civitates and Clients: Roman Frontier Policies in Pannonia and Mauretania Tingitana," in D.H. Miller, J.O. Steffen, eds., The Frontier. Comparative Studies, (Norman: University of Oklahoma Press, 1977), vol.1:57-80; and W.S. Cooter, "Preindustrial Frontiers and Interaction Spheres: Prolegomenon to a Study of Roman Frontier Regions," in Miller, Steffen, The Frontier, vol.1:81-107.

¹⁴ codex Iustinianus 1.27.2.8(A.D. 534); 1.27.2.10(A.D. 534); and 1.46.4(A.D.443) = P. Krueger, ed., Corpus Iuris Civilis, vol.2, 12th ed., (Berlin: Wiedmann, 1959).

¹⁵ E.N. Luttwak, The Grand Strategy of the Roman Empire. From the First Century A.D. to the Third, (Baltimore/London: Johns Hopkins University Press, 1979).

imperial highways and the aggressive consolidation of spear-won territories. It was the failure of this offensive-minded strategy that forced the imperial administration to adopt a new frontier strategy in the course of the late third and early fourth centuries. This new Balkan strategy was one of defense-in-depth in which three defensive layers of hardened fortifications were built and then maintained by a network of military highways. These military zones, which defended the hapless Balkan peninsula from the late third through sixth centuries, were based upon three topographically advantageous barriers: 1) the southern bank of the Danube River, 2) the Oite-Kallidromos frontier barrier, and, 3) the Isthmus of Korinth. This passive defensive strategy was not intended to check a full-scale invasion before or at the frontier; rather, it was effective in supervising and maintaining key mountain passes, road crossings, fortified installations, and in intercepting raiding parties within imperial territories. But, even when confronted and overrun by an all-out invasion, these hardened garrison positions could independently hold out, disrupt enemy supply lines and discourage foraging parties.¹⁶ The Balkan frontier, therefore, could be, and often was, in a constant state of flux. In fact, Konstantinople often temporarily lost control of many exposed Balkan regions, and even if imperial control was tacitly maintained by these three defensive layers, the history of the imperial Balkans during the fourth through sixth centuries remained one repeatedly punctuated by raid, invasion, and eventual barbarian occupation and

¹⁶ See Luttwak, Grand Strategy, 131-132, 136, 159, 176.

settlement.

In addition to its primarily militaristic connotation, the term frontier can also imply, in a broader sense, a zone of settlement and cultural interaction. Although such a region is typically devoid of geographical barriers, is topographically unified, and is the crossroads of highways, major thoroughfares or migration routes, the Malian Basin during the fourth through sixth centuries A.D. was not such a zone of settlement and cultural interaction.

During the politically uncertain fourth through sixth centuries A.D., when barbarian raiders sometimes ruled the highways of the Balkans, the Malian Basin became a neutral zone or no-man's-land between the fortified strongholds of the Othrysts Range and Oite-Kallidromos frontier barrier. Under such conditions it is not difficult to understand that in early Byzantine times the boundary between the provinces of Thessaly and Greece was only vaguely drawn and approximately understood. Although the southern limit of the early Byzantine province of Thessaly remains unclear, the cities of Lamia, Hypata, and Echinus were considered in the sixth century as being within the jurisdiction of Thessaly.¹⁷ Therefore, on the basis of the location of Thessalian Hypata, it is reasonable to suggest that the Lower Spercheios River Basin was the southern-most limit of Byzantine Thessaly.¹⁸ Greece, on the other hand,

¹⁷ For Lamia, see: Hierokles 642.6 and Steph. Byz. 409; Hypata, Hierokles 642.7 and Prokopios de aedificiis 4.2.16; Echinus, Hierokles 642.5, Prokopios bella 8.25.19 and de aedificiis 4.3.5.

¹⁸ Koder/Hild, 37-38, discuss the uncertainty of the border between early Byzantine Thessaly and Greece. They conclude, however, that the

encompassed the area south of the Oite-Kallidromos frontier barrier and east of the Pindus Range. Included in it were the ancient tribal areas of Malis, Trachinia, East Lokris, Phokis, Doris, Boeotia, Attika, West Lokris, and the Peloponnesos. Ancient Aetolia, Akarnania, and Epirus were lumped together in the province of Old Epirus.¹⁹ Consequently, the Oite-Kallidromos frontier barrier was considered by the ancients to be the frontier of north central Greece in a military and administrative sense. This is best illustrated through the use of the term Hellas (=Achaëa, Hierokles 645.6) during the fourth through sixth centuries. Hellas clearly meant that region south of the Oite-Kallidromos frontier barrier.²⁰ For the Greeks, therefore, Thermopylai was the last bastion that protected civilization from incursive savagery.

Therefore, the southern Malian Basin during the fourth through sixth centuries exhibited the frontier characteristics of a militarized

southern slopes of the Othrys Range and the Lower Spercheios River Basin probably formed the southern limit of Thessaly, while the region south of Thermopylai (i.e., south of the Oite-Kallidromos frontier barrier) was Greece.

¹⁹ ibid., 50-51. Hierokles does not mention any cities in the province of Greece that are located in these three ancient tribal regions.

²⁰ For the fourth and fifth centuries, see: E. Groag, Die Reichsbeamten von Achaia in spätrömischer Zeit, (Budapest: Magyar Nemzeti Múzeum, 1946), 23, n.2. For the sixth through eighth centuries, see: P. Charanis, "Hellas in the Greek Sources of the 6th, 7th, and 8th Centuries," in P. Charanis, ed., Studies on the Demography of the Byzantine Empire, (London, 1972), 161-176. Isidore of Seville is the sole exception, id., "Graecia in Isidore of Seville," BZ 64(1971): 22-25, because Isidore considered Greece as all of Illyricum. G. Ostrogorsky, "Postanak Tema Helada i Peloponez," Iz Zbornika Radova 21(1952):67-69, as cited by Charanis, "Hellas", 162, n.10, has argued for a further refinement of the term Hellas, as referring to central Greece only.

borderland, but not a zone of settlement and cultural interaction.

As a convenient terminology for describing road systems and their remains, this study has adopted the following categories, devised by D.H. French.²¹

Route: the intended line of communication by means of a highway, roadway, etc.,

Course: the physical topography and description of a highway, roadway, etc.,

Road: a general or generic term for any line of communications between pre-existing points,

Highway: a specific term for a built, engineered, paved and maintained line of communication; broad, on average more than 3.25 meters wide,

Roadway: a specific term for a built, engineered, paved and maintained line of communication; narrow, on average less than 3.25 meters wide,

Track: a specific term for a non-built, non-paved, but known, accepted and regularly used line of communication,

Trackway: a broad, constructed but not paved, regularly maintained line of communication,

Pathway: a narrow, non-paved, but regularly maintained line of communication,

Path: a specific term for an irregularly used line of communication.

Chapter One of this interdisciplinary work will concern itself with the strategic Dhema Pass, the most efficient logistical route

²¹ D.H. French, "A Study of Roads in Anatolia: Principles and Methods," *Anatolia Studies* 24(1974):143-149. See also his study, "The Roman Road System in Asia Minor," in *ANRW*, II, 7.2(1980):703.

through the mountainous frontier of north central Greece. Chapter Two will discuss the topographical setting and architectural description of the 'Dhema military complex', fix chronological limits on its foundation, renovation, and occupation, compare its remains with similar structures found in and around the Thermopylai area, and evaluate its strategic and tactical significance within the frontier defense system of north central Greece. Chapter Three will examine the historical role played by the Dhema Pass in the frontier defense system of north central Greece during the fourth through sixth centuries.

CHAPTER I

THE MALIAN BASIN, OVERLAND COMMUNICATIONS, AND THE STRATEGIC SIGNIFICANCE OF THE DHEMA PASS.

The Dhema Pass was the most strategic passageway from the Malian Basin into central Greece, for it offered the most direct access through the mountainous Oite-Kallidromos frontier barrier. Furthermore, the pass was also the northern entrance of the strategic Isthmus-Corridor, the most efficient and practical all-weather route into and through central Greece.

The Dhema Pass was the best passageway from a purely logistical standpoint for mass communications and wheeled traffic bound for central Greece from the Malian Basin. The pass, which begins just southwest of the modern village of Káto Dhió Vouná(see Map II),¹ is an open, unobstructed and gentle ascent of no greater than a 10% grade. Because of these advantageous characteristics, the Dhema Pass could have easily accommodated, in antiquity, entire marching armies, marauding cavalry invaders, and wheeled traffic. Since topography clearly dictated the course of wheeled and non-wheeled traffic throughout the Balkan penin-

¹ This topographical feature has been previously described as: the 'Senke von Dyovuna': F. Stählin, Das hellenische Thessalien, (Stuttgart, 1924), 203, 210, 212; id., "Thermopylen," RE 5a(1934): 2401,46-68, 2420,45-59; 'passe de Dyovuna': M.A. Hauvette, "Rapport sur une mission scientifique en Grèce,(Sept.-Oct. 1891)," Nouv.Arch 2(1892): 376; and 'Sideroporta': Koder/Hild, 256.

sula, a topographical description of the Malian Basin as it was during the fourth through sixth centuries will clarify the conditions present that affected overland traffic into, through, and beyond the basin to the south.²

The Malian Basin, a topographically unified region, is bounded on its three landward sides by the following mountain ranges: 1) the Othrys to the north, 2) the heights of Mt. Oite to the west, and 3), the Oite-Kallidromos frontier barrier to the south.

² The author is greatly indebted to the following early travellers and topographers. Consult the bibliography and list of abbreviations above for more complete citations. F.C.H.L. Pouqueville; H. Holland; E. Dodwell; W. Gell; J.J. Barthelemy; W.M. Leake; T. Gordon; L. Stephani; L. Ross, Reisen, and Archäologische Aufsätze, vol.2: 453-66; J.T. Wheeler; H. Barth; C. Bursian, Geographie von Griechenland, vol.1: 90-95; H.F. Tozer, Lectures, 87-93 and 208-223; H. Weil, "Die Oitää im vierten Jahrhundert," Hermes 7(1873): 380-392; W. Vischer; H.G. Lolling, 134-135; Hauvette, Nouv.Arch 2(1892): 375-376; A. Philippson, "Reisen und Forschungen in Nord-Griechenland," ZGE(B) 30(1895): 159-161; G.B. Grundy; J.A.R. Munro, "Some Observations on the Persian Wars," JRS 22(1902): 299-332; Farrell; F. Stählin, "Herakleia, no.4," RE 8(1912): 424-429; von Geisau, "Kallidromon," RE 10(1919): 1633-1634; J. Kromayer; Stählin, Thessalien, 191-219; id., "Malischer Busen," RE 14(1928): 905-907; id., "Melas, no.14," RE 15(1931): 439; id., "Thermopylen"; Kolias, EEBΣ 10(1933): 72-82; Y. Béquignon, "Recherches archéologiques dans la vallée du Spercheios," RA 4(1934): 14-33; Munro, "Xerxes Invasion of Greece," CAH 4(1934): 291-301; Béquignon; M. Cary, 64-67, 70; Stählin, "Trachis," RE 6a(1937): 1863-1864; Philippson/Kirsten, vol.1; A.R. Burn, Studies; S.N. Marinatos; J.L. Myres; E. Meyer, "Thermopylen," MDAIA 71(1956): 101-106; Kolias, EEBΣ 26(1956): 358-379; Pritchett, "Thermopylai"; Burn, Persia and the Greeks; C. Hignett; MacKay; P. Green; Koder/Hild; Hammond, "Migrations", 25, 70-73; Burn, "Thermopylai Revisited"; C.C. Tzia-vos, "Sedimentology, Ecology, and Paleogeography of the Spercheios Valley and Maliakos Gulf, Greece," (Master's thesis, University of Delaware, 1977); J.C. Kraft, et al. "Geologic Landscape Reconstructions at the Malian Gulf, Greece: Land Routes between Northern and Southern Greece," AIA(Abstracts), 5(1980): 15; Kase, Szemler, "Amphiktyonic League"; Wallace, "Anopaea"; Kase, Szemler, "Xerxes' March"; and recently, Pritchett, Passes.

1. The Othrys Mountain Range.

Overland communications between the Thessalian Plain and the Malian Basin typically used the steeply graded Phrouka Pass of the Othrys Range (see Map I). In antiquity this pass would have allowed safe passage for only light, non-wheeled traffic. Yet, the Phrouka Pass, along with the other passes of the western Othrys,³ were, and even today continue to be, strategically important north-south access routes between southern Thessaly and the Malian Basin. All wheeled traffic from Thessaly bound for central Greece must have followed a relatively flat course en route to the Dhema Pass. Such a road for heavy carts coursed south from the Gulf of Volos to the Malian Basin and along the coastal fringe around the eastern end of the Othrys.⁴

2. The Oitean Mountain Range.

Once beyond the Othrys Range, Mt. Oite, a geographical barrier lacking any passageway for mass overland communications, funnelled all wheeled traffic bound for central Greece to the Dhema Pass (see Map I). The Katavóthra massif (2153 meters),⁵ a steep and almost square formation extending 15 kilometers on a side, would have blocked all access south from the Spercheios Valley between Hypata and Phrantzí and west from the Malian Basin into Aetolia.

³ The Karyá and Mochlúka (600-750 m.). See: N.G.L. Hammond, Migrations and Invasions in Greece and Adjacent Areas, (Park Ridge, New Jersey: Noyes Press, 1976), 25 and Koder/Hild, 93.

⁴ Philippson/Kirsten, vol.1:165, 293; and Koder/Hild, 93-94.

⁵ Philippson/Kirsten, vol.1:237, 320.

3. The Oite-Kallidromos Frontier Barrier.

The formidable Oite-Kallidromos Range, which forms the frontier of north central Greece, could be easily penetrated by overland traffic only at the Dhema Pass. The steep northern exposure of this range (1000+ meters) and its almost continuous wall of cliffs and slopes confronted overland communications with many difficulties.⁶ Although light, non-wheeled traffic could surmount this barrier at specific points between the Asopos River Gorge and the Boagrias Valley, such a venture would exact a considerable expenditure of effort.⁷ One could, however, circumvent this topographical obstacle by following the coastal route through Thermopylai which led into East Lokris.

Safe north-south transit through the Malian Basin depended upon several variables in late antiquity because the topography of the basin's lower elevations and alluvial plain were treacherous and unhealthful. Not only were the surrounding rivers and streams seasonal hindrances to conventional traffic, but they also coalesced the basin's topography of mainland, alluvial plain, coastline and gulf into broad malarial lowlands, swamps, and brackish pools.⁸ The principal rivers

⁶ ibid., vol.1:320.

⁷ Philippson/Kirsten, vol.1:237, 320, 329, 330, 337.

⁸ Such was the condition of the Malian Basin for the early travellers. See for example: F.C.H.L. Pouqueville, Voyage en Morée, à Constantinople, en Albanie, et dans plusieurs autres parties de l'empire Othoman, pendant les années 1798, 1799, 1800, et 1801, 3 vols., (Paris, 1805), vol.2:41, (1805); H. Holland, Travels in the Ionian Isles, Albania, Thessaly, Macedonia, etc., during the years 1812 and 1813, (1813), 374, 377, (1813); E.D. Clarke, Travels in Various Countries of Europe, Asia, and Africa, 4th ed., (London: T. Cadell and W. Davies, 1818), vol.7:304,

that contributed to this ecosystem are the Spercheios, Gorgopóamos, Xírias, and Asopos. Consequently, north-south traffic in the Malian Basin tended to hug the foothills (400-700 m.) which border the basin from Phrantzí south to the Dhema Pass(see Map I).

Because the Spercheios River is the only true fluvial barrier to conventional overland communications in the basin,⁹ all southbound traffic heading for central Greece via the Dhema Pass converged at any natural crossing point of the river. One such location exists today at a point just north of Kostaléxi(see Map I). This bridgehead location is important, for during the spring flood the rushing and icy water of the Spercheios cannot be forded.

The deep and steep sided Gorgopóamos Gorge (ancient Dyras) impedes all north-south traffic headed for the Dhema Pass along the western foothills of the Malian Basin. In order to avoid this chasm, the ancient traveller must have descended the Oitean foothills and then crossed the Gorgopóamos River near the site of the modern village of the same name. The seasonal flow of this river probably required it to have a bridge in antiquity, as did the Xírias and Asopos Rivers.

313, 321, in December, (1815); L. Stephani, Reise durch einige Gegenden des nördliche Griechenlands, (Leipzig: Breitkopf und Härtel, 1843), 37-39, 58, in July, (1842); L. Ross, Reisen des Königs Otto und der Königin Amalia in Griechenlands, 2 vols., (Halle, 1848), 85, in August (1847); and W. Vischer, Erinnerungen und Eindrücke aus Griechenland, 2nd ed., (Basel, 1875), 636, in May (1874). See also, Handbook of Macedonia, 65 and 66, n.1, which specifically mentions the notorious reputation of the Malian Basin (esp. Thermopylai) for malaria.

⁹ As it was for the Gauls in 279 B.C.: Pausanias 10.22.7-8. See also Hammond, Migrations, 70-71, for a description of this river and the necessity of bridging across it.

The north-south overland communication route that coursed through the Malian Basin and into central Greece via the Dhema Pass was a branch of the Thermaic-Malian highway to be discussed below (see Map I). This highway section most likely crossed the Spercheios River near Kostaléxi and then followed a north-northwest by south-southeast course above the unhealthy and topographically unstable Malian lowlands directly towards the Dhema Pass along the western foothills of the Malian Basin. The detailed discussion and description of this highway and its course along the western Malian Basin is the subject of a future PDE publication.

Although many routes have been suggested as strategic passageways either through or around the Oite-Kallidromos frontier barrier, the Dhema Pass was the most direct and practical passageway through this frontier barrier into central Greece for all forms of conventional overland communications. The assumed alternate routes with the Dhema Pass will be discussed in the following order: 1) the routes via Mendenitsa and the Boagrias Valley; 2) the Sástano Gorge; 3) the Dhamásta Spur; 4) the Khalkómata Path; 5) the Asopos River Gorge; and 6), the Thermopylai Pass.

1. The Mendenitsa and Boagrias Valley Routes.

The trackways that coursed through Mendenitsa and the Boagrias Valley saw use in both antiquity and in the late mediaeval period,¹⁰ but

¹⁰ Philippon/Kirsten, vol.1:344-345. See also: W.K. Pritchett, Studies in Greek Topography, Part III (Roads), (Berkeley/Los Angeles: University of California Press, 1980), 227-232; id., Passes, 123-175; and W.

neither can be considered an engineered highway that could have supported wheeled traffic nor can they be justified as principal passages through the Oite-Kallidromos frontier barrier into central Greece.¹¹ These two routes, which are located east of Thermopylai in the central third of the Kallidromos Range, employed two, or possibly three, north-south overland passages which connected the Malian Basin with Elateia (see Map I). These routes have been described as good mule-tracks,¹² and the early travellers often used mules or horses to travel the Mendenitsa and Boagrias Valley routes.¹³ Furthermore, the itinerary preserved

Dittenberger, ed., Inscriptiones Phocidis Locridis Aetoliae Acarnaniae insularum maris Ionii, 74, nos. 311-313, in Inscriptiones Graecae, vol.9, part 1, (Berlin: Reimer, 1897), for ancient inscriptions found in the Boagrias Valley. The editor of the IG mentions these inscriptions in direct relation to the road that passed through this valley. See also Koder/Hild, 221-222, s.v. 'Muntonitsa', for the late medieval remains.

¹¹ Pritchett, Roads, 228-229, 232; and id., Passes, 135, concerning the problems of the Mendenitsa route. Pritchett, however, maintains that the Boagrias Valley route and its two passes (Fontana, Vasilika), that lead to Elateia, "carried the brunt of the traffic between (East) Lokris and Phokis in ancient times," 175. See also pp. 137-138, 158. This conclusion of Pritchett's is based upon three assumptions: 1) the above mentioned ancient inscriptions that refer to the road which coursed through the valley; 2) that ancient armies rarely if ever employed carts and baggage trains, and hence their unnecessary need for wide, paved and engineered roads, 174; and 3), that the coastal route via Thermopylai to Atalante was not practical for wheeled traffic, 138-146. See pp. 26-28 below.

¹² Pritchett, Roads, 231, quoting from the British Admiralty's, The Handbook of Greece, (London, 1920), vol.1: 230-231. See also Baedeker's Greece, 4th ed., (Leipzig, 1909), 199, where travel on horseback is recommended through the pass at Mendenitsa.

¹³ Clarke, Travels, vol.7: 304, (1818); W. Gell, Itinerary of Greece, 237, (1819); W.M. Leake, Travels in Northern Greece, 4 vols., (1835), vol.2:67, 69; Vischer, Griechenland, 629-630, and map; and W. Miller, "The Marquisate of Boudonitsa(1204-1414)," JHS 28(1908): 237. Pouqueville, Voyage en Morée, vol.2: 39, describes how he accompanied a Turk-

in the Tabula Peutingeriana that reads "Thermopylai -- Skarpheia -- Elateia,"¹⁴ most likely describes the Boagrias Valley route, the most expedient overland route between Skarpheia and Elateia.¹⁵ This route during the fourth through sixth centuries was suitable only for light, non-wheeled traffic.¹⁶

2. The Sástano Gorge.

The Sástano Gorge describes a rugged mountain gorge(see Map II),¹⁷ and as such, cannot be considered the principal passage through the Oite-Kallidromos frontier barrier. This narrow and precipitous cleft,

ish prison-train on horseback from Salona (Amphissa) to Zetouni (Lamia). Enroute, he relates his view of Euboea while descending the Kallidromos via the Boagrias Valley.

¹⁴ See p. 27 below.

¹⁵ Elateia was the only major urban center along this route. Consequently, it must have been both a mutatio (for the changing to fresh pack-animals), and a mansio (a post-station and rest stop for travelers). The merging of these two features of the cursus publicus was first initiated in A.D. 315 (codex Theodosianus 8.5.1), and completed in A.D. 365 (codex Theodosianus 11.1.9). Concerning this development, see O. Seeck, RE 4(2)(1901):1855,66-1856,25.

¹⁶ Pritchett's arguments for the use of either the Fontana Pass or Vasilika route by wheeled traffic are based entirely upon late historical evidence and sources: 1) the presence of Turkish kalderini road remains; and 2), a battle between Turkish and Greece forces that occurred in 1821. Although carts and artillery were moved into the Vasilika Pass by the Turks in 1821, Pritchett, Passes, 131, evidence is lacking for such a road surface in this pass during late antiquity.

