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ECOLOGY AND EMPIRE:
THE STRUCTURE OF
THE URARTIAN STATE

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To
Wolfram Kleiss, Stephan Kroll,
and
My Coworkers at Bastam

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FOREWORD

The literate civilizations of the ancient Near East preserve some of the earliest records of such basic political institutions as the city, national state, and empire. Those interested in such phenomena will welcome this case study of the Urartian state, one of the oldest examples of a complex political system documented in its developing phases by a literate neighbor.

Among the burgeoning nation-states and empires in southwest Asia, the kingdom of Urartu rose suddenly to prominence in the ninth century B.C. Situated in harsh and unpromising terrain just to the north of Assyria, Urartu within a few decades managed through territorial expansion and political alliance to prove itself a dangerous rival of the Assyrian Empire. Paul Zimansky analyzes the resilient superstructure of the Urartian state as a response to its physical and political environment: topography, climate, and the threat of the Assyrian army. Against a detailed geographical background, recreated in part from modern satellite photos, he utilizes a wide range of textual and archaeological materials to present a thesis of cultural adaptation of state structure and organization to ecological exigencies.

Although the environmental viewpoint used here is only one of several possible avenues of approach, it will provide fresh insights and should stimulate serious discussion in the field. Zimansky's thought-provoking analysis will be welcomed by those concerned either with the history of the ancient Near East or with the development, character, and typology of early states.

<div align="right">J. A. BRINKMAN</div>

January 28, 1982

PREFACE

Urartu has known many dark hours, and the present is one of them. While the Iranian revolution has temporarily checked systematic and recorded excavation in a major part of the relevant territory, illicit pillaging of sites and graves to feed the world's appetite for tangible antiquities continues unabated. Several major excavations have come to naught because their directors, for one reason or another, have failed to publish. The transmission of Urartu's legacy is apt to be further retarded by the current academic recession, in that ancient history in general can hardly command a high priority in a drought of research funds. Nevertheless, this book was written with the conviction that Urartian historiography is hardly in need of an obituary.

The period of research which has just ended produced an enormous amount of new data, and the current hiatus, inevitably temporary, offers an opportunity for reflection, assimilation, and synthesis. There is, at the same time, much interest in the social and economic transformations that took place in the ancient world as iron came into widespread use. Urartu cannot be left out of that discussion; nor can the historians of Urartu limit their own horizons to chronology and sequences of events, when the questions put to them by other scholars concern causation. The ecological approach adopted here is but one of several options, and those deeming it unsatisfactory should be able to find much in this book to fuel other engines of analysis. There is a great deal to be learned of Urartu and from Urartu, even if there were no prospect of future excavations.

The confusion of tongues harbored by the modern territory has left its mark on the manuscript. Since many places mentioned are not easy to find on standard maps, and their names change from map to map and decade to decade, I have sought to locate as many as possible on the plates at the end of this volume. The index of geographical names is also intended to serve as a gazetteer to those maps. For each country and language in question, I have been compelled to adopt a different system of transcription. This vacillation has the consequence, for example, that the Turkish word for "river" can appear as çay, čay, or chāy, depending on the country through which it flows. However, no uniform system for transcribing the sounds of the Russian, Turkish, Persian, Arabic, and cuneiform scripts would be at all recognizable to specialists used to dealing with those languages on an individual basis. My ground rules are as follows: Names of places in Turkey have been left in Turkish. All references in Russian, including geographical names, have been transliterated according to the "international" system of the University of Chicago Press's *A Manual of Style*, 12th edition. With certain allowances for changes wrought by the Iranian revolution, Persian and Arabic names have been taken from the listings of the United States Board of Geographical Names, except in the case of Urartian sites, which are too obscure for that authority. These are spelled as written in Wolfram Kleiss et al., *Topographische Karte von Urarṭu*, Archäologische Mitteilungen aus Iran Ergänzungsband 3 (Berlin: Dietrich Reimer Verlag, 1976), which is usually, but not always, the way they appear in other archaeological literature. Assyrian place-names are transcribed as they appear in Simo Parpola, *Neo-Assyrian Toponyms*, Alter Orient und Altes Testament, vol. 6 (Neukirchen: Butzon & Bercker Kevelaer, 1970); and Assyrian royal names are given as listed in A. Leo Oppenheim, *Ancient Mesopotamia*, 2d ed. (Chicago: University of Chicago Press, 1977). I have transliterated the longer quoted passages of Akkadian and Urartian according to normal conventions, using transcription only for passages where there were duplicates or for individual words where the actual signs used in the text were irrelevant. However, weakened in resolve by the absence of the appropriate diacritic on my typewriter, I have treated Urartu and Urartian

as English words, transposing the emphatic *ṭ* that the Assyrians, and other sticklers, would insist upon.