¹⁷ Munro, CAH vol.4, map facing 291; Stählin, Thessalien, 194; id., "Thermopylen", 2402,43-54; 2404,10-14; J. Kromayer, G. Veith, Schlachtenatlas zur griechische und römische Geschichte, Greek map section, plate 1, no.5; Béquignon, RA 4(1934): 16; Philippson/Kirsten, vol.1: 252; Burn, Studies, 484, and map; Pritchett, "Thermopylai", 210, n.64; and MacKay,245.

prone to rock-falls and landslides,¹⁸ has been described as "extremely bad and difficult," requiring a circuitous route to climb only a few hundred yards.¹⁹ One early traveller says that the local inhabitants called it a bandit's track.²⁰ Clearly this steep and narrow path is a local feature for the convenience of those living in the upland Sástano/Liathítsa region rather than a principal route of communications through the Oite-Kallidromos frontier barrier.

3. The Dhamásta Spur.

Although the Dhamásta Spur historically has represented a steep but feasible trackway over the Oite-Kallidromos frontier barrier,²¹ it cannot be considered as a principal access point for wheeled traffic bound for central Greece from the Malian Basin (see Map II). Instead, this trackway connects the southern Malian Basin with the highlands of the Kallidromos Range and the modern villages located therein. The Dhamásta Spur, which contains stretches of cobblestone paving²² and has

¹⁸ MacKay, 246.

¹⁹ E. Dodwell, A Classical and Topographical Tour through Greece, during the years 1801, 1805, and 1806, (London: Rodwell and Martin, 1819), vol.2:72.

²⁰ MacKay, 245, quoting T. Gordon, Account of Two Visits to the Anopaea or Highlands above Thermopylae, with a Map, (Athens, 1838), 2, incorrectly cited in his article as (Athens, 1938) (sic!), on 241,n.1.

²¹ The Dhamásta Spur was twice a modern battle site, once in 1821 and again in 1941. Philippson/Kirsten, vol.1: 254; and Burn, Studies, 480.

²² Koder/Hild, 94. Pritchett, "Thermopylai", 206; and id., Passes, 183-184, Plates 115-117, describes this road as Turkish kalderini, with a width of 2.01 m.

been described as an "easy access up the Kallidromos(Range)," contracts into a narrow defile as it approaches Eleftherokhóri from the north-east.²³ The Dhamásta Spur, therefore, is predominantly a local feature suitable only for light, non-wheeled traffic and not for the mass movement of men and materials.

4. The Khalkómata Path.

The Khalkómata Path cannot be considered a practical route for wheeled traffic bound for central Greece(see Map II), for this local feature shares the same narrow passage through the Fylakí defile as the Dhamásta Spur.²⁴ Beyond the defile the path courses either west to Eleftherokhóri and the Upper Asopos Valley or east towards Nevropolis. This path was first advocated by Gordon, Marinatos, and recently by Pritchett, who argues that "this route constitutes the easiest ascent of the (Kallidromos) mountain from the Lamian plain."²⁵ Pritchett also believes that this path was the main route over the mountains. But despite Pritchett's arguments for the primacy of the Khalkómata Path as the main route over the Kallidromos, this route still suffers from the same problems as does the Dhamásta Spur. At best, this short and steep

²³ See Burn, Studies, 480; and Pritchett. Passes, 183-184.

²⁴ Wallace, "Anopaea", 17, 20.

²⁵ Gordon, 10-12; S.N. Marinatos, Thermopylae. An Historical and Archaeological Guide, (Athens, 1951), 29-31; Pritchett, "Thermopylai", 205-206; and id., Passes, 184-185. P. Green, Xerxes at Salamis, (New York: Praeger, 1970), 115-116, 138, follows Pritchett on this point. Koder/Hild, 94-95, also see this route as one to be considered important.

mountain path could have serviced only light, non-wheeled traffic.

5. The Asopos River Gorge.

Many have argued that the Asopos River Gorge was 'the' passageway through Oite-Kallidromos frontier barrier(see Map II).²⁶ These arguments are based upon the the sporadic use of the gorge by local traffic either on foot or by donkey,²⁷ and upon the variously dated fortification that is located high above its left bank. Because of the lack of additional evidence, until recently, this line of argumentation has sufficed. The Asopos River Gorge, however, cannot be justified as a practical, secure, and year-round communications route through the Oite-Kallidromos Range into central Greece. Instead, it is a gorge created by nature that is occasionally used by man.²⁸ Consequently, the relative importance of the

²⁶ See, for example: Holland, Travels, 381, n.1; Leake, Northern Greece, vol.2:39, 53-55; H.G. Lolling, Geographie und Geschichte des griechischen Altertums. Hellenischen Landeskunde und Topographie, (Leipzig: Teubner, 1889), 135; J.T. Wheeler, Geography of Herodotus, (London: Langman, Brown, Green, and Langmans, 1854), 83; Vischer, Griechenland, 641, Philippson, ZGE(B) 30(1895), 160-161; Munro, JHS 22(1902): 312; G.B. Grundy, The Great Persian War and its Preliminaries, (London, 1901), 302; J. Kromayer, Antike Schlachtenfelder in Griechenland, 4 vols., (Berlin, 1903-1931), vol.2: 142; Stählin, Thessalien, 195, 203; id., "Thermopylen", 2403,28-35, 2417,1-5; Munro, CAH 4(1934): 292; Y. Béquignon, La vallée du Spercheios, (Paris, 1934), 254; Burn, Studies, 480; Philippson/Kirsten, vol.1: 250, 338; and recently C. Hignett, Xerxes' Invasion of Greece, (Oxford: Clarendon Press, 1963), 370.

²⁷ Stählin, Thessalien, 195; id., "Thermopylen", 2403, 28-35; Béquignon, 38; Philippson/Kirsten, vol.1: 335.

²⁸ Philippson/Kirsten, vol.1:335; Myres, Herodotus, 248; Pritchett, "Thermopylai", 204, plate 54, figs.1, 2, and 205; Béquignon, 38; Burn, Studies, 480, calls it a death-trap; Koder/Hild, 94; Wallace, "Anopaea", 16, 20, plate 1, fig.4; and recently, Pritchett, Passes, 216-217, Plates 130-134.

Purnaráki saddle, which is often mentioned in connection with the Asopos River Gorge as the principal route into central Greece, should also be reconsidered.²⁹

6. The Thermopylai Pass.

In antiquity the coastal highway or roadway that went through the Thermopylai Pass and on to Opos (Byz. Atalante) would have offered direct access to East Lokris and eventually eastern Greece. This circuitous route to Athens and Korinth provided a practical and relatively flat coastal route for wheeled traffic around the Kallidromos and Knemis Ranges.³⁰ As a result, during the fourth through sixth centuries this meandering coastal route probably saw use by the wheeled traffic of the Imperial Post (cursus publicus),³¹ and local traffic between such impor-

²⁹ See Philippson, ZGE(B) 30(1895): 159-161; Stählin, Thessalien, 195, n.6; and Philippson/Kirsten, vol.1: 237, 320, and 336 concerning the Purnuráki Pass. Note, that Kirsten later contradicts the views of Philippson on the ancient use of the Purnaráki in antiquity, ibid., vol.1:651, 711, n.22 and 713, n.40. Finally, see: Pritchett, Passes, 220-222.

³⁰ See: Grundy, The Great Persian War, 346; Bölte, "Hyampolis," RE 9(1914): 18,43-57; and J.O.A. Larsen, "A New Interpretation of the Thes-salian Confederacy," CP 55(1960):232, 247, n.16. Recently, Pritchett, Passes, 138-146, has argued that this coastal route was impractical for wheeled traffic. He instead prefers the Boagrias Valley route via either the Fontana Pass or Vasilika route, 175. See pp. 20-21 above.

³¹ The imperial post was primarily a system of transportation maintained at public expense for the use of the imperial administration and military for the conveyance of State messages, officials, troops, and supplies. Only rarely could private individuals use it for their own purposes. See J. Marquardt, Römische Staatsverwaltung, 2nd ed., (Leipzig: Hinzel, 1881), reprint New York: Arno Press, 1975, vol.1: 558-561; Th. Mommsen, Römische Staatsrecht, 5 vols., (1887), reprint (Basel: Schwabe, 1963), vol.2, part 3, 1029; O. Seeck, RE 4(2)(1901): 1846-1863; E.J. Holmberg, Zur Geschichte der 'Cursus Publicus', (Disser-

tant administrative centers, harbors, granaries, and urban centers as Korinth, Opos, Skarpheia, and Elateia.³² This coastal route was used primarily in times of peace as an administrative, commercial, and civilian route. But in times of war, this pass also offered invaders a possible overland route around the Kallidromos and Knemis Ranges into East Lokris and eastern Greece.

When stripped of all of its tradition, the Thermopylai Pass itself was merely a passage along the southern coastline of the Malian Basin, a passage formed by the steep cliffs and slopes of Kallidromos on the one side, and the shifting swamps and malarial marshes of the Malian Basin on the other(see Map I).³³ In fact, to invade central Greece via Thermo-

tation, Uppsala, 1933); H.-G. Pflaum, Essai sur le 'cursus publicus' sous le haut-empire romain, in Mem.Ac.Inscr 14(1940):189ff; and W.H. Gross, "cursus publicus," Der kleine Pauly 1(1979): 1346-1347, for an updated bibliography.

³² See: Groag, Spätromischen Reichsbeamten, 72, who cites W. Dittenberger, Sylloge Inscriptionum Graecarum, 4 vols., 3rd ed., (1915-1924), reprint (Hildesheim: Olms, 1960), vol.2: 625-626, no.908 (A.D. 401/402), concerning the importance of Skarphia and Korinth as frontier grain depots in the fifth century. Concerning frontier granaries, see also: codex Iustinianus 10.16.6, (A.D. 365).

³³ The recent geological investigations of Kraft and Tziavos, in conjunction with the PDE, indicate that the topographical alteration of the Malian Basin, based upon sedimentary core samples, was, for the most part, the result of the Spercheios River's ever-expanding alluvial delta or fan. Kraft, AIA, Abstracts 5(1980):15; and Tziavos, "Sedimentology". Further investigations have indicated that the southern coastline of the Malian Gulf during the sixth century A.D. was near the narrows o. Thermopylai. The coastal route through the Thermopylai Pass, therefore, was still a relatively narrow passage, with the alluvial fan of the Spercheios extending up to an area just east of the Asopos River Delta. Kraft, H.F. Brown, personal communication, February 2, 1982. Cf., also: Stephani, Reise, (1843), 58, who reported that the swamp allowed only one rider to pass at the foot of the Dhamásta Spur. Holland, Travels, 377, who passed through Thermopylai's West Gate in 1812/1813, also noticed

pylai was to take an extremely round-about route, for the continuation of this route went east along the southern Malian coastline and then inland southwest to Opos (Byz. Atalante).³⁴ Once at Opos, practical passage west to Elatea was possible through the only real pass in the eastern Kallidromos Range.³⁵

The Dhema Pass.

Unlike the above, the Dhema Pass provided the most efficient route the Oite-Kallidromos frontier barrier from a logistical standpoint for light-, heavy-wheeled traffic, and the mass movement of men and materials. Furthermore, the Dhema Pass was also the northern entrance of the strategic Isthmus-Corridor, the most practical all weather route for overland communication into and through central Greece (see Maps I and II). In addition, the Dhema Pass and Isthmus-Corridor were part of a much greater geographical whole, part of a vast geographical migration and overland communications route made up of valleys, plains and mountain passes which extended south from the Danube,³⁶ converged upon the

this crampedness to the passage, as did Clark, Travels, (1815), 309, 317-318, and W. Gell, Itinerary of Greece containing one hundred routes in Attica, Boeotia, Phocis, Locris, and Thessaly, (London: Rodwell and Martin, 1819), 239.

³⁴ Koder/Hild, 95.

³⁵ Pritchett, Roads, 228, quoting J.G. Frazer, Pausanias' Description of Greece, (London, 1913), vol.5:427, "The real pass, by which the carriage road now goes to Atalanti and Thermopylae, is through a natural opening in the hills about nine miles east of Elatea."

³⁶ See: C.J. Jirecek, Die Heerstrassen von Belgrade nach Constantino-pel und die Balkanpässe. Eine historisch-geographische Studie, (1877), 143-162; D. Obolensky, Byzantine Commonwealth: Eastern Europe, 500-1453,

Thermaic Gulf, and continued on to the Malian Basin.³⁷ Therefore, in the broader perspective of eastern Balkan geography, the Dhema Pass and the Isthmus-Corridor were the southern continuation of this vast Balkan route which connected the Malian Basin with the Korinthian Gulf.

The primary sources for this important north-south communications system between the Thermaic and Malian Gulfs are the Itinerarium Antoninianum and the Tabula Peutingeriana.³⁸ Unfortunately, neither of these documents describes all the possibilities for overland travel within the eastern Roman provinces; instead, the listed highways probably indicate the most common routes between major urban areas. Consequently, the strategic Isthmus-Corridor route, which courses for the most part through marginally populated regions, does not appear in these two car-

(London, 1971), 6, 11, 18-23; G. Stadtmüller, Geschichte Südosteuropas, (Munich, 1950), 15; and P. Lemerle, "Invasion et migrations dans les Balkans depuis la fin l'époque romaine jusqu'au VIII^e siècle," R.Hist 211(1954):273-277, for a description of the major routes and passes of the Balkans. D. Obolensky, "The Empire and its Northern Neighbours," CMH vol.4:475-476, is also valuable for its description of the terminus of the 'steppe corridor' from Asia which emptied into the lower Danubian region.

³⁷ The principal north-south communications system of the eastern Balkans began at Thessaloniki and ran south along the coastline of the Thermaic Gulf through the Tempe Pass and into the Thessalian Plain. From there it went almost straight south, through the Phrouka Pass, and into the Malian Basin. For a full topographical description of this route, see: Handbook of Macedonia, 27, 103-106, 122-126.

³⁸ See K. Miller, Itineraria Romana. Römische Reisewege an der Hand der Tabula Peutingeriana, 2nd ed., (Stuttgart, 1929), route 81, 573-578. Only C. Edson, "Strepsa (Thucydides 1.61.4)," CP 50(1955):169-190; N.G.L. Hammond, History of Macedonia, (Oxford: Clarendon Press, 1972), vol.1:19, 29; Koder/Hild, 90-91; and Pritchett, Roads, 197-219, fig.9 have previously discussed this north-south highway section between the Thermaic and Malian Gulfs.

tographic sources.

Since the Dhema Pass and Isthmus-Corridor were the geographical continuation of the north-south communications system of the eastern Balkans, and since a broad, paved highway coursed through them,³⁹ the Dhema Pass and Isthmus-Corridor therefore provided a logistically superior route into and through central Greece -- a route that promised direct access to the Upper Kephissós Valley, ancient Phokis, Doris, and West Lokris. Such immediate access to the heart of central Greece is of obvious strategic importance. In addition, this highway of the Corridor could have provided in early Byzantine times,⁴⁰ a viable military and administrative alternative to the famous via Egnatia.⁴¹ If that Byzantine Λεωφόρος ὁδός was somehow unusable,⁴² as often happened during the winter months⁴³ and in the turbulent years of the fourth through sixth

³⁹ See E.W. Kase, "Mycenaean Roads in Phocis," AJA 77(1973): 74-77. See also Philippson/Kirsten, vol.1: 320, 375, 379, 382; MacKay, 253; Koder/Hild, 95, 97-98; J. Koder, "Zur Frage der slavischen Siedlungsgebiete im mittelalterlichen Griechenland," BZ 71(1978): 322; and recently, Kase, Szemler, "Amphiktyonic League", 522; and id., "Xerxes' March", 361-362.

⁴⁰ See Koder/Hild, 95. See also M. Robertson, "Archaeology in Greece 1938-1939," JHS 59(1939):198-199, for paving stones in certain sections of the Delphic Sacred Way that are thought to be of early Byzantine date.

⁴¹ G. Skrivanic, "Roman Roads and Settlements in the Balkans," in F.W. Carter, ed., An Historical Geography of the Balkans, (London: Academic Press, 1977), 122-124.

⁴² A highway, or heavily travelled road. Ioannis Kameniates Turkika, ed., Bonn, p. 500 and Gregorios Palamas, Migne, PG vol.151: 544.

⁴³ During the winter, Epirus was cut off from Thessaly and Makedonia by snow, N.G.L. Hammond, Epirus, (Oxford: Clarendon Press, 1967), 34. This route between Monastir and Elbasan, itself a difficult one even in

centuries,⁴⁴ then the Isthmus-Corridor could have been used to maintain strategic communications between Rome, Thessaloniki, and Konstantinople.⁴⁵ The city of Krisa and its harbor of Kirrha at the southern terminus of the Isthmus-Corridor, therefore, may have provided an embarkation point both east-west to Italy and north-south to Thessaloniki and Konstantinople.⁴⁶ Furthermore, Prokopios recorded two instances for the use of the Isthmus-Corridor are preserved from Justinian's reign: the first instance was when Alexander 'Psalidios' was dispatched in the early 540's to the region of Thermopylai while enroute to Italy;⁴⁷ and the

summer, involves two difficult passes of 933 and 609 meters respectively, N.G.L. Hammond, "Epirus and the Dorian Invasion," BSA 32(1931-1932): 141. See also T.L.F. Tafel, De via militari romanorum Egnatia qua Illyricum, Macedonia et Thracia iungebantur, (Leipzig: Laupp, 1842), 6, 12, for the letter of F.C.H.L. Pouqueville concerning the difficulties of this route.

⁴⁴ The entire neighborhood of the via Egnatia was in hostile hands from at least 548 on, and the Slavs even were in the suburbs of Dyrrachium: Stadtmüller, 91; and Dvornik, The Slavs. Their Early History and Civilization, (Boston: American Academy of Arts and Sciences, 1956), 36.

⁴⁵ The deteriorating conditions in Italy, as described in Prokopios (Books 7 and 8), between 540 and 550 probably are to be explained in part by the dysfunction of the via Egnatia. The lack of payroll shipments, reinforcements, supplies, and good military leadership was all the result of its probable shut-down. This possibility is best illustrated by the mass desertion of a Thracian contingent whose military pay was in arrears two years, whose supplies were low, and whose homeland was being ravaged by the Slavs. See Prokopios 7.11.13-16; W.E. Kaegi, Jr., Byzantine Military Unrest 471-843, (Amsterdam: Hakkert, 1981), 51-52.

⁴⁶ See J. Jannoray, H. von Effenterre, "Fouilles de Krisa(Phocide)," BCH 61(1937): 323, 326, and plates XXIII-XXV; E.W. Kase, "A Study of the Role of Krisa in the Mycenaean Era," AJA 75(1971): 205-206 and Koder/Hild, s.v. 'Krisa', 195.

⁴⁷ anecdota 26.31. Stählin, "Thermopylen," 2422,43-46; E. Stein, Histoire du bas-empire. De la disparition de l'empire d'occident à la mort

second instance was the relief of Kroton by the garrison of Thermopylai in the spring of 552.⁴⁸

As will be seen in Chapter Two, the strategic and tactical qualities of the Dhema Pass were well recognized in the early Byzantine period, for during that period a unique frontier complex was constructed to defend the pass and to regulate all the traffic that coursed through it enroute to central Greece.

de Justinien (476-565), (Paris/ Bruxelles/Amsterdam: Jean-Remy Palanque, 1949), vol.2:446-447; and B. Rubin, "Prokopios von Kaisareia, no. 21," RE 23(1957): 584,19-26 and 569,22-27.

⁴⁸ See Chapter Three below.

CHAPTER II

THE STRATEGIC FORTIFICATIONS OF THE DHEMA PASS.

The Dhema Pass was strategically fortified during the fourth through sixth centuries not only to defend a key passageway through the Oite-Kallidromos frontier barrier, but also to preserve the integrity of the entire frontier defense system of north central Greece. If a hostile force breached the defenses of the Dhema Pass, then Thermopylai would be tactically compromised and the whole of central Greece imperiled.

This chapter will survey the unique remains of the frontier fortification complex within the Dhema Pass, place them in their physical setting, describe their construction, fix chronological limits on their foundation, renovation, and occupation, and evaluate their strategic and tactical significance. Finally, on the basis of similar construction style, similar topographical setting, and similar purpose, the structures within the Dhema Pass and those found in the immediate area of Thermopylai are believed to constitute one unified and possibly contemporaneous frontier defense system,¹ a system that was designed to regulate and defend the only practical routes into central Greece via the Dhema Pass and eastern Greece via the Thermopylai Pass.

¹ The comparative dating of frontier architecture, based upon similar construction styles, is tenuous at best. In this study, however, this comparative method was greatly enhanced through the lime mortar carbon-14 dating analysis of the Dhema remains.

The Dhema Military Complex.

The elaborate architecture within the strategic Dhema Pass was planned and constructed to exploit the naturally defensive characteristics of the pass.² In fact, nowhere else along the frontier of north central Greece are frontier defenses so well incorporated into their natural setting. The elements of this fortification complex include: 1) two separate barrier walls, 2) a walled garrison enclosure, 3) two probable signal/watch-towers, and 4) possibly a massively constructed main portal or gateway. These fortifications, which hereafter will be referred to collectively as the 'Dhema military complex', were designed to withstand organized, high-intensity, frontal assault.

The architectural remains of the Dhema military complex span the northern entrance of the Dhema Pass and extend south to the Xírias mountain stream(see Map III), which bisects (northeast to southwest) the southern portion of the pass at wall fragment D(see Map III). A solitary crag of the Trachinian Cliffs, the so-called 'Jamí' Rock(515.20

² The Dhema Pass has been for the most part overlooked by modern scholarship. Farrell, 117, however, was the first to report on the walls in the Dhema area. Stählin, "Thermopylen", 2423; and MacKay, 250, 254, merely quote him. Koder/Hild, 95 and 256, passed through the Dhema area in 1974, as did Pritchett, Passes, 226-228, 233, but neither investigated the site thoroughly. The pass and site of Dhema were first photographed, surveyed, surface sherded, and thoroughly investigated by the PDE in 1975, under the direction of E.W. Kase. See: NEH Report 1975, site no. 13, for the 1:300 m. survey map of Dhema and photographs S26(the Dhema Pass from the south) and S22(the Dhema Pass from the north). Cf., S22 and Plate 1 to Pritchett, Passes, plate no.136. The investigation, clearing, and gathering of carbon-14 samples from the Dhema fortifications were undertaken and completed between 1976 and 1980.

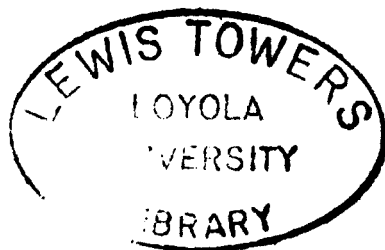
m.),³ abutts the site at its northeastern limit. To the west are the steep and overgrown slopes of Mount Oite's Petséta area(Plate 1). It is between these two dominating topographical features that the Dhema fortifications were built,⁴ fortifications whose physical setting has recently prompted one veteran topographer to say, "The fort is in the most formidable location of any that I have seen in Greece."⁵

The long walls of the Dhema Pass formed a two-stage system of overlapping barriers that blocked all access through the pass. These consisted of Jamí Rock Wall A, West Slope Wall B, Dhema Compound Wall C, and Dhema Crosswall D. Wall sections A through C were once one continuous barrier that barricaded the northern entrance of the pass. Wall D, located approximately 150 meters south of this northern long wall, blocked the entire width of the Dhema Pass at its narrowest constrict-

³Farrell, 117, reported that atop this rock was once the tower or minaret of a mosque, and hence its name.

⁴The topography of the Dhema Pass during the fourth to sixth centuries remained relatively unaltered by nature, in comparison with the metamorphosis of the Malian Basin: the formation of alluvial marshes, lowlands, and the shifting of the coastline. Periodic earthquake tremors and the seasonal erosion of the Xírias can account for nature's modifications of the pass. Concerning the seismic activity of the basin, see: Prokopios bellá 8.25.16-23, for the earthquake and tsunami which affected central Greece and the entire basin in 551/552; and Capelle, "Erdbebenforschung," RE Supplement 4(1924): 348,24-52 and 349,21-28. Geologically, the southern edge of the Malian graben is one continuous rift, Philippon/Kirsten, vol.1:235. Capelle even went so far as to call the basin a 'Schütterzone', 345,10-22. Man, however, has been a far more disrupting force by introducing: a mining road; several farm plots; some shepherd's huts and sheep pens; and most recently (June, 1982), some energetic bulldozer activity. Note the observations of Pritchett, Passes, 233. All of these forces have taken their toll on both the topography and architectural remains within the Dhema Pass.

⁵Pritchett, Passes, 228.



tion.

Wall section A defended the easily assaultable northern slopes of the Jamí Rock.⁶ This wall section begins very near point 1 of wall section C (see Map III), and runs northeast precisely along the 468 meter contour line(see Plate 2), and then terminates in a sheer bedrock outcropping overlooking the Vizoutí Gorge.⁷ The preserved remains of this wall section measure ca. 260.0 x 1.10-1.50 x 3.0 m.⁸

Wall section B would have effectively hindered any flanking maneuver against the Dhema Pass from the steep slopes of Mt. Oite while simultaneously funnelling all approaching traffic towards the main portal or gateway of the pass(see Map III). Its remains begin on the western side of the modern mining road approximately 65.0 meters northwest of the Dhema ἀποθήκη (see Map IV).⁹ The first 100 meters of the wall almost parallels the mining road as it courses north-northwest. Then, the wall abruptly turns west-southwest and ascends directly up the near 40 degree slope of Tsouka's eastern side(see Plate 3).¹⁰ The wall then

⁶ Pritchett, Passes, 227, n.41, briefly mentions the existence of wall section A.

⁷ ibid. This is the local name reported by Farrell.

⁸ Unless otherwise stated, all measurements are metric and are given in the following order: length, width, height.

⁹ During the 1976 through 1980 excavation seasons, the PDE rented an old farmhouse to store its equipment. This farmhouse is depicted as a rectangle in the middle of Map IV.

¹⁰ The steep Petséta area slopes and dense holly-oak undergrowth made for exhausting and difficult climbing. This was especially true when the investigation of West Slope Wall B was undertaken; for tunnels had to be literally cut through the the holly-oak in order to crawl and follow the

terminates at a ridge overlooking a sheer, deep, and practically unassailable ravine to the north. The preserved dimensions of this wall section measure ca. 600.0 x 1.10-2.0 x 1.60 m.

Illustration A is a reconstruction of wall section B, which includes a stepped parapet wall and walkway for patrols. It was inspired by Krischen's sketch of the stepped curtain wall at Latmian Herakleia (see Illustration A),¹¹ and is comparable with the stepped curtain walls of Phokian Lilaia,¹² Tithorea,¹³ and Boeotian Khaeroneia.¹⁴ The vertical dimension of this wall is based upon the considerable fallen remains and upon the conservative ratio of 1:4, wall width to wall height.¹⁵

course of the wall. At times, even this procedure was rendered impractical. I wish to thank Miss Evelyn Balchunas for her brave assistance and patience in the tracing and recording of this wall section.

¹¹F. Krischen, Die Befestigungen von Herakleia am Latmos, 1922= Milet 3(1922):plate 39. See also Lawrence, Greek Aims in Fortification, for some excellent photographs of this site, plates 20, 21, 74.

¹²See Lawrence, Greek Aims, fig. 20, and plates 70, 71. For a brief description and bibliography of this site, see R. Stillwell, et al., eds. Princeton Encyclopedia of Classical Sites, (Princeton, New Jersey: Princeton University Press, 1976), s.v. 'Lilaia', 509.

¹³L.B. Tillard, "Fortifications of Phokis," BSA 17(1910- 1911):73, and fig.11.

¹⁴See Lawrence, Greek Aims, plate 6. See also PECS, s.v. 'Chaironeia', 215-216.

¹⁵This ratio compares well with preserved examples of curtain walls in Tunisia; see S. Toy, A History of Fortification from 3000 B.C. to A.D. 1700, (New York: MacMillan, 1955), 58. Furthermore, this 1:4 ratio was possible because of the wall's location where it could not be formally assaulted by siege equipment. See F.E. Winters, Greek Fortifications, (Toronto: University of Toronto Press, 1971), 145.

Wall section C formed the permanent garrison enclosure immediately above and east of the entrance to the Dhema Pass (see Map IV),¹⁶ and not surprisingly, the greatest recorded wall thicknesses are along its exposed northern face. This enclosure probably had a gateway along its short western segment so that its garrison could sally out directly into the pass or to man the proposed main portal or gateway. The preserved remains of this wall section measure about 350.0 x 1.80-2.50 x 2.70 m.

The reconstruction of wall section C includes crenelles (τοξικά) in the parapet wall and a walkway that were designed to provide good surveillance of all the northern approaches leading up to the Dhema Pass.¹⁷ Illustration B was inspired by L.B. Holland and F.E. Winters (see Plate 9).¹⁸ The vertical dimension was estimated on a ratio of 1 to 3 (width to height).¹⁹

¹⁶ Pritchett, Passes, 227 and Plates 137-139, has discussed this wall, but failed to realize that it was continuous and that it formed the Dhema garrison enclosure (see Map IV). Cf., Plates 7-9.

¹⁷ Such battlement crenelles are well attested to both in the literature and in the field. Prokopios de aedificiis 2.1.15. See: H.B. Dewing, Procopius. The Buildings, (Cambridge, Mass.: Harvard University Press, 1940), 104-105, for an illustration of the tower and battlement crenelles of Rusafa; C. Diehl, L'Afrique byzantine vers le milieu du VI^e siècle, 3 vols., (Paris, 1896), vol.1: 150, fig. 3 at Ain-Hedja; 156, fig.9 at Teboursouk; 208-209, figs. 43-44 at Lemsā; and R.G. Goodchild, J.B. Ward Perkins, "The Roman and Byzantine Defenses of Lepcis Magna," BSR 21(1953): 57, fig. 5 and 59, fig.6. Parapet walls were generally built to the height of a man, or about 1.75 meters tall, A.R. Birley, Hadrian's Wall, (Ipswich: W.S. Cowell, 1963), 5; and J.C. Bruce, Handbook to the Roman Wall, 12th ed., (Newcastle: Hindson and Reid, 1965), 17.

¹⁸ "The Katastegasma of the Walls of Athens," AJA 54(1950):337-356; and Greek Fortifications, 92, 138, 140, 145, 147, 149.

¹⁹ This ratio, however, may be too conservative, for the fifth century

Wall D was the second and final stage of defense that barred all access at the narrowest constriction of the pass. This wall fragment can be found approximately 150 meters south of the northern long wall, and a few meters north of where the modern mining road crosses the Xírias via a concrete ford(see Map III). If one stands in the center of this ford and looks north, a wall fragment can be seen on the right bank of the stream, which appears at some period to have dammed this water-course(Plate 10).²⁰

The predominant construction style of wall sections A through D can be described as a rubble technique using irregularly shaped facing stones of uniform size (ca. 0.65 x 0.20 x 0.20 m.). These stones were then bonded together with a friable, whitish to gunpowder gray, lime mortar(see Plates 7-8). The brick or tile fragments, which are so commonly seen wedged between facing stones of Byzantine architecture, are seldom if ever found at Dhema. More often, small stone wedges, which average in size to about 0.15 x 0.04 x 0.02 m., were used. Occasionally, the wall surfaces were found covered with a smoothed plaster layer. Core compositions were made up of rubble and chance ceramic material set in lime mortar. Often, bedrock outcroppings were incorpo-

curtain walls at Thessaloniki measured 2.0 to 2.3 meters in width by 10.0 to 12.0 meters in height, which yields about a 1:5 vertical ratio. See: O. Tafrahi, Topographie du Thessalonique, (Paris, 1913), 87-88.

²⁰ The topographical location and fortuitous preservation of this wall fragment suggests that not only did this wall in late antiquity blockade the Dhema Pass at its most narrow point, but also that it must have been the crosswall described by Prokopios in de aedificiis 4.2.22. See pp. 79-80 below.

rated directly into the foundation of a wall section for further structural support.

Of considerable interest was the method of anchoring the foundation of wall section B to the steep slope of Mt. Oite. The solution was found in the placement of ceramic bricks (ca. 0.15 x 0.08 x 0.04 m.) against the exposed bedrock of the slope, undoubtedly to aid in the levelling of the foundation course(see Plates 4-6).²¹

Another architectural curiosity is the composite construction style of Wall D. The southern face of this wall appears to be of an older architectural tradition which was strengthened by a later rubble and mortar wall built directly against it(Plate 11). This southern face (ca. 0.74 m. thick) consists of about two courses of well-fitted and shaped rectangular blocks (ca. 0.37 x 0.27 x 0.20 m.) set in mortar(Plate 12). The northern face, about 0.30 m. thick, is made up of the typical rubble and mortar construction technique found throughout the rest of the site(see Plate 13). Between these two faces, a core in excess of one meter in width was filled with rubble and mortar.

Wall D is the solitary example among the defensive structures at Dhema where two distinct architectural traditions are joined together in one structure. The southern face of Wall D, therefore, may represent an older fortification wall, which was later rebuilt, laid wet (in mortar),

²¹ This was a far cheaper method of affixing a curtain wall's foundation on a steep slope, then cutting inclined, stepped beds to hold the wall's foundation in place. Concerning this stepped foundation bedding technique see: A.W. Lawrence, Greek Aims in Fortification, (Oxford: Clarendon Press, 1979), 201, and plates 20, 21, of Herakleia-by-Latmos.

and substantially strengthened with the addition of a rubble northern face and core structure. Such composite construction is well-known in the early Byzantine period.²²

The Dhema garrison enclosure commanded all the northern approaches leading up to and through the pass from the Malian Basin (see Maps III and IV). This frontier stronghold, formed by the encircling ring of wall section C and the sheer northwestern face of the Jamí Rock, has an area of ca. 5,800 square meters, or about 0.6 hectare. Within this enclosure are several topographical eminences, of which only the north-northeastern height (470.0 m.) seems to have had any obvious tactical importance. Other architectural remains within the enclosure include some unidentified rectangular structures and a course of massive stones. These rectangular structures located in the dense holly-oak along the southern wall of the compound share the same rubble and mortar construction technique as do the wall sections A through C (see point 6 on Map V). These structures may represent the compound's barracks,²³ and only the clearing of the dense holly-oak could confirm this supposition. The

²² See for example a similar situation in the Malian Basin, L.W. Daly, "Echinos and Justinian's Fortifications in Greece," AJA 46(1942):502, 506. Unfortunately, no reconstruction of the course of Wall D could be drawn, for the area immediately to the east of the wall fragment is heavily eroded by land slides caused by the seasonal undercutting of the Xírias. The area west of this wall fragment has been thoroughly disturbed by the construction of the modern mining road, cultivation, and a sheep pen.

²³ From the fourth century onward, barracks were built along the inner face of defensive walls in order to protect the occupants from missiles and to thicken the walls. Luttwak, Grand Strategy, 167. See also Lawrence, Greek Aims, 177, fig. 30, of the plan of Filla (Euboea) with its barracks; and J. Papavasileiou, "Ἀρχαιολογικὴ Ἐφ' ἡμερῶν 20(1903): 131ff.

massive line of stones, which runs approximately east-west and forms the 464 meter contour line near the center of the present compound, probably is the foundation of a former fortification wall(see Illustration D). If this is correct, then this may be an indication of the expansion of the area of the enclosure.

The circular signal/watch-tower (see Map III) atop the Jamí Rock and the garrison enclosure beneath it must have been considered by the ancients as one defensive unit, for a rock-cut, zig-zagging trail climbed the northwestern face of the Jamí Rock from within the enclosure below(see Map IV). From this vantage point (515.20+ m.), any approach along the entire Kotronákia Plain, the entire length of the Vizoutí Gorge, and nearly the entire western Malian Basin, could be surveyed.²⁴

Another signal/watch-tower foundation(?) is located high up the eastern slopes of Mt. Oite at the termination of wall section B(see Map III). Situated almost directly opposite (to the west) the tower of the Jamí Rock, an observer in this tower could have easily scanned the steep northern ravine before him, the entire length of the Dhema Pass, and the western half of the Malian Basin. The rectangular or square traces of the foundation of this tower, which measure four to five meters on a side, jutt out from the inside (southern) face of the Wall B. The copious remains of rubble, mortar, and roof tiles suggest a similar con-

²⁴ Unfortunately, dense holly-oak prevented any precise measurement of this tower's remains. Only a crude estimate of its dimensions could be made: ca. ten meters in diameter with the height of its rubble mound at about two to three meters. Its construction was of small and irregular rock rubble, bound with mortar.

struction as that used in the long walls, with the possible addition of a tile-roof.

The probable main portal or gateway of the Dhema military complex, which would have regulated all traffic through the pass, was most likely located in the shallow declivity between the mining road and the Dhema $\alpha\pi\omicron\theta\eta\acute{\kappa}\eta$ (see Map IV). This area is now a gap about fifty meters wide, strewn with large and crudely worked stones,²⁵ which were probably once part of the gate's massive construction.²⁶

As the focal point, and therefore the weakest point of the Dhema military complex, the main portal or gate area must have been massively constructed. The reconstruction with crenelles (τοξικά), parapet wall, and walkway is based upon the early Byzantine fortifications of North Africa and Isthmia (see Illustration C). These defensive works also feature narrow gates, which almost never seem to exceed three meters in width.²⁷ The dimensions of gate were based upon the ratio of 3 to 5

²⁵Two examples are: 0.53 x 0.45 x 0.35 and 1.58 x 0.58 x 0.88.

²⁶The poor preservation of the portal or gateway area can be attributed to plundering and the bulldozing of the mining road which runs through the pass. Farrell, 117, stated that in his time he could clearly follow the long walls. Therefore, the construction of the mining road probably did the most damage to the gate area by displacing tons of bedrock and soil and by severing the probable junction of the wall sections B and C.

²⁷Diehl, L'Afrique byzantine, vol.1: 161, "Les portes principales ne depossent guere une largeur de trois metres, et souvent elles ont beaucoup moins (2.25 m.; 1.25 m.)." See also: Goodchild, Ward Perkins, BSR 21(1953): 57, fig. 5 and 59, fig. 6; and O. Broneer, "Excavations at Isthmia," Hesperia 27(1958): 21. Cf., also Lawrence, Greek Aims, 303, where Hellenistic through Roman gate widths in Greece ranged usually between 2.70 to 3.50 meters, just enough to allow one bulging cart to pass.

(width to height).²⁸

The following chronological data indicate that the Dhema military complex had a long occupation and that its defenses were worthy of several modifications. The foundation, occupation, and renovation of the complex has been determined by four dating methods: 1) lime mortar carbon-14 analysis; 2) comparative construction styles and techniques; 3) comparative pottery; and 4), small finds analysis.

The following lime mortar samples were collected from the Dhema military complex for radiocarbon analysis during the 1980 season. This new carbon-14 dating process was first made practical by R.L. Folk and S. Valastro of the University of Texas at Austin,²⁹ and its procedure has been described by Folk and Valastro in a recent issue of the Journal of Field Archaeology.³⁰ The Dhema samples were collected according to this publication's guidelines. Unfortunately, only Dhema sample no. 2 was of sufficient size to allow for a second control analysis.

²⁸ ibid., 303.

²⁹ See: R.L. Folk, "Geologic Contributions to Archaeology and Dating Techniques: Stobi, Yugoslavia," Geological Society of America(Abstracts), Dallas, 1973, 624; Valastro, Folk, "A New Radiocarbon Technique for Dating of Mortars," ibid., Miami, 1974, 993-994; Valastro, "A New Technique for the Radiocarbon Dating of Mortars," (Master's thesis, University of Texas at Austin, 1975); Folk, Valastro, "Radiocarbon Dating Mortars at Stobi," J. Wiseman, ed., Studies in the Antiquities at Stobi, (Beograd, 1975), vol.2: 30-39; and C. Malone, S. Valastro, A.G. Varela, "Carbon-14 Chronology of Mortar from Excavations in the Medieval Church of Saint-Benigne, Dijon, France," JFA 7(1980): 329-343.

³⁰ Folk, Valastro, "Successful Technique for Dating of Lime Mortar by Carbon-14," JFA 3(1976):203-208.

1980 DHEMA RADIOCARBON DATA*

Texas Laboratory Cat. no.	Sample	Uncorrected Age Ref. (1950 A.D.)	Corrected** Age Ref. (1950 A.D.)	All Corrections Applied	Expected*** Date
(1) Tx 4216:	Wall C, pt. 1	1587+-94	1559+-98	391+-98 (302-489)	ca.370
(2a)Tx 4219:	Wall C, pt. 2	1631+-94	1598+-94	352+-99 (253-451)	ca.370
(2b)Tx 4219:	Wall C, pt. 2	1620+-96	1579+-100	371+-100 (271-471)	ca.370
(3) Tx 4220:	Wall C, pt. 3	1567+-86	1520+-91	430+-91 (339-521)	ca.440
(4) Tx 4218:	Wall A, pt. 10	1532+-83	1498+-87	452+-87 (365-539)	ca.440
(5) Tx 4215:	Wall B, pt. 6	1576+-75	1540+-79	410+-79 (331-489)	ca.440
(6) Tx 4217:	Dhema, pt. 6	1540+-60	1515+-75	435+-75 (360-510)	ca.440

*These samples were collected from points along wall sections A through C and from within the Dhema enclosure. Consult Map IV for these locations. See also: W.J. Cherf, "Carbon-14 and Prokopios' De Aedificiis," Eighth Annual Byzantine Studies Conference, Abstracts, (University of Chicago, 1982), 44-45.

**These carbon-14 dates were first calculated on a half-life of 5568 years, then corrected for a half-life of 5730 years to the Reference Year of 1950. The data were then further adjusted by dendrochronology according to the Arizona Method and finally by the delta 13 Carbon ratio. All ages were statistically calculated on the basis on one sigma. Cf., A. Long, B. Rippeteau, "Testing Contemporaneity and Averaging Radiocarbon Dates," Am.Ant 39(1974):205-214.

***These dates are based upon literary evidence and similiar fortification projects undertaken in the surrounding regions.

The above radiocarbon data indicate at least two major late Roman-early Byzantine construction periods at Dhema, for there is statistical agreement between samples 1, 2a, and 2b that date to the second half of the fourth century, and samples 3 to 6 that date from the first half of the fifth century. These results were a surprise because the architectural observations below indicated only one post-Classical mortar and rubble construction period at Dhema. The value of this new lime mortar dating process, therefore, cannot be overlooked. In addition, considerable importance should be attached to the spatial distribution of these samples and their corresponding epochs. The earliest chronological data originate from points 1 and 2 along the northern section of Wall C, while wall section B, the remainder of wall section C, and wall section A appear to be of later date. Closer inspection of the C-14 data within each of the two construction periods is also revealing. For example, sample number 2a yielded the earliest chronological datum point. Sample numbers 1 and 2b therefore may represent either later repairs to this wall section or the differing setting times of this wall's mortar.³¹ For the second construction period, three conclusions can be drawn: 1) sample number 5 probably represents the construction of Wall B; 2) sample numbers 3 and 6 mark the construction of the southern circuit of wall section C and the possible barracks along it, an event that seems to have followed the erection of wall section B; and 3), sample

³¹Because sample numbers 1 and 2 were core wall samples, the mortar could have taken from ten to one hundred years to set. Cf., Folk, Valastro, JFA 3(1976):204, n.9.

number 4 suggests that wall section A was the last defensive addition at Dhema.³²

The extensive use of lime mortars, plasters, and cements in Greek wall construction was first introduced by the Romans and was continued by the Byzantines.³³ Typically, this wall construction consisted of two wall faces of either brick or stone laid wet with a poured rubble and cement core. When irregularly shaped stones were used, stone wedges or ceramic tile fragments were inserted between them to aid in their stacking during construction. Consequently, when such a building technique was followed, construction was rapid and relatively cheap in comparison with that of ashlar masonry, while at the same time providing practi-

³² A word must be said about the appended chronological 'plus or minus' deviations for the samples, for they afford a direct indication of the data's chronological reliability. It is with great credit both to this new approach and to its processor Mr. Valastro that the deviations are so low. See, for example, the deviations that range from +52 to +195 years in the carbon-14 mortar samples taken in Dijon, France, from an eleventh century church, which were considered to "fall clearly within the acceptable range of C-14 dating of mortar," C. Malone, et al. JFA 7(1980): 342. The above given deviations are therefore well within these specified limits. Typically carbon-14 data produce deviations in excess of one hundred years. See, for example, the carbon-14 results in F.A. Hassan, "Radiocarbon Chronology of Archaic Egypt," JNES 3(1980): 204-205, 207. Concerning the bristlecone-pine calibration see: C. Renfrew, "Carbon 14 and the Prehistory of Europe," in C.C. Lamberg-Karlovsky, ed., Old World Archaeology: Foundations of Civilization, (San Francisco: Freeman, 1972), 201-209. An outline of the process can be found in M. Joukowsky, A Complete Manual of Field Archaeology, (Engelwood Cliffs, New Jersey: Prentice-Hall, 1980), 445-449, with bibliography on 660-662.

³³ See Winter, Greek Fortifications, 91, 94; Lawrence, Greek Aims, 210; J.C. Bruce, Handbook to the Roman Wall, 15-16; W.L. MacDonald, The Architecture of the Roman Empire, (New Haven: Yale University Press, 1965), vol.1: 149, 150, 156; and C. Mango, Byzantine Architecture, (Oxford: Clarendon Press, 1975), 11 and 14.

cally the same solid construction.

The site of Dhema exhibits two different traditions of architectural construction: 1) an ashlar construction of fitted medium- to large-sized stones laid dry in regular courses (Plate 12), and 2), a rubble and mortar construction of irregular but uniform-sized facing stones with a rubble and mortar core(Plate 9). Only three instances for the former construction type have been observed at Dhema: in the southern facing stones of wall section D; in the 464 meter contour line within the Dhema military compound; and, in the disturbed stones scattered about the postulated Main Gate Area. The scarcity of this ashlar construction style and the composite nature of Wall D(Plate 11) suggest that this ashlar style predates and was supplanted by the rubble and mortar constructions.

The above carbon-14 data and architectural observations strongly support the hypothesis that the Dhema military complex was the object of several architectural modifications or renovations in the course of its occupation during the fourth through sixth centuries:³⁴ 1) the puzzling course of stone (foundation?) blocks that create the 464 meter contour line within the Dhema compound; 2) the rough hewn stones that litter the probable Main Gate Area; and 3), the composite construction of Wall D. Moreover, in the early Byzantine period, economy in construction was achieved through the practice of reusing architectural materials and of

³⁴ Cf. Daly, AJA 46(1942): 502, 504, for a similar conclusion for the remains found at ancient Echinus.

modifying and renovating pre-existing structures.³⁵ Does, for example, the northern section of Wall C represent two remodeled sides of a once almost rectangular military enclosure? Did the stones of the 464 meter contour line once delineate the enclosure's third southern side(see Illustration D)? Historical evidence suggests just such a hypothesis and will be discussed below in Chapter Three.

Late Roman and early Byzantine pottery, described as 'combed', 'ribbed', or 'wavy-incised ware'(Plate 14), has been collected on the surface and excavated from within the garrison enclosure of the Dhema military complex.³⁶ Comparable examples of this pottery type were in common use during the fourth, fifth, and sixth centuries,³⁷ but evidence

³⁵ The Theodosian Code stipulated the dismantlement of temples and similar structures for reuse as building materials. See: Codex Theodosianus 15.1.36(1 November 397 A.D.), Quoniam vias pontes, per quos itinera celebrantur, adque aquaeductus, muros quim etiam iuvari provisum sumptibus oportere signasti, cunctam materiam, quae ordinata dicitur ex demolitione templorum, memoratis necessitatibus deputari censimus, quo ad perfectionem cuncta perveniant. See also: R.L. Scranton, Corinth, vol.16(1957):98-99, for examples of this practice.

³⁶ The author expresses his thanks to Professors Kase and John Rosser, for their permission to discuss the unpublished late Roman-early Byzantine pottery and small finds excavated from Dhema.

³⁷ Anthedon(Boeotia), H. Schäfer, D.J. Blackman, J. Schäfer, "Der Hafen von Anthedon mit Beiträgen zur Topographie und Geschichte der Stadt," AA 83(1968): 86-87, illustration 88; S. Hood, Acta Musei Nationalis Pragae, Series A, 20(1-2)(1966), plate 23b, nos. 5-7; on the islands in the Gulf of Itea, id., "Isles of Refuge in the early Byzantine period," BSA 65(1970): 38, 41, 43, and plate 14b, 4-6; Isthmia, O. Broneer, Hesperia 28(1959): 336, no.15-16, plate 72a-b; Navlokhos, Hood, BSA 65(1970): 43, n.18; Tiryns, W. Rudolph, Tiryns, 5(1971): 101-102, plate 44, no. 31; at Pavlopetri, A. Harding, G. Cadogan, R. Howell, "Pavlopetri, An Underwater Bronze Age Town in Laconia," BSA 64(1969): 113-142, esp. 137, plate 33c. See also J.W. Hayes, Roman Pottery in the Royal Ontario Museum. (Toronto: Royal Ontario Museum, 1976), 64, no. 352 and 123, plate 352 and H.S. Robinson, The Athenian Agora, vol.

for the use of these pottery styles after the beginning of the seventh century is insecure.³⁸ It is of some significance that these sherds also testify to the last ancient habitation of the site.

These and the other numerous small finds, which were excavated from within the Dhema garrison enclosure, will be the subject of a future PDE publication. One find, however, must be mentioned here, that of an iron-socketed spearhead (Plate 15). This object may prove to be controversial for iron-socketed spearheads almost identical to Dhema small find no. 52 have been found in early seventh century warrior graves from Hungary and Germany.³⁹ The implication is that our example may be of northern Balkan manufacture.⁴⁰

On the basis of the pottery and small finds analysis, the Dhema military complex seems to have been continuously occupied during the fourth, fifth, and sixth centuries. Moreover, the wide spectrum of objects found are those commonly associated with the habitation of a

5(1959): 84, nos. M-349-384; 114, nos. M-321-322, plate 31; and 118, no. M-371, plate 34.

³⁸ Hood, BSA 65(1970): 38, n.3 and 43. See also T.E. Gregory, "Byzantine 'Isles of Refuge,'" AIA Abstracts 5(1980), 10, who points out that although much of the pottery found on the islands in the Gulf of Itea is of the late sixth and seventh centuries, much is also from the fourth and fifth centuries.

³⁹ G.R. Davidson, "The Avar Invasion of Corinth," Hesperia 6(1937): 231, fig.2-H; 233, n.2; and 235, notes 4 and 5.

⁴⁰ But cf. the following Roman spearhead finds also similar with Dhema no. 52: G. Ulbert, Die römischen Donau-Kastelle Aislingen und Burghöfe, in Limesforschungen vol. 1(1959): plate 27, nos.15-18; N. Walke, Das römische Donau-Kastell Straubing-Sorvidurum, idem., vol. 3(1965): plates 107, nos. 7, 10, 11 and 108, nos. 6, 9, 10; and G. Ulbert, Das frühromische Kastell Rheingönheim, idem., vol. 9(1969): plate 46, nos. 27-31.

permanent military camp. Dhema then was abandoned, or more probably taken by force (Dhema small find no. 52), sometime in the late sixth century.

Numerous fortifications with a remarkably similar mortar and rubble construction style to that of the Dhema military complex have been found throughout the Oite-Kallidromos frontier barrier.⁴¹ This similarity in construction style and advantageously chosen topographical setting for tactical defense suggests the possibility of an unified frontier defense system, a system that both regulated and defended the only practical routes into central Greece via the Dhema Pass and eastern Greece via the Thermopylai Pass.

The Frontier System of North Central Greece.

The unique, elaborate, and topographically opportunistic fortifications of the Dhema Pass preserved the strategic integrity of the entire frontier defense system of north central Greece by regulating all access to the Isthmus-Corridor and preventing the western encirclement of the fortifications in and around Thermopylai. This tactical dominance by the Dhema Pass was reason enough for the development of a care-

⁴¹ In particular, the defensive structures of the 'Thermopylai fortification cluster', see p. 53 below. For the published descriptions of these structures, see: Stählin, Thessalien, 207-208; id., "Thermopylen", 2399(map), 2414, 37-43, and 2422,46-2423,4; Kolias, BZ 36(1936): 334; Robertson, JHS 59(1939): 200; S. Marinatos, "Forschungen in Thermopylai," in Bericht über den VI. Internationalen Kongress für Archäologie, (Berlin, 1940), 333-341; Daly, AJA 46(1942):507; Marinatos, Thermopylae, 65-69; Pritchett, "Thermopylai", 210, n.64, and Plate 55, fig.10; MacKay, passim Pritchett, Topography, 74, Plate 65, figs. 76-77, 81, Plate 84; Koder/Hild, s.v. 'Thermopylai', 274; and Pritchett, Passes, 185, 186, 227.

fully integrated and unified frontier defense system for north central Greece. The purpose of such a system was to take advantage of the topography of the region and to supplement those natural defenses with fortifications in order to form a continuous linear frontier barrier.⁴²

In a rational scheme of selective fortification in depth, the goal is to equalize the barrier effect of terrain (i.e. the Oite-Kallidromos frontier barrier) across the sector as a whole by denying free use of the easier passage points.

Such a defensive scheme was designed to halt 'low-intensity' threats and to intercept, or at least slow down, heavy assaults both north-south against the Oite-Kallidromos frontier barrier,⁴³ and east-west along the coastline of the southern Malian Basin. A model that aptly fits such a rationalization of the Oite-Kallidromos frontier barrier has been defined by Luttwak as a 'scientific frontier'.⁴⁴ The frontier defense system of north central Greece fits this definition in many respects for it included: a well developed system of roads for border patrols and troop movements; a sophisticated system of intercommunications; a hierarchy of overlapping and interdependent fortresses, forts, barriers, and guardposts; and conveniently placed supply dumps. Clearly, the key tac-

⁴² See Luttwak, Grand Strategy, 133. The author is indebted to Luttwak's book, in the production of this section. His terminology and strategic models have provided many insights into the possible organization of the Oite-Kallidromos frontier barrier.

⁴³ ibid., 66, 69. 'Low-intensity' threats can be defined as simple infiltrations, hit-and-run raids, and small foraging parties.

⁴⁴ This term connotes an optimal strategic situation, where a narrowly defined zone or borderland is chosen for topographical and tactical convenience as well as for its role in the overall strategic planning of a region. Such a situation should ideally defend the greatest amount of territory with the least amount of exposed frontier. ibid., 87-88.

tical position in this defensive scheme was the Dhema Pass.

Tactically, the Dhema military complex insured the integrity of the entire frontier system of north central Greece by fortifying the most strategic passageway through the mountains and by regulating all of its traffic. Moreover, several tracks and pathways branched off of the highway of the Isthmus-Corridor towards the east behind the Oite-Kallidromos Range (see Maps I and II) and towards the central Kephissós Valley. In fact, the Dhema military complex must have been linked by an integrated network of roads with the rest of the Oite-Kallidromos frontier barrier; the basis of which rested upon well constructed and maintained 'vertical' (north-south) and 'horizontal' (east-west) tracks and pathways (see Maps I and II).⁴⁵ Vertical roads connected the frontier zone as a whole with the reserve troops stationed in the interior. The broad highway of the Dhema Pass and Isthmus-Corridor was the primary vertical highway of the Oite-Kallidromos frontier barrier.⁴⁶ By comparison, the other routes of this frontier have all been shown to be only of secondary or local significance. On the other hand, horizontal roads must have been constructed for the convenience of border patrols and troop movements along the frontier itself. The Anopaea Path, which rendered the 'Thermopylai fortification cluster' tactically dependent upon the Dhema military complex,⁴⁷ is the most important in this category.

⁴⁵ Luttwak, Grand Strategy, 67, 96.

⁴⁶ See: Introduction, p.4, n.8 above.

⁴⁷ See the discussion on p.53 below.

Not far behind, however, are the secondary arteries that coursed throughout the Thermopylai highlands of the Kallidromos Range (see Map II). It was along such routes that the pass of Thermopylai and its supporting fortifications were occasionally by-passed or encircled.⁴⁸ This network of vertical and horizontal roads in the Oite-Kallidromos Range are even reflected in the Prokopian description of the area.⁴⁹

A highly developed network of intercommunications, of either heliographs or beacon-fires,⁵⁰ must have joined the fortifications of the Dhema Pass with the rest placed throughout the Oite-Kallidromos Range. The hypothesis that such a network existed in antiquity rests upon the numerous remains of signal/watch-towers throughout the region. The typically clear mountain top visibility of the region made possible the instantaneous transfer of information between the signal/watch-towers by means of any two-way signaling system. In this way, the approach of any hostile force towards the southern Malian Basin could be seen and evaluated. In the event of inclement weather or poor visibility, mounted messengers or runners could have easily maintained communications for the entire military frontier along its integrated vertical and horizontal road system.

⁴⁸ Cf., Prokopios bella 2.4.10. See also the definitive work of Wallace, "Anopaea", on the topography and routes behind the Kallidromos Range.

⁴⁹ See de aedificiis 4.2.2, 4.2.7, 4.2.8, and 4.2.9.

⁵⁰ See for example, W. Riepl, Das Nachrichtenwesen des Altertums mit besonderer Rücksicht auf die Römer, (Leipzig, 1913), reprint, (Hildesheim: Georg Olms, 1972), 43-44, 46, and 85; and Lawrence, Greek Aims, 189.

The late fortifications in and around Thermopylai,⁵¹ were dependent upon the defenses of the Dhema Pass for the protection of their exposed flanks, for to breach the Dhema Pass simply meant the western encirclement of Thermopylai. These dependent fortifications, collectively referred to as the 'Thermopylai fortification cluster', are located along the Kallidromos Range east of the Asopus River Gorge and west of the East Gate Wall of Thermopylai: the Kolonos Hill, the Middle Gate long wall, the Muntzmeno fortifications, the Moní Panagías-Palaio Dhrakospiliá Wall, the 'Fylakí complex',⁵² and the fortification above the left bank of the Asopus River Gorge.

It is a paradox that the primary tactical position for the defense of the Thermopylai Pass and eastern Greece is also the most topographically exposed and logistically isolated segment of the Thermopylai fortification cluster. This garrison point was located behind the Middle Gate Wall,⁵³ at or near the famous Kolonos Hill(see Map II). From this position, all east-west traffic along the Malian coastline was regulated.

Of secondary tactical significance was the Fylakí complex, the

⁵¹ See p. 49, n.41 above.

⁵² This group of structures include: a long wall, signal/watch-tower, and the nearby hilltop fort to the northwest, all of which should be considered as one tactical unit. Concerning these remains, see: Pritchett, "Thermopylai", 210, n.64; MacKay, 247-248, map no.10; and Koder/Hild, 274. Koliás, BZ 36(1936): 334, however, is alone in dating this fortification to the 13th century. All others, based on architectural inspection, have strongly preferred a late Roman-early Byzantine date.

⁵³ For a description of this massive long wall and its possible προτείχισμα, see MacKay, 251-252 and map nos.2-4.

Muntzmeno fortifications, and the the fortification above the left bank of the Asopos Gorge(see Map II). The Fylakí complex was a defensive position that was designed to check any low intensity assaults that would have ascended from the Dhamásta Spur or the Khalkómata Path. If the Dhema Pass was breached this fortification complex was susceptible to assault from the west via the infamous Anopaea Path.⁵⁴ Despite this tactical weakness, the Fylakí complex was of primary importance to the intercommunications between the highlands of Thermopylai and Dhema via the same path. The other fortifications located over the Muntzmeno Ravine and Asopos River Gorge(see Map II) overlooked narrow and steep north-south paths into the Oite-Kallidromos frontier barrier. Because of their orientation and relatively isolated position, these fortifications were also susceptible to any flanking maneuver originating from the Dhema Pass or Anopaea Path.

Of tertiary importance to the defensive infrastructure of the Thermopylai fortification cluster were the solitary longwall and signal/watch-tower located between Moní Panagías and Palaio Dhrakospiliá; for they intercepted any hostile forces along the crest of Kallidromos east of the Fylakí complex(see Map II).

The Dhema military complex was not only the tactical key of the frontier system of north central Greece, but it also was a logistically independent installation as well, for rich, fertile, and well-watered fields surrounded it to the north and south. Troops, however, marching

⁵⁴ See Wallace, "Anopaea", for the best discussion of this highland route along the southern slopes of the Kallidromos Range.

along the highway of the Isthmus-Corridor would require supply depots. Certainly, the early Byzantine city of Krisa along with its harbor of Kirrha served this logistical function at the Corridor's southern terminus. But for troops marching north there are two possible locations for the site of a convenient supply depot in the Isthmus-Corridor: either at the early Byzantine site of Kouvéla (see Map II), or in the immediate vicinity north of Dhema. The extensive remains at Kouvéla and upon its acropolis called Κάστρο τῆς Ὠριᾶς have been discussed elsewhere.⁵⁵ Adjacent to Kouvéla, an extensive and well-watered upland plain, known locally and on the 1:5000 Greek Staff Map (1943) as the Pergára, could have supplied provisions and water for such marching legions. On the other hand, another possibility might have been the unidentified site of Myropóles, believed to be located near Dhema,⁵⁶ whose etymology suggests that it might have been such a supply depot.⁵⁷

Unlike the fortifications within the Dhema Pass the principal food

⁵⁵ See, for example: Koliás, *ΕΕΒΣ* 10(1933):80-82; Béquignon, 254, 260-261, plate 21; A. Bon, "Forteresses médiévales de la Grèce centrale," *BCH* 61(1937):139; Philippson/Kirsten, vol.1:251, 335-336; and MacKay, 250, plate 50, no.5.

⁵⁶ Concerning Myrópoles' possible identification, see pp. 79-80 below.

⁵⁷ The etymology of Μυροπώλης, 'perfume dealer', was an accepted term in the tenth century for a city quarter devoted to the manufacture and selling of not only perfumes, but also dyes, spices, and drugs of all kinds. See A. Stöckle, *Spättrömische und byzantinische Zünfte*, *Klio*, Beiheft IX, (Leipzig, 1911), 36-38 and A.E.R. Boak, "Notes and Documents. The Book of the Prefect," *Journal of Economic and Business History* 1(1929):597-611. Worthy of mention in this connection is the purgative drug, hellebore, that grew on the steep slopes of Mt. Oite. Theophrastus *de causis plantarum* 6.13.4. See also Stadler, "Helleboros," *RE* 8(1)(1912):163-170. Is, therefore, the toponym Myropóles merely a coincidence, or does it instead reflect a commercial reality?

sources for the garrisons of the Thermopylai fortification cluster, probably the granaries of Skarpheia and the fertile Pergára Plain near Kouvéla (see Maps I and II), were remotely located.⁵⁸ Such strategically placed granaries (horrea) were the center pieces of Roman tactical thinking,⁵⁹ since they supplied the frontier garrisons who were not permanently settled as were the practically self-sufficient farmer-soldiers or limitanei milites of the Dhema Pass.⁶⁰ The Justinianic reorganization of the Thermopylai region, however, eventually redressed this logistical weakness, for Prokopios records that numerous granaries were established everywhere.⁶¹

The dominating natural and man-made defenses of the Oite-Kallidromos Range, which spanned 15 kilometers, were augmented in the mid-sixth century by a permanent force of approximately 2000 men.⁶² Although much of this frontier's precipitous topography required little or no military supervision, a significant average density ratio of 133 men per kilometer was maintained to insure the security of north central Greece and the strategic Isthmus-Corridor route. Truly, this was an exceptional

⁵⁸ See Dittenberger, Sylloge, vol.2:625-626, no.908, concerning the importance of Skarpheia as a frontier grain depot in the fifth century. See also Groag, Spättrömischen Reichsbeamten, 72.

⁵⁹ R. Grosse, Römische Militärgeschichte von Gallienus bis zum Beginn der byzantinischen Themenverfassung, (Berlin: Weidmann, 1920), reprint, (New York: Arno Press, 1975), 241, n.7; and Luttwak, Grand Strategy, 132-133, 179.

⁶⁰ See p. 76 below.

⁶¹ de aedificiis 4.2.14.

⁶² Prokopios de aedificiis 4.2.14. See pp. 76-79 below.

situation during a period supposedly noted for its stinginess in defense. It then should be no wonder that Prokopios could record that the cities of central Greece complained bitterly when they were burdened with the economic strain of their own defense.⁶³

⁶³ Prokopios anecdota 26.29-34. It should be remembered that the Justinianic reorganization of the Thermopylai area supposedly included the restoration of fortifications, the support of the garrison of about 2,000 professional soldiers, and the maintenance of the frontier's highway system. Concerning road building costs during the early empire before Diocletian, see: R. Duncan-Jones, "An epigraphic survey of costs in Roman Italy," PSBR 33(1965):189-306.

CHAPTER III

THE DHEMA PASS AND THE INVASIONS OF GREECE DURING THE FOURTH THROUGH SIXTH CENTURIES.

As has been shown, the elaborate military architecture of the Dhema Pass was constructed during the second half of the fourth century, and this construction corresponds to the barbarian raids and invasions that threatened the frontier of north central Greece. Whether lightly-armed infantry or swift-moving cavalry, these invaders tended to plunder areas along or near the routes of major highways. Then, along these same roadbeds, they returned with cart-loads of spoils followed by trains of slaves, cattle, and animals.¹ In response to such incursions, fortifications were first built along the highways around the tempting areas of plunder and especially in strategic mountain passes. The Dhema Pass, as the principal passageway through the Oite-Kallidromos frontier barrier, therefore, was a crucial position in the defensive scheme of north central Greece.

¹ See, for example, the description of the abandoned plunder of the Gothic invasion of 269-270 A.D., where "no road is clear, their wagon train has been abandoned," vita Claudii 8.5.

I.

Encounters: Fourth through Sixth Centuries.

Even though the Dhema Pass and its fortifications played a decisive strategic and tactical role in the frontier defense of north central Greece, they remained historically obscure. It may at first seem surprising that such a crucial access through the mountainous frontier of north central Greece could have remained so overlooked by the ancient sources until its existence was specifically mentioned by Prokopios of Kaisareia. Some reasons for this lack of attention in late antiquity could have been: 1) that there was a general lack of interest by the ancient sources, the sole exception being Pausanias, in Roman Greece and in its northern frontier in particular; 2) that any passing interest by the ancients in the frontier area of north central Greece was usually of a negative nature -- whenever Greece was threatened by barbarian invasion; and 3), that the Dhema military complex was indeed a formidable defensive installation that seldom failed and therefore seldom received literary notoriety. But when these fortifications did fall, as they did in 539, the results were so catastrophic for central Greece that orders direct from Konstantinople demanded their reorganization and probable repair. In the final analysis, the military history of the frontier of north central Greece during the fourth through sixth centuries must be gleaned from brief notices, vague statements, and fragmentary evidence. Such disparate documentation forces the historian to his utmost limits where only conjecture as to the substance of specific events must suffice. With this caveat, the following chapter has been arranged chrono-

logically into two sections: the first is further subdivided into chronological segments that correspond to the various possible, probable, and sure encounters between incursive barbarian and defender along the frontier of north central Greece.² The second section discusses the possible encounters and eventual fall of the northern frontier system of central Greece during the reigns of the emperors Tiberius and Maurice in the last quarter of the sixth century.

The First Encounter:(Probable)

The fortifications of the Dhema Pass probably met their first test shortly after the Battle of Adrianople on 9 August 378.³ This first encounter accords well with the first construction period at Dhema, between 352-391 A.D. (Dhema C-14 sample numbers 1, 2a, 2b), which coincides with the deteriorating frontier conditions of the fourth century when barbarians repeatedly crossed the Danube and laid waste to the southern Balkan regions.⁴ Although these barbarian thrusts into the Bal-

² For the editions of individual authors or works, see above the list of abbreviations on pp. vii-xii. For Byzantine chronology, see: F. Dölger, Regesten der Kaiserurkunden, Teil 1., (Berlin/Munich, 1924); and V. Grumel, La Chronologie, (Paris, 1958).

³ On the events leading up to the Battle of Adrianople, see: Amm. Marc. 31.7-13; Stein, HBE, vol.1: 189-190; and Jones, LRE, vol.1: 153-154.

⁴ Cf., for example, a Megarian inscription from the year 375/376 that supports this radiocarbon data: W. Dittenberger, ed., Inscriptiones Megarides et Boeotiae, 42, no.96, in Inscriptiones Graecae, vol.7, (Berlin: Reimer, 1892). It is recorded that the Megarians, who as a result of an earthquake in the winter of 375/376 A.D.(Zosimus 4.18.2), hurriedly refortified their city out of fear and panic of the barbarians before the Gates of Greece. Groag, Spätrömischen Reichsbeamten, 55.

kans tended to be more disruptive and devastating for Thrace and Makedonia, sudden forays into the peninsula as far south as Thessaly and Greece were not unheard of. Immediately after Andrianople, the eighth century Byzantine chronicler Theophanes says, the following Roman territories were raided: Skythia, Moesia, Thrace, Makedonia, (Thessalian) Achaëa, and "all of Hellas."⁵ Shortly thereafter, the Visigoths settled in "large military and ethnic enclaves" in Moesia, Thrace, Makedonia, and Thessaly.⁶ Although the date (A.D. 378) of Theophanes' report closely agrees with the Dhema carbon-14 data, the precise involvement of the Dhema Pass and its fortifications in this raid remains, as does the extent of the damage to Greece, unclear. Of some interest is the order of the affected territories mentioned by Theophanes because it suggests that these invaders followed the major north-south highways of the eastern Balkans that eventually led to the Malian Basin and the frontier of north central Greece.⁷

The Second Encounter: (Sure)

The next instance when the defenders of north central Greece were called to muster was in 391, for the Visigoths were again wreaking havoc

⁵ Theophanes, A.M. 5870(A.D. 378) = pp. 64-65. Groag, Spatromischen Reichsbeamten, 55, 63.

⁶ L. Várady, "New Evidence on Some Problems of the late Roman Military Organization," Acta Antiqua 9(1961):349.

⁷ Cf., the invasion route described in the poem de bello Pollentio sive Gothico, by Claudius Claudianus, MGH, AA, ed., T. Birt, vol.10, 26.175-190, where the later Visigothic invasion of 395 follows a similar path. See p. 69, n.17 below.

on the security of Makedonia, Thessaloniki, and Thessaly.⁸ Emboldened under their new-found leader, Alarich, who continued these war-like activities during the years 395 to 397, the Visigoths wasted the eastern and southern Balkans from Thrace to the Peloponnesos.⁹ But the success of Alarich in the field was not entirely due to the innate military character of his Visigothic army.¹⁰ Rather, Alarich's greatest asset during his almost cavalier tour of the Eastern Roman Empire was his canny use of treacherous, unscrupulous, or overzealous individuals.¹¹ The entrance of Alarich into eastern Greece via the Thermopylai Pass is an excellent case in point. That infamous event and its vivid aftermath are best narrated by three authors: Eunapios, Claudius Claudianus, and Zosimus.¹²

⁸ Zosimus 4.48.

⁹ Marc. Comes 395,4; Jordanes Romana 319; Zosimus 5.5; John of Antioch frag. 190, FHG vol.4:610; Prokopios 3.2.7; and id. anecdota 26.31. See also Stein, HBE, vol.1: 228-229; 540-541; 231; 542.

¹⁰ See Zosimus 4.31, 5.5, and 5.7-8, for the Visigothic ignorance of siege techniques.

¹¹ Roman deserters: Zosimus 4.31. Wayward praetorian prefects, pro-consuls and military commanders: Zosimus 5.5; 5.6; Claudius Claudianus in Rufinum, MHG, AA, ed., T. Birt, vol.10, 1.308ff; 2.7ff; and possibly de bello Pollentino sive Gothico, MHG, AA, vol.10, 26.182, domitis irrisam cautibus Oeten, and 26.187-188, primo conamine ruptae Thermopylae. Zealous Christian monks bent on the destruction of pagan temples and sanctuaries: Eunapios vita Soph. 7.4-5. This is Wytttenbach's interpretation of the 'black-robed men' of Eunapios vita Maximii, pp. 52-53, in J.F. Boissonade, D. Wytttenbach, Eunapii Sardiani. Vites Sophistarum et Fragmenta Historiorum, (Amsteladam: Hengst, 1822), 184. Cf., also 245.

¹² To these authors can be added the vague notice of Sokrates Scholasticus Historia Ecclesiastica 7.10 = ed., H. Valesius, in Migne, PG vol.67(1859): 755-758. Concerning this author and his sources, see: W. Eltester, "Sokrates Scholasticus," RE 3a(1927):893-901.

Eunapios of Sardis, a pagan contemporary of this event,¹³ says in his fragmentary chronicle that in the first year of the emperor Arcadius (395 A.D.), Alarich passed through the Gates of Greece as if Thermopylai were a stadium and horse trodden plain.¹⁴ Eunapios then mentions the assistance given to Alarich by the impious men in black robes, who pointed out to him the Gates and arranged for unhindered passage through them. From this passage, it is clear that Alarich chose the coastal route through the Thermopylai Pass that led into eastern Lokris.

Claudius Claudianus, a pagan poet who also lived during this brutal invasion,¹⁵ is valuable for his description of the route taken by the Visigoths in their descent on Greece. In his poem de bello Pollentino sive Gothico, Claudius describes the route chosen by Alarich as following the via Egnatia west from Thrace,¹⁶ crossing the Strymon River, and wisely by-passing Thessaloniki. Then at the Haliacmon River the route Alarich followed went south along the highway between the

¹³ Ca. 345/356 to 420 A.D. See W. Schmid, "Eunapios, no. 2," RE 6(1)(1907): 1121-1127; A. Lesky, Geschichte der griechischen Literatur, 3rd ed., (Munich, 1971), 951; and H. Dörrie, "Eunapios," Der kleine Pauly 2(1979):427-428.

¹⁴ vita Maximii pp. 52-53, ed., Boissonade, (Amsteladam, 1822), = vita Soph. 7.4-5. ed., Giangrande, (Rome, 1956).

¹⁵ See J.C. Rolfe, "Claudian," TAPA 50(1919):135-149; M. von Schanz, C. Hosius, G. Krueger, Geschichte der römische Literatur, vol.2, part 4, (Munich, 1920), 3-21; and M. Fuhrman, "Claudius Claudianus, no.5," Der kleine Pauly 1(1979): 1202-1204.

¹⁶ See E. Demougeot, De l'unité à la division de l'empire romain 395-410, (Paris, 1951), 148, and 149, n. 160, who also reconstructs Alarich's route along the via Egnatia.

Thermaic and Malian Gulfs.¹⁷ How Alarich entered Greece Claudius does not specify, but of the toponyms next mentioned all are located in the vicinity of the Korinthian Isthmus. It may be supposed, therefore, that Alarich breached the Middle Gate fortifications at Thermopylai (see Map III), proceeded along the coast into eastern Lokris, and then rejoined the highway on his march south through eastern Greece towards Athens.

Zosimus is our most complete, if apocalyptic, source for the Visigothic invasion of Greece in 395. As a result, his account bears quotation:¹⁸

Thereupon Alarich departed from Thrace and proceeded to Macedonia and Thessaly, overthrowing everything en route. When he neared Thermopylai he covertly sent to the proconsul Antiochus and to the commander of the garrison there, Gerontius, messengers to announce his approach. Gerontius moved his garrison away, leaving the barbarians free and untrammelled access into Greece. They in turn proceeded to plunder the countryside and to destroy the cities utterly, killing all males from youth up and herding together the women and children as booty, along with all the wealth. Next all Boeotia and whatever other peoples of Greece the barbarians passed on their descent from Thermopylai were laid low, and from that day to this have shown the marks of the devastation... Only the Thebans were spared, partly because of their city's fortifications... Alarich made for Athens. (Trans., J.J. Buchanan, H.T. Davis, Zosimus. Historia Nova, San Antonio, Texas: Trinity University Press, 1967, 197, with additions

¹⁷ The course described (26.180-190) reads as follows:

The Thessalians groan over worthless Tempe and bemoan the ridiculous Oite with its conquered crags. The Spercheius and Enipeus, the choice of maidens, (now) washed their (Visigoths) barbarian locks. The Dryopians (of Epirus) having neither been saved by the barrier of Pindus nor did cloud-capped Leucates protect the shores of Actium. These things had once resisted the Medes more steadfastly, (but) Thermopylai was breached at the first attempt.

¹⁸ historia nova 5.5.5-5.6.2. Cf., the later accounts of Prokopios bella 3.2.7 and anecdota 26.31.

by this author.)

This vivid excerpt about the Visigothic invasion, composed at the end of the fifth century,¹⁹ used as its principal source Eunapios, a contemporary of this invasion.²⁰ That Alarich and his army traversed the eastern Balkans by following the via Egnatia and descended upon Greece by means of the highway between the Thermaic and Malian Gulfs seems clear. But once at Thermopylai, Zosimus states that Alarich wisely followed the path of least resistance, for Antiochus, the proconsul of Achaëa, and Gerontius, a commander at Thermopylai, allowed the barbarians free access through the pass. Alarich then took the coastal road to eastern Greece. The later mention of Boeotian Thebes and Athens supports this assumption.

Alarich chose the coastal route through the Thermopylai Pass into eastern Greece because it was left open to him and therefore offered a path of less resistance for his army. The most direct passageway into central Greece, the Dhema Pass, was defended in 395 by at least a roadside fortlet,²¹ and most likely even a crosswall blocking the narrowest

¹⁹ F. Paschoud, "Zosimus, no. 8," RE 10a(1972):798,62-66.

²⁰ Paschoud, RE 10a(1972): 810,55-61, quotes Photios Bibl. cod. 77, and sees a close relationship between the fragments of Eunapios and Zosimus' text, 810,62-811,1. Groag, Spättrömischen Reichsbeamten, 68, n.3, thinks that Zosimus actually copied the text of Eunapios concerning the fate of Boeotia and its devastation.

²¹ The existence of such a fortlet can be surmised based upon the results of Dhema carbon-14 sample numbers 1, 2a, and 2b, and upon the unpublished fourth century pottery excavated from within the Dhema garrison enclosure.

section of the pass.²² This fortlet and crosswall barred the Visigothic cavalry force from using the pass and the Isthmus-Corridor(see Illustration D). Moreover, there is good reason to believe that the troops under the command of Gerontius did not include those of the Dhema Pass.²³

The Third Encounter:(Possible)

The second construction period at Dhema, between 430 and 452 A.D. (Dhema C-14 sample numbers 3 through 6), is probably to be associated with the revitalization of the Long Walls of Konstantinople in 447, with the walls built around 450 at Thessaloniki, and with the construction or reconstruction of the trans-isthmian wall of the Korinthian Isthmus,²⁴ all of which were in preparation for the Hunnic threat that had been mounting along the Danubian frontier during the first half of the fifth century.²⁵ This concern for the Huns has been summed up by Hohlfelder,

²² This supposition is based upon the construction of the southern face of wall section D, which may date to this period.

²³ See the discussion on pp. 75-76 below, concerning this individual.

²⁴ Obolensky, Commonwealth, 16. The massive Long Wall of Konstantinople was first erected in 413 by the energetic praetorian prefect Athemius. See J.A.S. Evans, "The Walls of Thessaloniki," Byzantion 47(1977): 361-362, who quotes the work of M. Vickers. B. Croke, alternately dates the walls of Thessaloniki to ca. 442-443 A.D. and before the Hunnic invasion of 447 A.D., in "Hormisdas and the Late Roman Walls of Thessaloniki," GRBS 19(1978): 251-258. R.L. Hohlfelder, "Trans-Isthmian Walls in the Age of Justinian," GRBS 18(1977): 175, who upon numismatic evidence suggests that the Isthmian wall was constructed sometime in the middle of the fifth century. See also P.A. Clement, "Alaric and the Fortifications of Greece," Ancient Macedonia II, (1977): 135-137, who dates the Hexamilion's construction between 396 and 457 A.D.

²⁵ See E.A. Thompson, A History of Attila and the Huns, (1948), 78ff;

who states that constructions in the southern Balkans during the fifth century "may well represent another major defensive project executed late in the reign of Theodosius II after the engagement at Thermopylae and motivated by the fear of further Hunnic onslaughts against central Greece."²⁶ Because of this Hunnic threat, the instability of the Danubian frontier at this time is quite apparent for the praetorian praefectus of Illyricum, Apraemius, moved his headquarters south from Sirmium to Thessaloniki around 441/442 A.D.²⁷ In fact, the near-chaotic state of the eastern Balkan frontier prompts Vicker to comment that "in the mid-fifth century--the time when the walls were built--Thessalonica was practically speaking on the frontier, at least in the sense that there was nothing between it and Barbaricum, personified in this case by the Huns."²⁸ Similar conditions had existed in the northern Balkans during the reigns of Valerian and Gallienus in the third century,²⁹ and again

J. Otto Mänchen-Helfen, The World of the Huns, (Berkeley: University of California Press, 1978), 103ff; and Stein, HBE, vol.1:291-292. See also B. Croke, "Evidence for the Hun Invasion of Thrace in A.D. 422," GRBS 18(1977): 347-367; and W.N. Bayless, "The Treaty with the Huns of 443," AJP 97(1976): 176-179.

²⁶ Hohlfelder, GRBS 18(1977):177.

²⁷ Marc. Comes 441,3, and 442,2; Justinian novellae 11.94 = ed., G. Kroll, Corpus Iuris Civilis, vol.3, (Berlin, 1895); P. Lemerle, Philippe et la Macédoine orientale, (Paris, 1945), 82-82; and F.E. Wozniak, "East Rome, Ravenna and Western Illyricum: 454-536 A.D." Historia 30(1981): 352, n.2; 355, n.16; and 356. Jones, LRE, vol.1: 192-194.

²⁸ See E. Birley, et al., Roman Frontier Studies 1969, 249.

²⁹ See vita Claudii 9.8; Amm. Marc. 31.5.16; Eusebius FGrHist 101, F 1, 2; Zosimus 1.29.2; Synkellos, p. 715.9; and Zonaras 12.23.

with Theodosius I in the fourth.³⁰

The Dhema radiocarbon data testify to new construction most likely in preparation for this Hunnic threat. Whether or not the Huns in 447 actually penetrated as far south as Thermopylai is still a matter of debate. The locus in question is the laconic statement of Marcellinus Comes for the year 447 A.D.: "Attila, king (of the Huns), invaded as far as Thermopolis."³¹ The debate centers around whether the toponym 'Thermopolis', as preserved in the manuscript tradition, is in fact the same as 'Thermopylai' as some scholars have assumed.³²

The Fourth Encounter:(Possible)

During the fifth century the Huns were not alone in sacking the Balkans, for within a generation the garrisons along the northern frontier of Greece were again on alert. This time it was the Ostrogoths and Bulgars who were making inroads deep into Roman territory. First Epirus

³⁰ See Zosimus 4.48.

³¹ Attila rex usque ad Thermopolis infestus advenit. Chronica Minora, ed., Th. Mommsen, vol.2:82.

³² J. Karayannopoulos, "Βυζαντινά Συμμείγματα I," Βυζαντινά 5(1973):99-110, esp., 103-104, prefers the MSS emendation 'Thermopolis' as a town located near Konstantinople, instead of 'Thermopylai.' Cf. the opinion of D.A. Zakythinos, Byzantinische Geschichte 324-1071, (Vienna: Hermann Bohlaus, 1979), 32 n.25. Koder/Hild, 51-52, consider this possibility. L. Halphen, Les barbares des grandes invasions aux conquêtes turques du XI^e siècle, (Paris, 1948), 31; L. Schmidt, "The Asiatic Background," CMH, 1(1924):363; E. Barker, "Italy and the West, 410-476," CMH, 1(1924):414; Stadtmüller, 72; Lemerle, "Invasions", 280; Stein, HBE, vol.1: 292; G. Ostrogorsky, History of the Byzantine State, 2nd ed., (Oxford: Blackwell, 1968), 57; J.A.S. Evans, Procopius, (New York: Twayne, 1972), 23; Hammond, Migrations, 63; and R.L. Hohlfelder, GRBS 18(1977): 176, n.6, all prefer the 'Thermopylai' reading.

was invaded and Dyrrachium captured in 457 by the Ostrogoths.³³ Although Greece had remained untouched during this latest barbarian foray, panic of the barbarian was widespread. About this time (457-484 A.D.) a certain Diogenes, son of Archelaos, meritoriously spent funds for materials to renovate the fortifications and baths of cities in Greece.³⁴ Then, suddenly, the Ostrogoths again attacked, but this time they went deeper into the Balkans, devastating Dacia, Epirus, and Makedonia, and laying siege to Thessaloniki. Their continued presence in these regions ultimately led to their settlement in Makedonia and Thessaly by the imperial government.³⁵ The secure control of the the principal north-south highway between Thessaloniki and the rest of the southern Balkans was jeopardized, as were communications between Konstantinople and Thessaloniki. These events also caused serious obstructions to the strategic via Egnatia at a time when the besieged West could ill afford such a breakdown in communications with Konstantinople. Then, just around the turn of the century, as if the northern Balkans had not suffered enough, the Bulgars appeared and devastated Thrace.³⁶

³³ Jordanes Getica 270-271; Marc. Comes 459; and Jones, LRE, vol.1:221.

³⁴ SIG, 3rd ed., vol.2: 909.

³⁵ Jordanes Getica 286, 287; Marc. Comes 482,2; John of Antioch de insidiis p. 83 = frag. 213, FHG vol.4:620; and Malachus, frag. 18, FHG vol.4:125. See also Bury, Invasions of Europe, 178; Lemerle, "Invasions", 280; and Jones, LRE, vol.1:223.

³⁶ Marc. Comes 499,1; and Theophanes A.M. 5994(A.D. 502) = p. 143. Lemerle, "Invasions", 282-283, n.4; and Jones, LRE, vol.1: 231.

The Fifth Encounter: (Sure)

During the sixth century the first recorded test along the frontier of north central Greece was in 517, when a troop of Getic cavalry was turned away.³⁷ This low intensity threat seems to have been easily repelled by the intact and operational fortifications of the Oite-Kallidromos frontier barrier. But this repulse of the Getae should be considered exceptional because from the beginning of the sixth century the Roman frontier strategy of defense-in-depth was on the verge of total failure and collapse.³⁸ In the northern Balkans the sources indicate that construction and repair were needed for defensive structures both on the frontiers and within the empire itself.³⁹ Recently the research of Wozniak, which is substantially based upon Books 7 and 8 of Prokopios' bella, has gone one step further. Wozniak concludes that "the fortifications of Illyricum did not effectively hinder the marauding of foreign tribes anywhere north of Thermopylae during the sixth century."⁴⁰ The research of Wozniak thus illustrates the relative fluidity

³⁷ Marc. Comes 517,1. See also Jones, LRE, vol.1:235. The 'Getae' have been associated with the 'Antae' mentioned by Prokopios 3.14.2 and anecdota 18.20 by Stein, HBE, vol.2:105-106.

³⁸ P.N. Ure, Justinian and His Age, (Baltimore, 1951), 233 and Obolensky, "Frontier Zones", 303, 308.

³⁹ Note, for example, that the year 502 records Anastasius' strengthening of the Long Wall of Konstantinople because of the Bulgar raids in the region. Evagrius 3.38 and Jones, LRE, vol.1:231.

⁴⁰ F.E. Wozniak, "The Justinianic Fortifications in Illyricum: Was Refortification the answer to Barbarian Raids?" Fifth Annual Byzantine Studies Conference, Abstracts, Washington, D.C.: Dumbarton Oaks, 1979, 44; see also J.W. Barker, Justinian and the Later Roman Empire, (Madison, 1966), 178; and R. Browning, Byzantium and Bulgaria, (Berkeley,

of barbarian movements within the southern Balkans north of the Oite-Kallidromos frontier barrier. At the same time this research clearly shows the importance of the fortifications along the Oite-Kallidromos Range, which for the most part defended early Byzantine Greece from barbarian invasion.

The Sixth Encounter:(Possible)

But from 517 or 527 on,⁴¹ to follow up on Prokopios, 'Hunnic',⁴² Slavenic, and Antic⁴³ raids along the entire length of the eastern Balkans took place practically every year. From Thrace to Greece, panic and fear of the barbarian were at a fever pitch. Prokopios further states that the depopulation caused by this unsettling political situation created "a veritable 'Scythian wilderness'" in those regions.⁴⁴ Whether

1975), 33, for a similar assessment.

⁴¹ There is some question as to which year, 517 or 527, Prokopios considered Justinian took over the reins of the empire. Clearly Justin I was an aged ruler, and possibly Prokopios considered Justinian as the real power behind the throne as early as 517. Consult: A.A. Vasiliev, Justin the First. An Introduction to the Epoch of Justinian the Great, (Cambridge, Mass.: Harvard University Press, 1950), and G. Downey, Justinian and the Imperial Office, (Offprint), from Lectures in Memory of Louise Taft Semple, 2nd series, (Cincinnati: University of Cincinnati, 1968), 9-10.

⁴² Concerning Prokopios' ethnic terminology, see p.1, n.2 above.

⁴³ Concerning the 'Antae', see G. Vernadsky, "On the Origins of the Antae," JAOS 59(1939): 56-57, 59, 63, who considers them the forefathers of the Russian and Eastern Slavs. M. Graebner, "The Role of the Slavs within the Byzantine Empire, 500-1018," (Dissertation, Rutgers University, 1975), 12 and n.71, treats both the Slavs and Antae "as one and the same." Barker, Justinian, 195, calls them Slavs, as does Dvornik, The Slavs, 24.

⁴⁴ Prokopios anecdota 18.20-21.

Prokopios' report is literally correct or grossly exaggerated, or whether these practically annual raids would include a region as far south as the Malian Basin, is unclear.⁴⁵

The Seventh Encounter: (Sure)

The Dhema Pass and its fortifications are for the first time specifically described in the sixth century by Prokopios in the 'Hunnic' invasion of 539.⁴⁶ Here Thermopylai was tactically compromised, for although its walls were defended valiantly, the 'Hunnic' invaders found a way to circumvent these stalwart defenses. Unexpectedly, the 'Huns' found an ascending route that by-passed the narrows and fortifications of Thermopylai.⁴⁷ The only candidate for that ascending route through the mountains of Oite could be the Dhema Pass. Therefore, in 539 the Dhema military complex was somehow overcome, allowing the barbarians

⁴⁵ See S.G. Evans, A Short History of Bulgaria, (London, 1960), 28; M. Gimbutas, The Slavs, (New York, 1971), 100; and Obolensky, Commonwealth, 44, who accept Prokopios' statement and Koder/Hild, 53, who consider this statement as a possible exaggeration. Cf. P. Charanis, Balkan Studies 11(1970): 3. Stein, HBE, vol.2:305-310; and Jones, LRE, vol.1: 287, indicate the invasion of Thrace and Illyricum only.

⁴⁶ Prokopios bella 2.4.10. Barker, Justinian, 272; and C. Diehl, Justinien et la civilisation byzantine au VI^e siècle, (1901), vol.1:244 identified Prokopios' 'Huns' as Slavs. J.B. Bury, History of the Later Roman Empire fro the Death of Theodosius I to the Death of Justinian, (London: MacMillan, 1923), vol.2:296; Jones, LRE, vol.1: 277 (quoting Stein, "HBE", vol.2: 309-310); and A.A. Vasiliev, History of the Byzantine Empire, (Madison: University of Wisconsin Press, 1928), vol.1: 173, all call them Bulgars. Lemerle, "Invasions", 285, prefers to call them 'Bulgars' (or Kotrigurs).

⁴⁷ Concerning the previous use of this ascending route (ἀτραπιός) through Mt. Oite that went around and evaded Thermopylai, see: Herodotus 7.213-215 and Kase, Szemler, "Xerxes' March." Compare also Appian Syrian Wars 11.4.18; and Pausanias 10.20.1; 10.22.8; and 10.22. 10-11.

access to the Isthmus-Corridor, the Upper Kephissós Valley, and the heart of central Greece.

As a result of this stunning 'Hunnic' raid, which devastated central Greece down to the Korinthian Isthmus, Justinian commanded that the entire Thermopylai region was to be reorganized with a permanent garrison of two thousand στρατιῶται or professional troops,⁴⁸ who would replace the λιμιτάνεοι troops of old.⁴⁹

This Justinianic reorganization of the defenses⁵⁰ and troops along the Oite-Kallidromos frontier barrier meant that for the first time the frontier of north central Greece became, in fact as well as in theory, a unified military frontier.⁵¹ As such, this frontier was most likely placed under the care of its own sector command, who may have been even a dux.⁵²

⁴⁸ de aedificiis 4.2.13-14. See J. Maspero, "Φοεδερᾶτοι et Στρατιῶται dans l'armée byzantine au VI^e siècle," BZ 21(1912):97, 103, 106, 108; and Grosse, Römische Militärgeschichte, 276-280.

⁴⁹ Prokopios anecdota 26.29-34 and de aedificiis 4.2.14-15.

⁵⁰ The Dhema carbon-14 data do not support Prokopios' testimony in this instance, but Justinianic additions or improvements upon the upper courses of the walls and parapets could have indeed taken place. Unfortunately, such extant architectural examples have not been found at Dhema.

⁵¹ If we are to believe Prokopios' testimony in de aedificiis 4.2.14. The very sensitive and controversial issue of Prokopian reliability in the presentation of his panegyric ἑκφρασις, the de aedificiis, cannot be fully discussed here. Although Prokopios' account is our best and most complete source on the Thermopylai region in the mid-sixth century, serious problems do however exist that demand full and precise analysis. This analysis, it is hoped, will be published in the near future.

⁵² Concerning this rank, see: Th. Mommsen, Hermes 24(1889):272; R. Grosse, "Die Rangordnung der römischen Armee des 4.-6. Jahrhunderts,"

A Tactical Digression to the Seventh Encounter.

Little is known about troop numbers and concentrations between the fortified locations along the Oite-Kallidromos frontier barrier. In fact, before this Justinianic reorganization, there are only two references concerning troop strengths in the Thermopylai area. The first report is from a mid-third century source of doubtful authenticity, the vita Claudii of the historiae Augustae.⁵³ In this account it is recorded that a tribune during the reign of Decius (249-251) was hurriedly dispatched to Thermopylai with the following force:⁵⁴ 200 Dardanian foot-soldiers (milites), 100 cuirassiers (cataphractii), 60 horsemen (equites), 60 Cretan archers (sagittarii), and 1000 raw recruits (tiro-nii), all well armed.⁵⁵ In all, if this source is to be believed, 1420

Klio 15(1918):152-157; A.E.R. Boak, The Master of the Offices in the Late Roman and Byzantine Empires, (New York, 1919), 90; and Luttwak, Grand Strategy, 179, 228, n.162.

This unnamed sector commander would have then been immediately answerable to a certain Victorinus, who was charged with the defense of Illyricum during Justinian's reign. Groag, Spätrömischen Reichsbeamten, 79-80.

⁵³ vita Claudii 16. The entire question of the historical validity, date of composition, authorship, and source analysis of the scriptores historiae Augustae (hereafter H.A.), has vexed generations of scholars. For a discussion of the early bibliography on these highly controversial subjects, see the introductions in D. Magie, The Scriptores Historiae Augustae, (LCL), vol.1(1922), and vol.2(1924). The recent polemic by Sir Ronald Syme, The Historia Augusta. A Call for Clarity, (Bonn, 1971), updates this heated debate.

⁵⁴ Such a legio pseudocomitatensis, unlike the other central units of the Roman expeditionary force, had specific defensive tasks connected with the inland maintenance of strategic highways, passes, and important fortresses. Várady, Acta Antiqua 9(1961):365.

⁵⁵ vita Claudii 16.2-3.

men and horse were sent to Thermopylai.⁵⁶

The second pre-sixth century report of troop strengths at Thermopylai comes from the pagan historian Zosimus. Zosimus writes that in the late fourth century a certain commander, named Gerontius,⁵⁷ was temporarily put in charge of the Thermopylai garrison.⁵⁸ Whether this Gerontius was the "governor of the garrison at Thermopylae" as Vossius translates,⁵⁹ a dux, as Groag and Martindale speculate,⁶⁰ or a praefec-

⁵⁶ It is possible, if this report is true, that the deployment of this legio pseudocomitatensis might have occurred in the following manner. The 1000 tironii were divided between the strategic positions of Dhema and Thermopylai, as were the Cretan archers. The 200 Dardanians probably made up a mountain patrol force for the Thermopylai highlands and the Asopos River Gorge positions. The 60 light horse could have made up a messenger squadron for intercommunications between all the positions. Finally, the 100 heavy cavalry might have been an offensive shock force that could be rushed to relieve any threatened position. This last group was most likely stationed somewhere south, or to the rear, of the Oite-Kallidromos frontier barrier in a convenient location.

⁵⁷ Concerning this individual, see: Zosimus 5.5.5; M. Manitius, "The Teutonic Migrations, 378-412," CMH 1(1924):261; Groag, Spättrömischen Reichsbeamten, 66-67; Demougeot, L'empire romain 395-410, 166, n.241; and A.H.M. Jones, J.R. Martindale, J. Morris, The Prosopography of the Late Roman Empire, (Cambridge: Cambridge University Press, 1971), vol.1, s.v. 'Gerontius, no.6'.

⁵⁸ Gerontius' presence at both Thermopylai and then later at the Korinthian Isthmus clearly testifies to the temporary nature of his command: Zosimus 5.5.5 and 5.6.4-5. A command arranged by Flavius Rufinus, the praefectus praetorio orientis, in which Alarich's advance into eastern Greece and the Peloponnesos was to be assured: Martindale, Prosopography, vol.1, s.v. 'Flavius Rufinus, no. 18'.

⁵⁹ G.J. Vossius, (trans.), The History of Count Zosimus, (London: Green and Chaplin, 1814), 133.

⁶⁰ Groag, Spättrömische Reichsbeamten, 67 and Martindale, Prosopography, vol.1, who suggests that 'Gerontius, no.6' = 'Gerontius, no.4', the dux Skythiae.

tus, as Buchanan and Davis suppose,⁶¹ cannot be determined from Zosimus' text(5.5.5): Γερόντιον τὸν ἑφεσθηκότα τῆς Θερμοπυλῶν φυλακῆς. Of these possible choices, 'commander' or praefectus seems to be the best translation of Zosimus' neutral term ἑφεσθηκός. Even if Gerontius was a praefectus -- whether he was a praefectus alae, p. cohortis, or a p. castrorum is unclear -- this title would suggest he was a commander of a small force.⁶² Such a force could have temporarily manned the Middle Gate at Thermopylai and could have been easily withdrawn to allow the Visigoths passage along the coast. Furthermore, such a small force could have been easily transported to the Korinthian Isthmus, where Gerontius again betrayed the Greeks.

Prokopios was probably the first to allude specifically to the pre-sixth century garrison troops of the Dhema military complex: once each in his anecdota and de aedificiis, where he refers to them as local farmers.⁶³ If this is so, then these troops were probably λιμιτάνεοι, who were static and permanently settled garrisons.⁶⁴ Such border troops,

⁶¹ J.J. Buchanan, H.T. Davis, Zosimus. Historia Nova, (San Antonio, Texas: Trinity University Press, 1967), 197.

⁶² Between 300 to 500 men. See Grosse, Klio 15(1918):152, 146-149 and id., Römische Militärgeschichte, 273-274. Note here also the similarity between the titles praefectus castrorum and ἑφεσθηκότα τῆς φυλακῆς of Zosimus' text.

⁶³ anecdota 26.31-32 and de aedificiis 4.2.15.

⁶⁴ Concerning the institution of the λιμιτάνεοι and στρατιῶται, see: Th. Mommsen, "Das römische Militärwesen seit Diocletian," Hermes 24(1889): 209; Grosse, Römische Militärgeschichte, 27, 63-65, 275-276; Diehl, Justinien, 226-228; Jones, LRE, vol.1:608, 649, 685-686; and A.R. Neumann, "Limitanei," RE Supplement 11(1968):876-888.

who were granted land in return for military service, could only have been stationed near the Dhema Pass where fertile fields existed both to the north in the Arakovítsa Plain and to the south in the upland Pergára Plain located near Kouvéla.

As to where and in what concentrations the στρατιῶται of the Justinianic reorganization were sprinkled throughout the Oite-Kallidromos frontier barrier can only remain a matter of conjecture, but a speculation can be made based upon the known archaeological remains. First, fort area sizes of approximately 0.6 to 0.7 hectare frequently contained, with few exceptions, one single troop unit.⁶⁵ This unit, called a numerus, amounted to about 300 men during the sixth century.⁶⁶ Therefore, based upon fort area alone, the Dhema military complex, the Kolonos Hill and Middle Gate area, and the Fylakí complex all could have supported their own garrisons or numeri.⁶⁷ The fortifications above the Asopos Gorge and Muntzmeno Ravine probably required fewer soldiers to man their walls and patrol their neighborhoods. Possibly the sixth century military unit of one hundred men, called a λόχος, could have sufficed for each.⁶⁸ The lone Moní Panagías/Dhrakospiliá barrier wall and tower would have required even fewer soldiers. Perhaps only twenty-five

⁶⁵ E. Fabricius, "Limes," RE 13(1926): 577,26-29.

⁶⁶ Grosse, Römische Militärgeschichte 273-274; Bury, LRE, vol.2:76; Stein, HBE, vol.2:85 Jones, LRE, vol.1:655; and H.T. Rowell, "Numerus," RE 17(1936):1337,67-1339,12.

⁶⁷ Pritchett, Passes, 226, n.39, supposes that all 2000 στρατιῶται mentioned by Prokopios were placed at Dhema.

⁶⁸ Grosse, Römische Militargeschichte, 274.

men at most were needed.

But what of the remaining one thousand or so soldiers, an entire Byzantine legion,⁶⁹ whom Prokopios says were permanently stationed at Thermopylai? Obviously, they were not stationed in the various fortifications along the Oite-Kallidromos frontier barrier; instead, these troops were probably billeted where they could be rushed at a moment's notice to any endangered point along the entire frontier. The provision for such a reserve force and its opportune deployment are consistent with the defense-in-depth strategy of the sixth century. An appropriate staging area, embarkation point, and supply dump behind (to the south) the Oite-Kallidromos Range was Kouvéla (see Map II). Not only are early Byzantine remains present throughout this vast site,⁷⁰ but Kouvéla's position, astride the highway of the Isthmus-Corridor near the route of the Anopaea Path, assured it rapid access to the Dhema Pass and to all of the above mentioned fortifications, as well as to the south (see Maps I and II).

One event, which supports this speculation, is the relief of Kroton in the early spring of 552.⁷¹ Prokopios relates that the Thermopylai garrison sailed "with all speed to Italy" in order to relieve that beleaguered city.⁷² This military operation proved successful, for the

⁶⁹ Th. Mommsen, Hermes 24(1889):260.

⁷⁰ See p. 55, n.55 above.

⁷¹ Prokopios bella 8.26.1-2. See also T. Hodgkin, Italy and Her Invaders: 535-553, (Oxford, 1885), vol.4:702-703.

⁷² Prokopios bella 4.15.9, states that 100 men could be carried per

Isthmus-Corridor and its broad highway insured a swift and unimpeded journey to the early Byzantine embarkation point of Kirrha on the Korinthian Gulf. Put simply, the entire Thermopylai garrison did not relieve Kroton for such a denuding of the Oite-Kallidromos frontier barrier would have been a foolish tactical decision. Instead, the relief force which was sent to aid Kroton more likely was the reserve legion stationed at Kouvéla.⁷³ Such alacrity in the deployment of reserve troops was, after all, the entire point behind the defense-in-depth strategy.

Before concluding this tactical digression, Prokopios in his description of the frontier reorganization of north central Greece also carefully described an important κλεισούρα through the mountainous Greek frontier and the fortifications of Myropóles that defended it:

(17)In (sc. the region of) Herakleia he did as follows. As one goes from Illyricum to Greece, two mountains stand very close to one another for a long distance, in a few words, producing in the midst of the region (sc. of Herakleia) a narrow pass, of the kind, which they (sc. the Romans) customarily call κλεισούραι. (18)And a stream comes down between them, in the summer season flowing forth with pure drinking-water from the mountains, which rise there forming a small mountain torrent. (19)But whenever it rains, a torrent very

ship. Cf., also bella 3.11.15-16 and 3.11.13-14, for the transport capacity of δρόμους and transport ships, see: R.B. Nelson, The War-fleets of Antiquity, 51. The Straits of Otranto, between the coasts of Apulia, Italy and Albania were 72 km. wide at their narrowest. Given a favorable wind, a ship could cross it in one day, Cicero ad Atticum 4.1.4 and ad familiares 16.9.1. Riepl, Nachrichtenwesen, 203, states that the sea route from the Korinthian Gulf to Italy took 4.5 days at most. With a good wind, one could travel from Korinth to Puteoli in 5 days, Philostratus vita Apollonii 7.10.

⁷³ Cf. the view of this military operation as reconstructed by Stählin, "Thermopylen", 2410,9-12, who has the Thermopylai garrison embarking from a harbor location in the Malian Gulf!

deep and violent billows down there, which gathers its volume from the mountain streams, which course down from the peaks thereabout. (20)Here (sc. via this narrow pass or κλεισοῦρα) it was possible for the barbarians with no difficulty to make an entrance both against Thermopylai and (sc. that region of) Greece. (21)But there was on either side of the narrow passage two strongholds from ancient times, on the one side the city of Herakleia, which I have just mentioned, and on the other, Myropóles as it is called, set apart (sc. from Herakleia) by no short distance. (22)And both these strongholds had lain in ruin from ancient times, so the Emperor Justinian rebuilt them and cut off and fortified the narrow passage with a very strong cross-wall, which he made fast to each of the two mountains, thereby blocking the pass from the barbarians, and the stream now forms a pond inside the wall, flows over it, and then goes wherever it chances.

On the basis of the above text,⁷⁴ the known topography of the southern Malian Basin, and the Dhema architectural remains, the κλεισοῦρα and the toponym of Myropóles must be equated with the Dhema Pass and its fortification complex. Unlike the many other fortresses briefly mentioned in this passage, Prokopios described well the topography of the κλεισοῦρα and the site of Myropóles by offering four clues as to its location: 1) it is located in the region of Herakleia at one 'side' of its κλεισοῦρα 2) it was the object of renovation by Justinian's military engineers; 3) it was not situated in the immediate neighborhood of Herakleia; and 4), near Myropóles was a crosswall, which blockaded the narrows of the κλεισοῦρα and allowed a nearby stream to collect and form a pond behind it. The location of the remains of the Dhema military complex satisfies all of these conditions far better than any previous suggestion,⁷⁵ and the location and position of Crosswall D within the

⁷⁴ de aedificiis 4.2.17-22. This translation is based upon the critical edition of J. Haury, G. Wirth, (Leipzig, 1964).

⁷⁵ Cf., MacKay, 250, who identified Myropóles with either Κλισόπορο,

Dhema Pass and near the Xírias mountain stream support this view.

The Eighth Encounter: (Sure)

This Justinianic reorganization of the Oite-Kallidromos frontier barrier was tested in the year 559 when a Kotrigur raiding party was prevented from entering central Greece.⁷⁶ After the year 559, silence falls on Thermopylai until it is again briefly mentioned in the tenth century.⁷⁷

II.

Encounters: End of the Sixth Century.

In the last quarter of the sixth century, the entire tactical defense of the frontier of north central Greece must have been put to its greatest test, for a marked resurgence of barbarian activity can be perceived among the scattered and fragmentary historical sources. Despite their fewness in number,⁷⁸ these sources chronicle the repeated incursions of the Avars and Slavs deep into the southern Balkans during the reigns of the emperors Tiberius and Maurice. Unfortunately, the northern frontier of central Greece is not specifically mentioned in

a rocky height overlooking the Dhema Pass from the east, or with Κάστρο τῆς Ὠρίδας to the south. Koder/Hild, s.v. 'Thermopylai', 274, identified Myropóles with the Fylakí complex.

⁷⁶ Agathias 5.23.6. Lemerle, "Invasions", 286.

⁷⁷ See Ioannis Scylitzae Synopsis Historicorum, ed., H. Thurn, in CFHB, vol.5: 364,76-80. Cf., Ioannis Zonaras Epitome Historicorum, ed., T. Büttner-Wobst, in CSHB, vol.46: 558-559.

⁷⁸ Concerning the general silence of the Byzantine sources on Greece after 578, see Koder/Hild, 54.

these testimonia; rather, these historical sources only generally narrate the devastation of Thrace, Makedonia, Thessaly, and Greece.

Greece is first mentioned, during the brief reign of Tiberius I Konstantine(578-582), as being the victim of barbarian invasion. In the course of his third (581),⁷⁹ or fourth year (582) as emperor,⁸⁰ Avar and Slavic invaders are described as having broken into Thrace, Pannonia, and parts of Greece. Even as Greece itself was being laid waste, Tiberius was helpless to do anything about it as he had no available forces to check the barbarian advance.⁸¹ Again, as with the second century invasion of the Κοινοβούκοι, Greece was on its own.

During the reign of Maurice(582-602), the sources speak of further invasions and even barbarian settlement as occurring in the southern

⁷⁹ John of Biclar Chronica s.a. 579,1 = MGH,AA, vol.11:215. (Cf., J. Campas, Juan de Biclar, Obispo de Gerona, (Madrid, 1960), 88.) Lemerle, "Invasions", 289, n.2, rightly questions John's chronological exactitude. See also John of Ephesus, 6.25.30-31 = p.432. (Cf., Lemerle, "Invasions", 290, n.1, for Michael the Syrian, who used John as his source for this event, Chronique de Michel de Syrien, ed., trans., J.B. Chabot, (Paris, 1901), vol.2:362.) Cf., also Prokopios bella 7.40.33, wherein Prokopios also reports that the barbarians were "actually spending winter (sc. in Europe) as if in their own land and having no fear of the enemy." See R. Browning, Byzantium and Bulgaria, (Berkeley/Los Angeles: University of California Press, 1975), 37; and J. Koder, "Zur Frage der slavischen Siedlungsgebiete im mittelalterlichen Griechenland," BZ 71(1978): 315, who state that the Slavs were in Greece after 578.

⁸⁰ Menander, frag. 47 = FHG vol.4:252. John of Biclar Chronica s.a. 581,2, = MGH,AA, vol.11:216, says the fifth year. Cf., Campas, Juan de Biclaro, 90. Hauptmann, 160, n.4, states states that Greece was overrun after 582. See also P. Charanis, "On the Slavic Settlement in the Peloponnesus," BZ 46(1953): 91-103; and ibid., "Ethnic Changes in the Byzantine Empire in the Seventh Century," DOP 13(1959): 36-37, 40.

⁸¹ Menander, frag. 48 = FHG vol.4:252; and Evagrius 3.25.

Balkans.⁸² First, Evagrius claims in his Ecclesiastical History that in 584 the Avars raided the Long Wall of Konstantinople, Anchialus, Singidunum, and 'all Hellas'.⁸³ Second, the Chronicle of Monemvasia states that the Avars in the sixth year of Maurice (ca. 587) "subjugated all of Thessaly, Greece, Old Epirus, Attica, and Euboea."⁸⁴ Third, the brief mention of a tenth century epitomizer of the geographer Strabo sums up the situation in the southern Balkans during Maurice's reign: "And now Skythian Slavs inhabit all Epirus and almost all Greece, the Peloponnesos and Makedonia."⁸⁵ Finally, the author(s) of the Acta S. Demetrii clearly and firmly reports that the Avars and Slavs were in control of the whole of Makedonia, Thessaly, Achaea, Epirus, and Illyricum.⁸⁶ This sacrifice of the southern Balkans took place because the plagues of the mid-sixth century and the repeated barbarian devastations had depopu-

⁸² K. Andrews, Castles of the Morea, (New Jersey, 1953), 136, states that the Slavs first invaded the Peloponnesos around 583-586. Vasiliev, Byzantine Empire, vol.1: 216; and Bury, LRE, vol.2:298, state that permanent Slavic settlement on imperial soil began around 587.

⁸³ 6.10.21-26.

⁸⁴ P. Charanis, "The Chronicle of Monemvasia and the question of the Slavic Settlements in Greece," DOP 5(1950):147. P. Lemerle's rebuttal "La Chronique improprement dite de Monemvasie: La contexte historique et légendaire," R.É.Byz 21(1963):5-49, has been recently overturned by P. Schreiner, "Note sur la foundation de Monemvasia en 582-583," Travaux et Memoires 4(1970):471-475.

⁸⁵ Excerpta ex Strabone, frag. 47 = C. Müller, GGM, vol.2:574. Hammond, Migrations, 66, states that this report is an exaggeration, but one which indicates the degree of settlement in these regions.

⁸⁶ Acta S. Demetrii, Migne, PG, vol.116, 1325. Concerning the date of this attack, see: p. 85, n.90, below.

lated the region of military manpower.⁸⁷ Incongruously, at this crucial moment in eastern European history, the principal Byzantine army was occupied in Lycia, and it was only with the army's return after the Persian peace of 591 that the Slavs and Avars were again checked at the Danubian frontier.⁸⁸ Irreparable damage, however, had already been done because the barbarian settlement of Greece had begun.

In this same context the historical events surrounding the welfare of the city of Thessaloniki are of considerable importance, for Thessaloniki stood at the junction of all the roads heading south from the northern Balkans.⁸⁹ If Thessaloniki fell or was surrounded, then the fortifications of the Oite-Kallidromos Range would receive the full brunt of any subsequent invasion. Truly they would become the final barrier between civilization and incursive savagery for north central Greece. The famous siege of Thessaloniki by the Slavs and Avars in the

⁸⁷ Justinian novellae 25 praef. In particular, the plague of 542 which lasted three years and which reduced the population of the Balkans 40 to 50% by 600 A.D. J.C. Russell, "Late Ancient and Mediaeval Population," TAPS 48(1958): 37-42; J.C. Teall, "The Barbarians in Justinian's Armies," Speculum 40(1965): 294-322; P. Charanis, "Observations on the Demography of the Byzantine Empire," in P. Charanis, Studies on the Demography of the Byzantine Empire, 1-19; and Russell, "That Earlier Plague," Demography 5(1968): 174, 179. By the sixth century, the Thracians were practically exterminated by invasions: P. Charanis, "Ethnic Changes in the Byzantine Empire in the Seventh Century," DOP 13(1959): 32-33.

⁸⁸ Concerning these Danubian campaigns from 591 to 602, see the important work of L. Hauptmann, "Les rapports des byzantins avec les slaves et les avars pendant la seconde moitié du VI^e siècle," Byz. 4(1927-1928):160, 161, n.1.

⁸⁹ See S. Vryonis, Jr., Byzantium and Europe, (London, 1967), 69-70; G.W. Hoffman, "Thessaloniki: The Impact of a Changing Hinterland," EER 2(1968): 1-27; and Obolensky, Commonwealth, 18, 21-22.

sixth century has been variously dated:⁹⁰ to either as early as 578/579,⁹¹ or as late as 597.⁹² But despite privations, the walls of Thessaloniki remained intact while the rest of the province was devastated and depopulated.⁹³

The late sixth century abandonment or fall of the fortifications of the Oite-Kallidromos Range to the Slavs must have been nearly contemporaneous to the siege of Thessaloniki.⁹⁴ Moreover, the presence of these invader-settlers in the southern Malian Basin is supported by the linguistic analysis of its toponyms. Specifically, Vardhátēs, located near the northern entrance of the Dhema Pass, is a Slavic toponym,⁹⁵ as

⁹⁰ The controversy concerning the date of the siege of Thessaloniki revolves around the contemporary narrative account of the Acta S. Demetrii, in PG, vol.116:1293, wherein the author or authors report that "on Sunday, 22 September, when Maurice was emperor," Thessaloniki was attacked by the Slavs.

⁹¹ Based upon John of Ephesus, p. 432. In 578/579: P. Charanis, "On the Capture of Corinth by the Onogurs," Speculum 27(1952): 346-347; and V. Tapkova-Zaimova, "Zur quelques aspects de la colonization slave en Macédoine et en Grèce," Ét.Balk 1(1964): 115. Stadtmüller, 92, prefers 581. Ostrogorsky, HBS, 81, 586.

⁹² See: M. Nystrazopoulou-Pélékidou, "Συμβολὴ εἰς τὴν Χρονολόγησιν τῶν Ἀβαρικῶν καὶ σλαβικῶν ἐπιδρομῶν ἐπὶ Μαυρικίου (582-602)," Συμμείκτα 2(1970): 145-206; Lemerle, "Invasions", 294; Dvornik, The Slavs, 40; Obolensky, "Northern Neighbours", 481 (cf., Commonwealth, 51, for the year 586); and Zakythinos, 53, 55.

⁹³ John of Nikiu, 109,18, R.H. Charles, trans., The Chronicle of John, Bishop of Nikiu, (Oxford: Williams and Norgate, 1916).

⁹⁴ As seen from the evidence in the Dhema pottery record. See Chapter Two, pp. 47-48 above.

⁹⁵ See M. Vasmer, Die Slaven in Griechenland, (Abhandlungen der preussischen Akademie der Wissenschaften, 1941), reprint (Leipzig, 1970), 103. See also the revealing distribution maps of the Slavic place-names in Greece in Koder, BZ 71(1978), maps 1-4.

is Mendenitsa near Thermopylai,⁹⁶ and many others throughout the Malian Basin.⁹⁷

That the Dhema Pass was breached by these Avar and Slavic invaders and that the Isthmus-Corridor was used by them seem certain. Again linguistic evidence in the tribal regions of ancient Doris, Phokis and West Lokris indicates the passing of Slavic-speakers.⁹⁸ Recently, the research of Koder and Rosser has added a further dimension to this question of the Avar and Slavic invasion route into central Greece. Both, on geographical and topographical grounds, have postulated the use of the Isthmus-Corridor by these invaders.⁹⁹ They cite a middle Byzantine source known as the Chronicle of Galaxidi, in which a tenth century Bulgar invasion used the route of the Isthmus-Corridor. On the basis of this historical parallel, in addition to toponymic evidence, both Koder and Rosser have speculated that the route of the Isthmus-Corridor was also the route used in the late sixth century by the Avars and Slavs.

In conclusion, since Menander, Evagrius, John of Ephesus, John of Biclar, and the Chronicle of Monemvasia, speak of the Avar devastation of, and Slavic settlement in, Greece during the last quarter of the

⁹⁶ Vasmer, Die Slaven, 106.

⁹⁷ ibid., see section 5c: 'Thessalian Phthiotis', 102-108.

⁹⁸ Vasmer, Die Slaven, 102-108; 113-118.

⁹⁹ See J. Koder, "Hellas," Reallexikon zur byzantinische Kunst 2(1971):1114; id., BZ 71(1978):322; and J. Rosser, "The Role of the Great Isthmus Corridor in the Slavonic Invasions of Greece," Byzantinische Forschungen, due to appear in 1983. The author expresses his thanks to Professor Rosser for the opportunity to read his latest research, while it was still in manuscript form.

sixth century, it must be true.¹⁰⁰ Dhema, therefore, succumbed to these invaders sometime in the last quarter of the sixth century. This conclusion is supported by the archaeological and scientific data from Dhema, by the historical testimonia, and by the nearly simultaneous disappearance from the literary sources of urban settlements and forts in Thessaly and central Greece during the same period.¹⁰¹

¹⁰⁰ Tapkova-Zaimova, Ét. Balk 1(1964):111-123; Schreiner, Travaux et Memoirs 4(1970):471-475; L. Maksimovic, in Mélanges Georges Ostrogorsky, vol.2:271; P. Charanis, "Observations on the History of Greece During the early Middle Ages," Balkan Studies 11(1970):3, 15; Mango, Byzantine Architecture, 161; and Obolensky, "Northern Neighbours", 480. The principal supporters of a later date for the Slavic settlement of the southern Balkans are: I. Nestor, "La pénétration des slaves dans la péninsule balkanique et la Grèce continentale," Revue des Études sud-est européennes 1(1963):67; and Lemerle, R.É.Byz 21(1963):36, 48.

¹⁰¹ Ancient sites that were totally eclipsed in the face of the Slavic invasions of the late sixth century A.D. are: Ambrosos/Amphrysos, Balaea, Bumelitaia (Byz. Bumelita), Daphnusia, Delphi, Drymia, Echinus, Herakleia, Homolion, Hagios Konstantinos, Kottai, Leontarium, Myropoles, Opus (Byz. Atalante), Ounnion, Peirasia, Phakion (Byz. Petrinon), Pharkadon, and Sakkus.

Sites that were temporarily abandoned at the end of the sixth century are: Aigosthena, Amphissa (Byz. Salona), Anthedon, Antikyra, Pherai (Byz. Belestinos), Brauron, Olosson (Byz. Elosson), Elateia, Eleusis, Xyniai (Byz. Ezeros), Larisa Cremaste (Byz. Gardikia Hetera), Glyphada, Iolkos (Byz. Golos), Halos (Byz. Halmyros), Hypata (Byz. Neai Patrai), Ithome (Byz. Phanarion), Glaphyrai (Byz. Kapraina), Kerkineon (Byz. Kastri), Koroneia, Lamia (Byz. Zetunion), Lebadeia, Liconia, Lutro, Stenae (Byz. Lydostomion), Melitaia, Metropolis, Olizon, Pagai, Phalara (Byz. Stylida), Plataiai, Skarpheia, Steiri, Subala, Tanagra, Ternabos, Thespiiai, Thisbai, and Tithora. Koder/Hild, passim.

CHAPTER IV

CONCLUSIONS.

It has been the purpose of this study to examine the topography, archaeology, and history of the Dhema Pass and its fortifications during the fourth through sixth centuries A.D.

Chapter One showed that the Malian Basin was the focus of north-south overland communications for the eastern half of the Balkan peninsula. As the focus of this north-south traffic, the control of certain passes became the crucial concern of the basin's contiguous provincial jurisdictions. Along the frontier of north central Greece, while the route through Thermopylai offered a feasible route around that barrier, the Dhema Pass was the most practical and efficient passage through the Oite-Kallidromos frontier barrier. All the other routes either through or around this barrier were found to be primarily for local convenience or light, non-wheeled traffic. Consequently, it was established that the Dhema Pass was the most crucial point along this frontier barrier as it was the northern entrance to the strategic Isthmus-Corridor route into central Greece. Moreover, it has been shown that through this broad and gently ascending pass coursed a wide, paved road that could easily accommodate armies and their wheeled supply trains. Finally, evidence has been gathered that indicates the Isthmus-Corridor could have offered a viable replacement for, or alternative to, the via

Egnatia in times of strategic necessity.

Chapter Two surveyed the architectural remains of the Dhema Pass and their tactical relationship to the rest of the defensive structures in the Oite-Kallidromos frontier barrier. This survey revealed that the architectural composition of the Dhema military complex is without comparison in the Oite-Kallidromos Range. In addition, the Dhema remains were subjected to an inter-disciplinary investigation in an effort to place them in a chronological context. These data indicate that the foundation, renovation and occupation of the Dhema military complex occurred between the fourth and late sixth centuries A.D. The late sixth century terminus post quem for the occupation of the Dhema military complex accords with that of other well-known archaeological sites as Anthedon, Athens, Korinth, Isthmia, and Kenchreai.¹ Furthermore, it has been shown that the defensive strategy for north central Greece did not

¹ H. Schläger, et al., "Der Hafen von Anthedon mit Beiträgen zur Topographie und Geschichte der Stadt," AA 83(1968): 27, 92. H.A. Thompson, "Athenian Twilight: 267-600," JRS 49(1959): 70; H.S. Robinson, The Athenian Agora, vol.5(1959):84; K.M. Setton, "The Archaeology of Medieval Athens," in Athens in the Middle Ages, (London: Variorum, 1975), 234; D.M. Metcalf, "The Slavonic Threat to Greece Circa 580: Some Evidence from Athens," Hesperia 31(1962): 134-157. Davidson, Hesperia 6(1937): 227-240; R.L. Scranton, Corinth, vol.16: 27-9; R. Carpenter, A. Bon, Corinth, vol.3(1936), part 1, 130. R.J.H. Jenkins, "Researches at Isthmia," BSA 32(1931-1932): 68-89; O. Broneer, "Excavations at Isthmia," Hesperia 27(1958): 1-37 and 28(1959): 298-343; and id., "The Corinthian Isthmus and the Isthmian Sanctuary," Antiquity 32(1958): 80-88. R.L. Hohlfelder, "The 'End' of Classical Kenchreai: Some Numismatic Evidence," AJA 74(1970): 197; id., "A Sixth Century Coin Hoard from Kenchreai," Hesperia 42(1973): 99; id., "Byzantine Coins from the Kenchreai Excavations: Numismatic and Historical Considerations," Second Annual Byzantine Studies Conference, (Abstracts), 42; id., "'Migratory Peoples.' Incursions into central Greece in the late Sixth Century: New Evidence from Kenchreai," Actes du XIV^e congrès international des Études byzantines, vol.3: 334, n.5.

depend upon the defense of the narrows at Thermopylai. Rather, the security of north central Greece was dependent upon the successful defense of the Dhema Pass. Finally, it is believed that Dhema provides a much-needed architectural comparison and chronological bench mark for the similarly constructed remains present in the region, and especially those of the Thermopylai fortification cluster.

Chapter Three collected those instances in the course of the invasions of the fourth through sixth centuries when the strategic Dhema Pass played a possible, probable, or sure role in the defense of north central Greece. During the fourth century, the fortifications of the Dhema Pass consisted of a small fortlet and possibly a single crosswall and it seems that this was all that was considered necessary to defend and regulate the pass. During the fifth century, the sources indicate a noticeable increase in barbarian activity, which apparently stimulated the enlargement of the Dhema military complex. Subsequent to these improvements, this military stronghold was tested often before its fall in 539. Following this disastrous 'Hunnic' sortie, the entire Oite-Kallidromos frontier barrier was reorganized by Justinian as the revitalized bastion of north central Greece. As a result of the continuing barbarian invasions and the virtual collapse of the Danubian frontier during the second half of the sixth century, the Oite-Kallidromos frontier barrier loomed ever greater as the sole remaining military frontier of north central Greece. Then, probably sometime in the last quarter of the sixth century and under unprecedented barbarian pressure from the north, the fortifications of the Oite-Kallidromos frontier barrier were

abandoned, possibly after they had been taken by force.

APPENDIX A

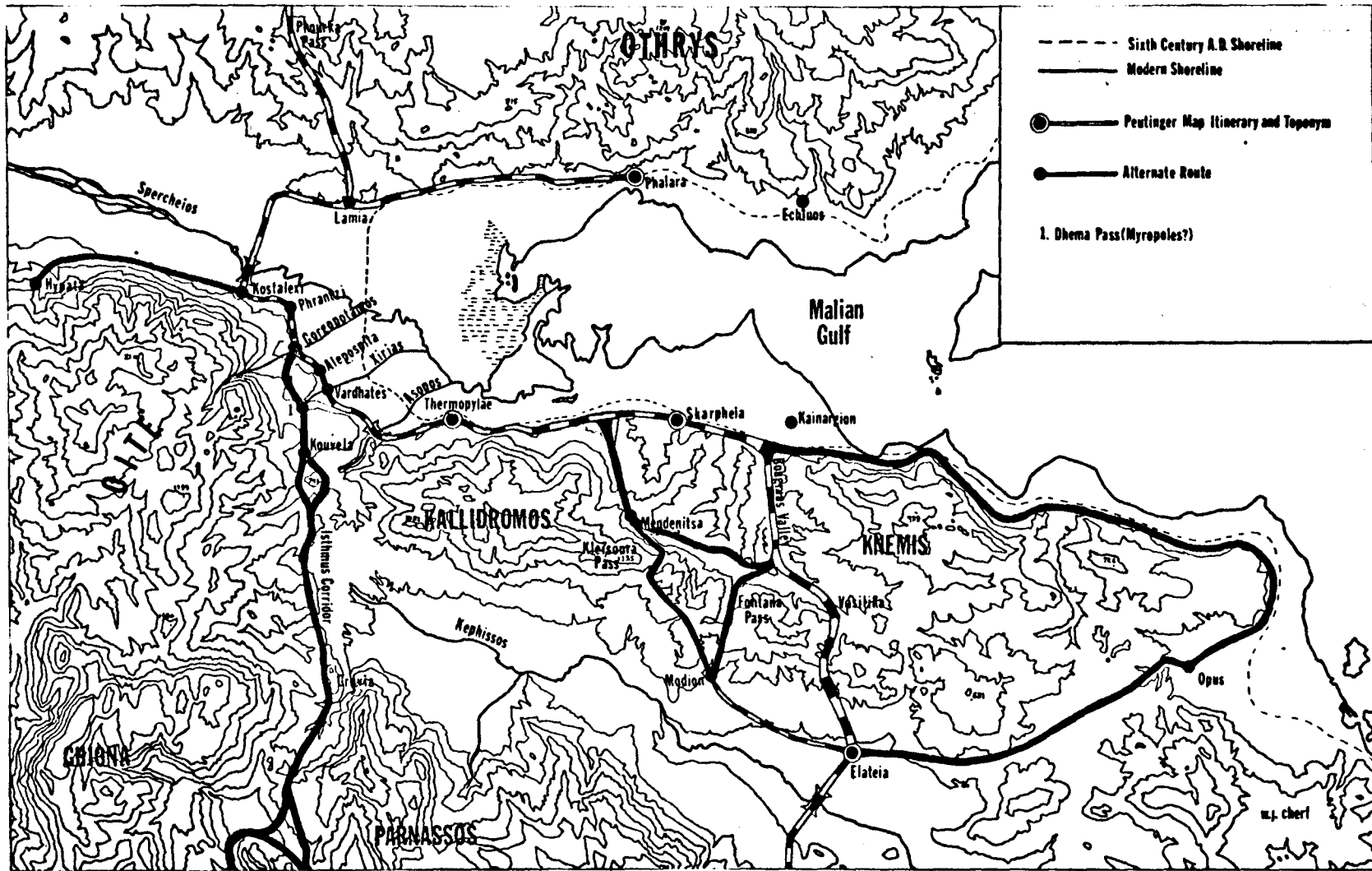
MAPS, ILLUSTRATIONS, AND PLATES.

MAP I

MAP OF THE LOWER SPERCHEIOS AND MALIAN BASIN(PDE)*

Scale 1:200,000

*Map adapted from E.W. Kase, G.J. Szemler, "Xerxes' March through Phokis (Her. 8,31-35)," Klio 64(1982):354-355.

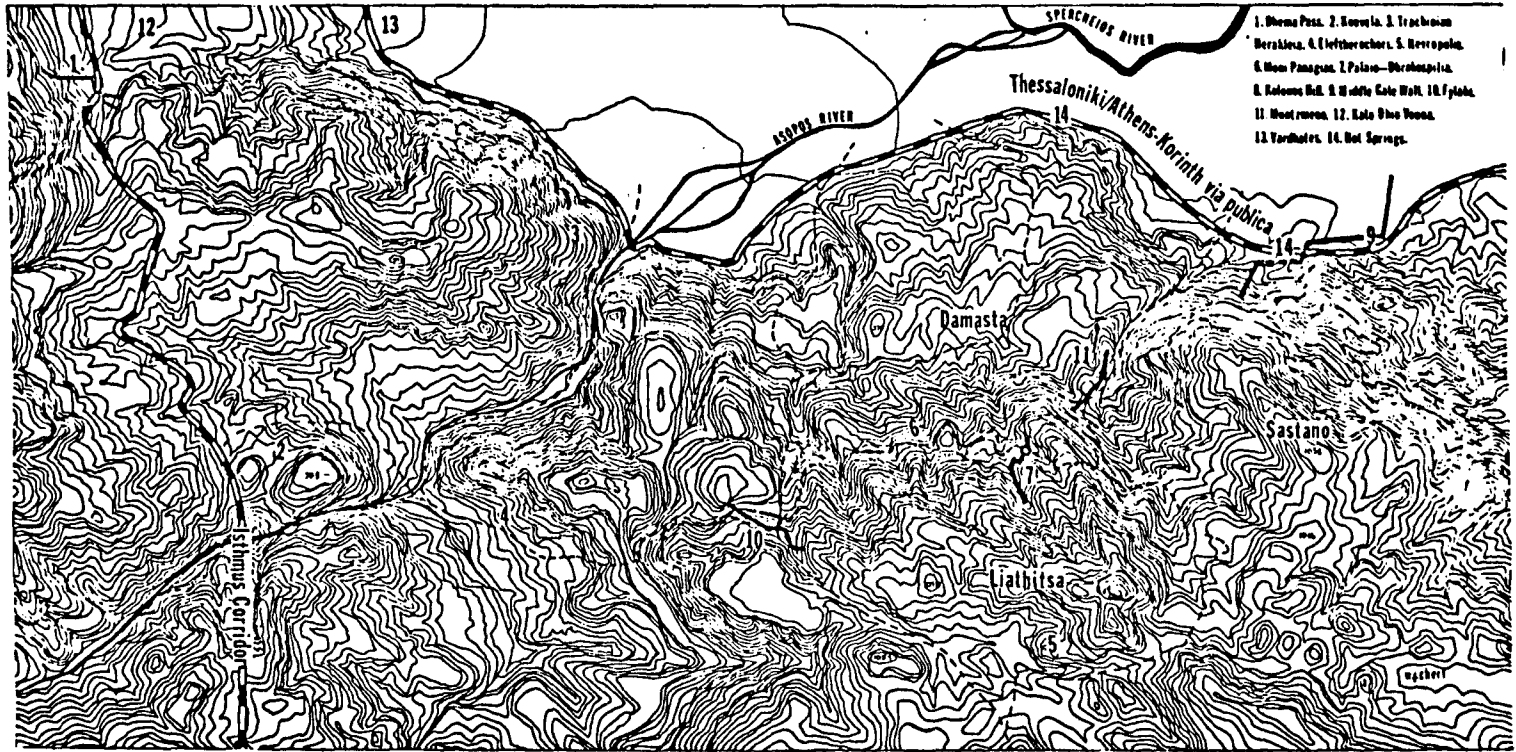


MAP II

THE OITE-KALLIDROMOS RANGE (MacKay)*
The Overland Routes and Early Byzantine Fortifications

Scale 1:40,000

*Map adapted from P.A. MacKay, "Procopius' De Aedificiis
and the Topography of Thermopylae," AJA 67(1963):241-55.

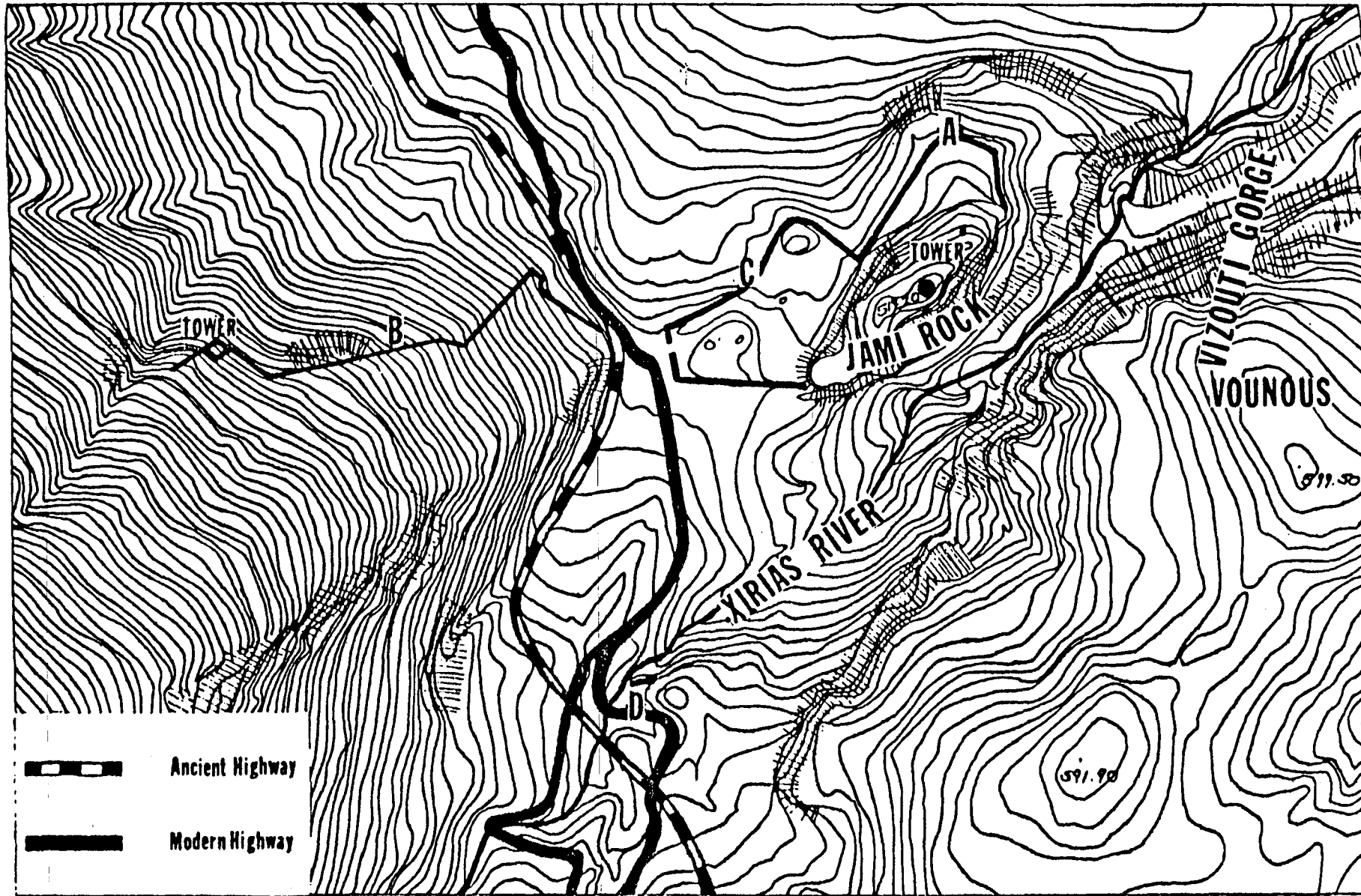


MAP III

DHEMA TOPOGRAPHICAL MAP(Greek)*

Scale 1:5000

*Map adapted from the Greek General Staff Map of 1943.



MAP IV

DHEMA TOPOGRAPHICAL MAP(PDE)*

Scale 1:100

*Map adapted from PDE NEH Report. 1977 Season.

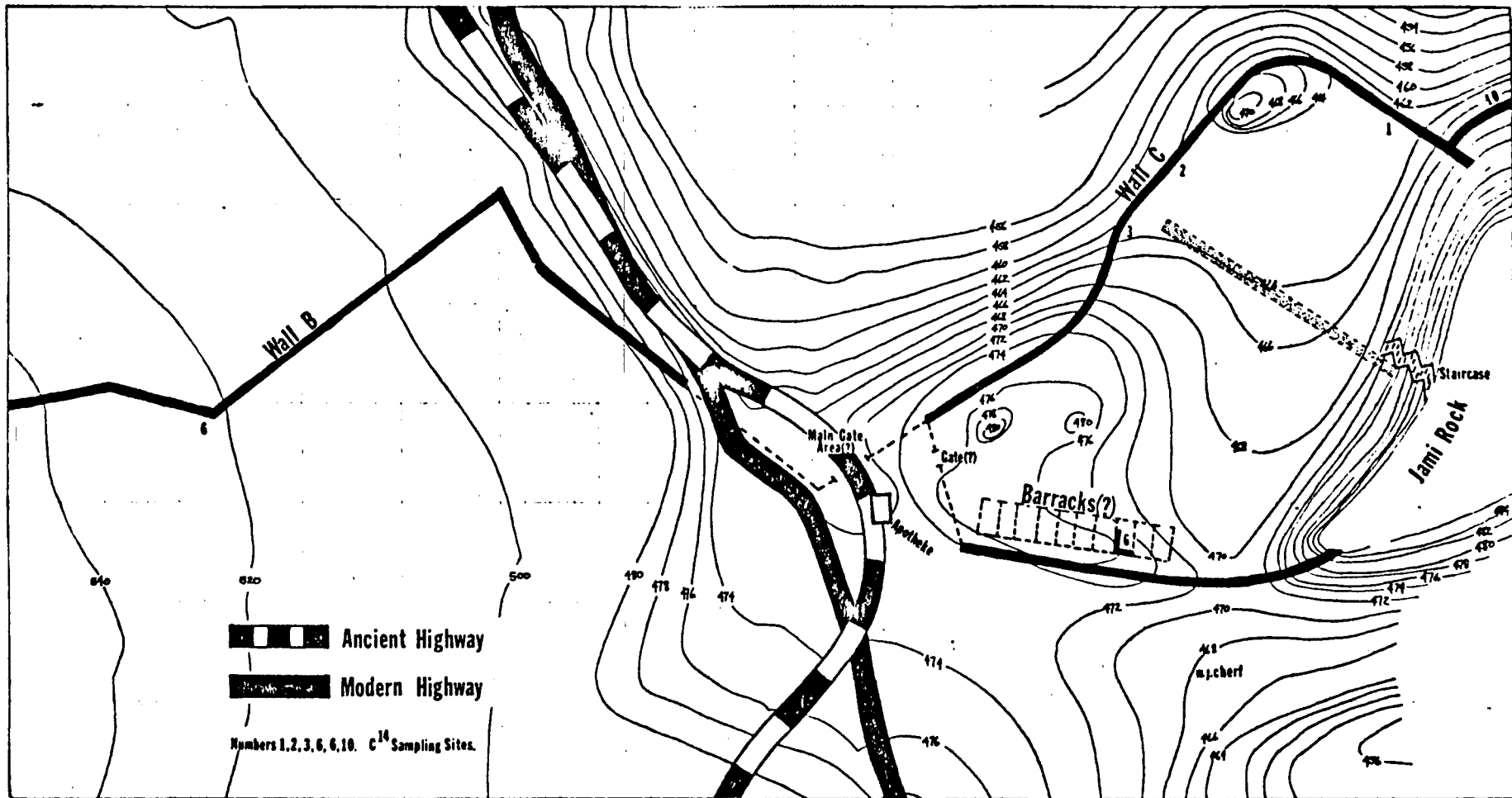


ILLUSTRATION A
West Slope Wall B Reconstruction
Scale 1:50

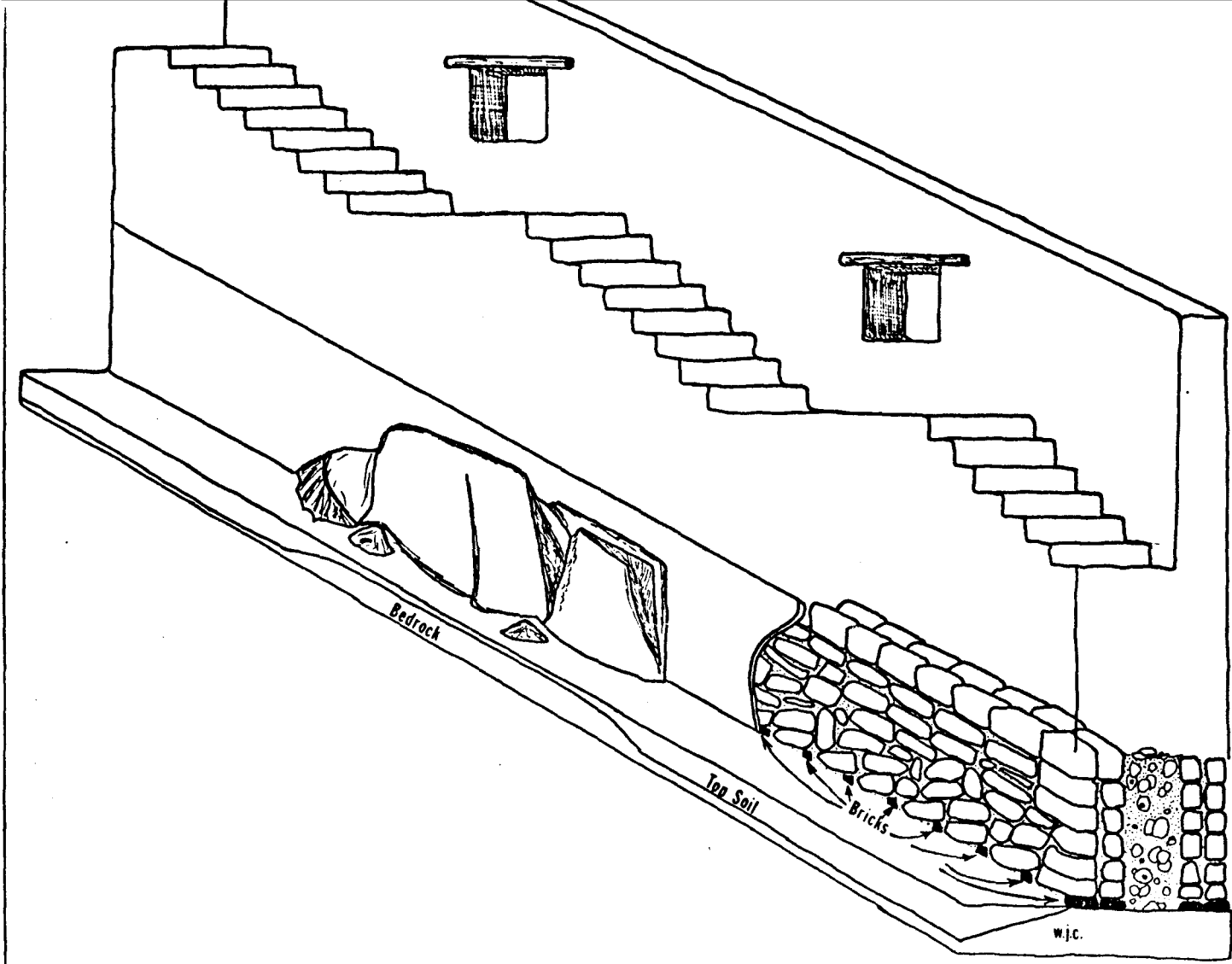


ILLUSTRATION B

Dhema Enclosure Wall C Reconstruction

Scale 1:50

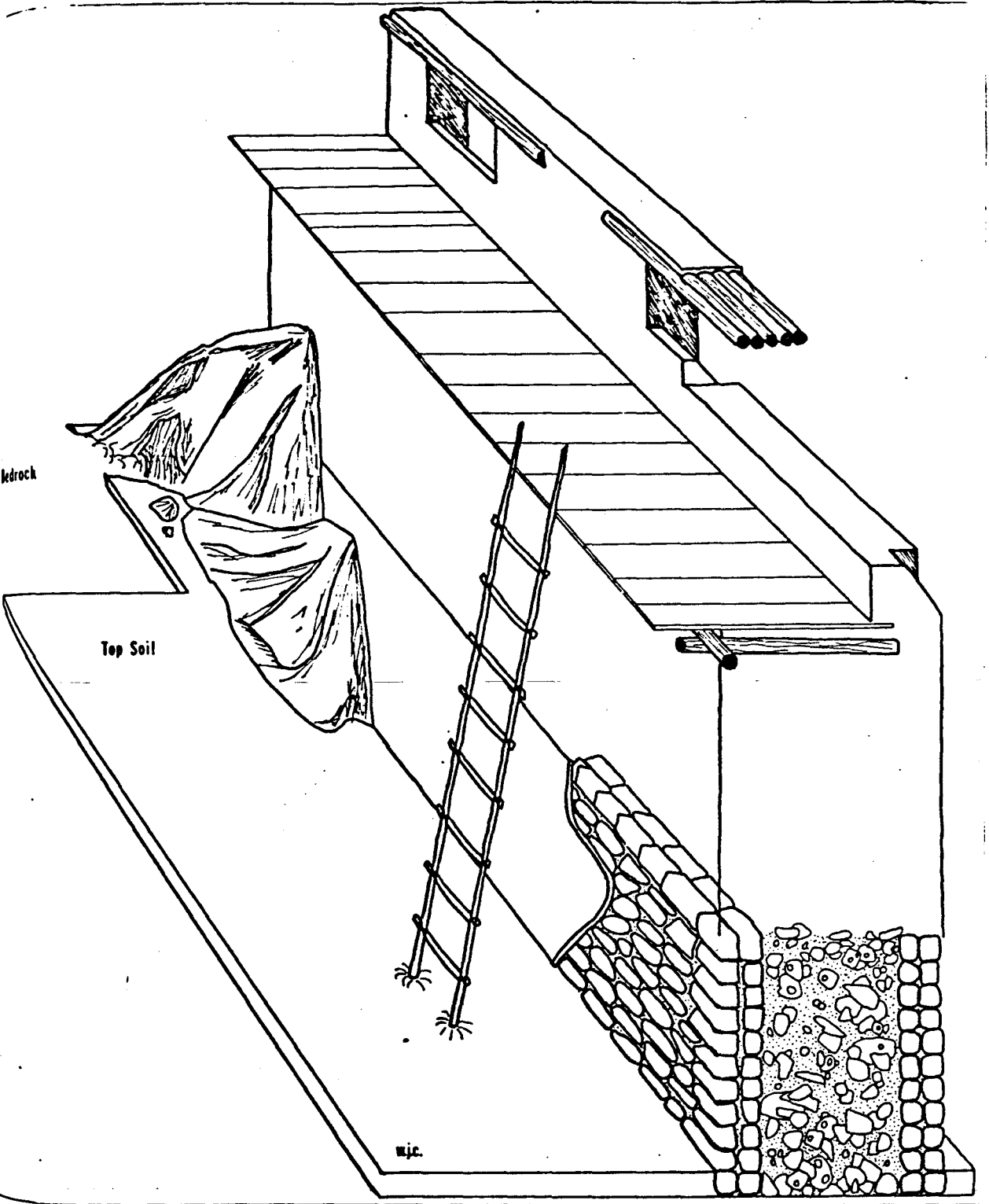


ILLUSTRATION C

Main Gate Area Reconstruction

Scale 1:50

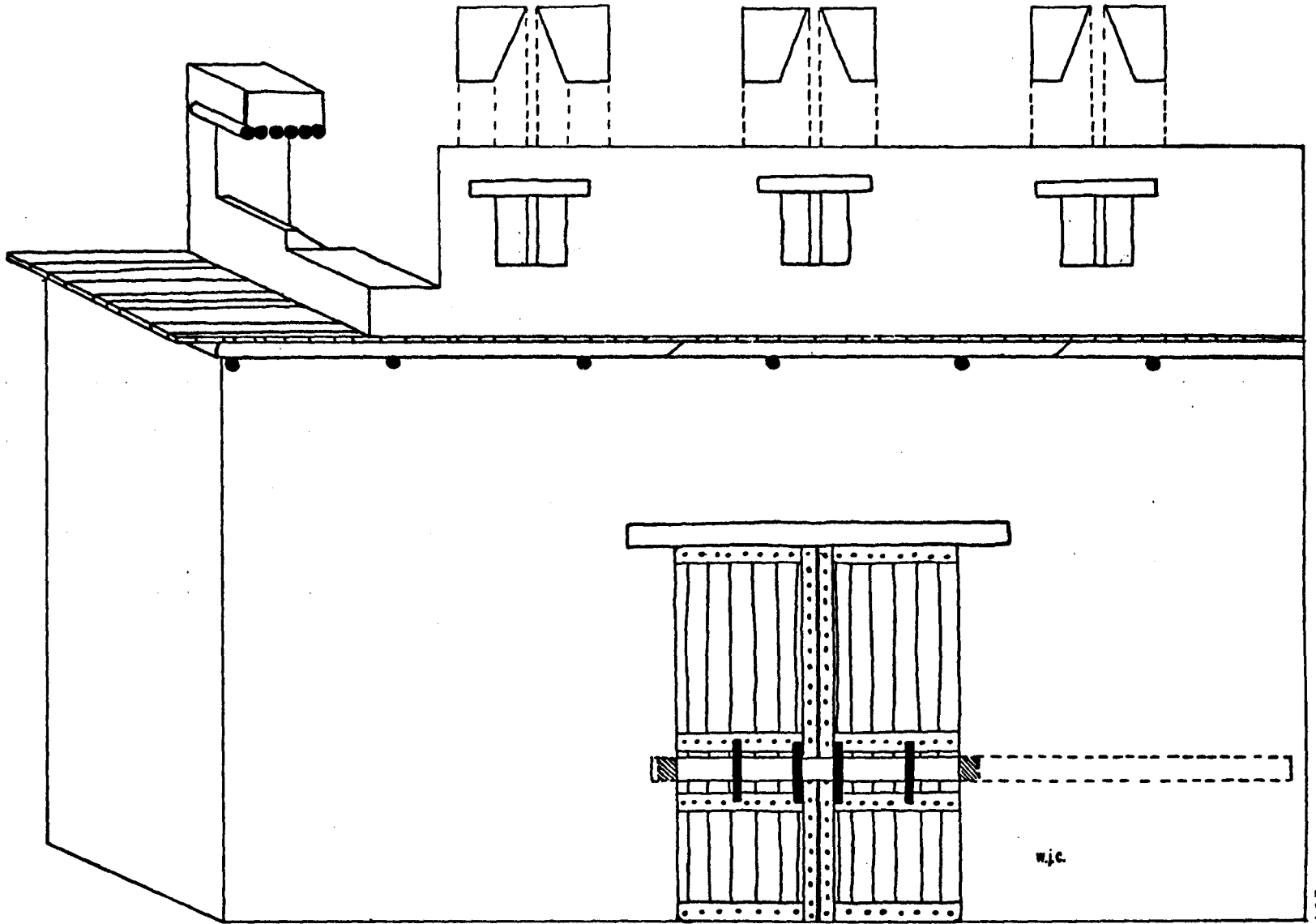


ILLUSTRATION D

Fourth Century Fort Reconstruction*

Scale 1:100

*Adapted from PDE NEH Report. 1977 Season.

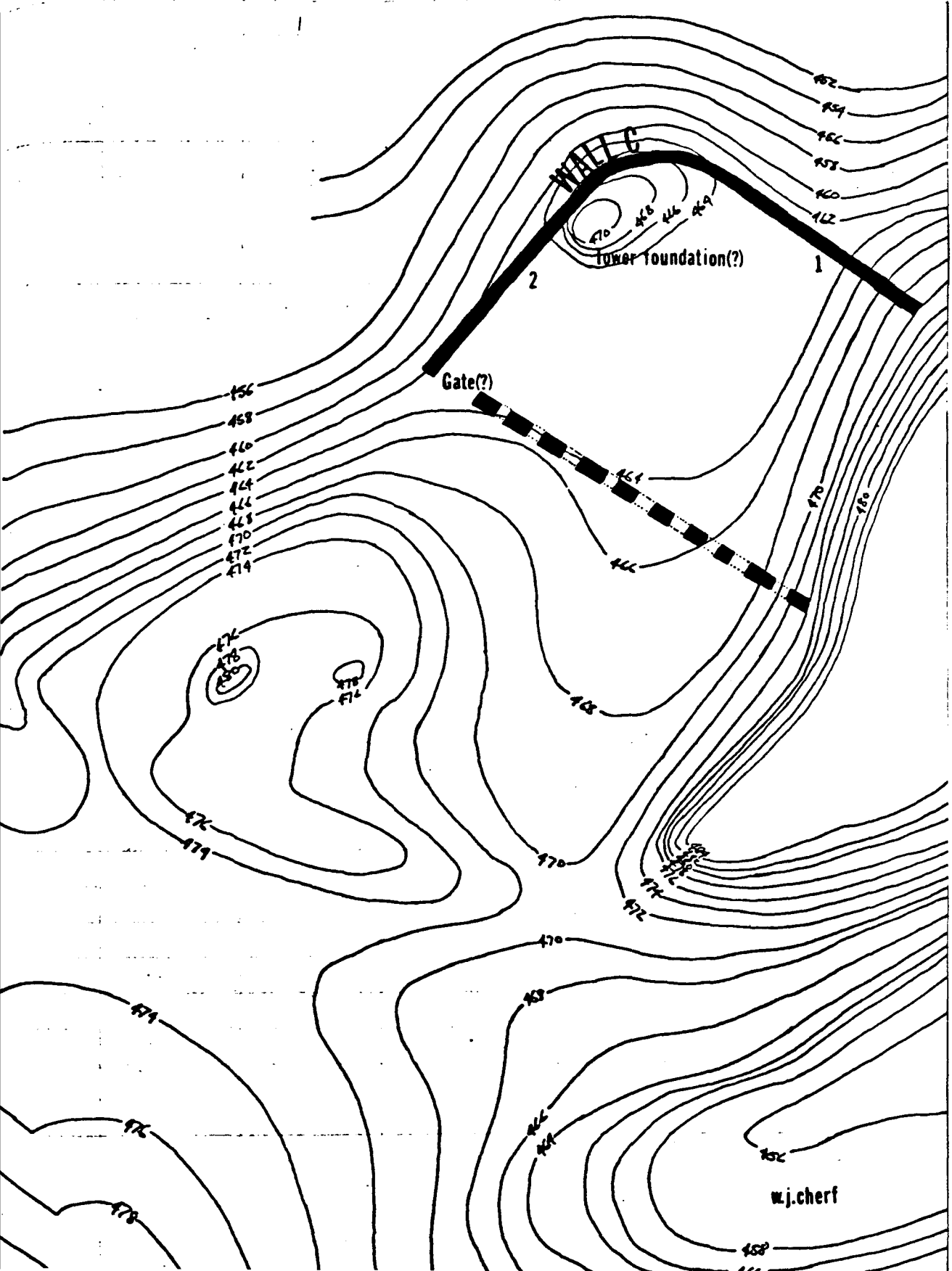


PLATE 1



PLATE 2



PLATE 3



PLATE 4



PLATE 5



PLATE 6



PLATE 7



PLATE 8



PLATE 9



PLATE 10



PLATE 11



PLATE 12



PLATE 13



PLATE 14



PLATE 15



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APPROVAL SHEET

The dissertation submitted by William Joseph Cherf has been read and approved by the following committee:

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The final copies have been examined by the director of the dissertation and the signature which appears verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

July 12, 1983
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