My rather unsophisticated use of *Landsat* technology requires a defense, if not defensiveness. It is hoped that the plates will give the reader an immediate and vivid impression of the overall character of the Urartian landscape to support and supplement the descriptions in the text. The computer tapes from which these images were generated obviously contain much more environmental information than the photographs, but I had neither the time nor the money to work with them. Most of the observations recorded in Chapter 2 were made on the basis of false-color composites, in which areas of cultivation show up clearly and rough distinctions between various types of cultivation can be made with the naked eye. However, color is prohibitively expensive to publish, so I have had to settle for black and whites in band 7 (sensitive to infrared). The photos were also selected from a much smaller inventory than might have been hoped for. The failure of *Landsat 3* to function as planned meant that no new images were being added to the stock during the time that I was writing. Ideally, all should have been from nearly the same time in the agricultural year, with high image quality and minimal cloud cover. For some areas, however, there were simply no images that satisfied these requirements, and the choice was made in favor of the least of competing evils.

The maps that accompany the satellite photos were traced from the largest-scale (1:500,000) series available to me which was uniform for the whole area. I have not tried to modify them to make them speak with the same voice as *Landsat*. Since the series predates the construction of the Keban and Nachičevan barrages, the relevant watercourses are marked in their earlier form—the transformations wrought by the new dams will be immediately apparent in comparing the plates with the drawings. Shorelines of all bodies of water in Urartu, particularly of shallow ones like Lake Urumiyeh, vacillate with the season; discrepancies will appear both between the maps and the photos, and among the photos themselves. The distortion of projection is such that topographic maps and *Landsat* images cannot be directly superimposed; scale in the latter varies from north to south and east to west.

This study grew out of a dissertation for the Department of Near Eastern Languages and Civilizations of the University of Chicago. A great many people in widely scattered locations have assisted me in various capacities, but I hasten to exculpate them all from any association with the finished product. The Urartologist—if lexicography will tolerate such an entry into the academic bestiary—is a solitary creature and inevitably an autodidact; I have never heard of one training another. Thus, most of my debts to professors at Chicago's Oriental Institute are owed to people who gave me tools and inspiration rather than wisdom about Urartu. They have been my most perceptive critics in the past, and I cannot imagine they will wish to be credited with much complicity in the present work. Yet I owe them much, and certainly could not have completed this book without their help. I must first record my gratitude to Professor Hans Güterbock, my dissertation adviser, philological conscience, and basic scholarly resource for problems Anatolian. Professor McGuire Gibson gave me my initial opportunity to do archaeological fieldwork in the Near East, and over the years alternately spurred and diverted me—always with enthusiasm. In the classroom, Professor Robert McC. Adams shaped my views on what an ancient historian ought to be. Later, he was generous with both his time and his skepticism, stimulating much thought and many improvements in the manuscript. Others, less directly involved in my dissertation research, have given me valuable advice and encouragement along the way. Among them I must single out Professors John A. Brinkman, Gene Gragg, Simo Parpola, and Johannes Renger. The Oriental Institute and the University of Chicago supported my studies with liberal grants in aid, and I owe my first visit to Urartu, in 1975, to a Ryerson Travelling Fellowship.

For my wife, Elizabeth C. Stone, a paragraph of praise is hardly sufficient. She gave me time to write in idyllic surroundings on Long Island; suffered frequent abandonment as I pursued field projects and bibliographical obscurities; and, frequently putting aside her own research, shared her time, insights, and more than one typewriter.

My debts to scholars and workmen on the other side of the Atlantic are more specifically Urartian. In the summers of 1975, 1977, and 1978 I was privileged to take part in the Bastam

expeditions of the Deutsches Archäologisches Institut. In this exciting and congenial atmo-
sphere, where inspiration and information came as often from my fellow archaeologists as from
the charred soil, I learned more about Urartu than I could have at any other spot on earth. Pro-
fessor Wolfram Kleiss, Director of the DAI, Abteilung Teheran, was most generous in sharing
his thoughts and discoveries. Dr. Stephan Kroll, second in command of the expedition, has
probably done the most to educate me on the archaeology of Urartu. The dedication of this
manuscript is perhaps a poor coin with which to repay these scholars, since they too will doubt-
less take exception to much that I have written, but I offer it nonetheless.

Aleppo, Syria
December 1981

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PROBLEM, HYPOTHESIS, AND SOURCES

The state known to modern scholarship as Urartu emerged in the middle of the ninth century B.C. and developed with astonishing rapidity into one of the major political powers of its day. Expanding along natural avenues of communication from its capital on the eastern shore of Lake Van, it came to dominate an extensive, mountainous territory that is now divided by the borders of Turkey, Iran, Iraq, and the Soviet Union. For two and one-half centuries, the Urartians flourished, contending with enemies on several fronts, not the least of which was Assyria, whose army was the supreme military force of the age. Surviving material remains of Urartian civilization, most notably ruins of enormous castles on mountain spurs, embankment walls for canals that still serve to irrigate farmland, works of art in stone and metal, and numerous inscribed monuments that attest to widespread building and military activity, confirm the effectiveness of the political and economic systems of this society. Yet when Urartu collapsed at the beginning of the sixth century—at nearly the same moment that the power of Assyria crumbled—it vanished so completely from historical consciousness that classical Greek writers fail to make a single reference to it.

This kind of meteoric rise to prominence and subsequent plunge into obscurity is hardly unique in the history of the Near East, but a number of unusual circumstances distinguish the case of Urartu and make its existence as a strong and prosperous state particularly unexpected. First, there is its proximity to and contemporaneity with the Assyrian Empire. The kingdom of Urartu came into being at a time when Assyrian pressure on its territory was considerable, expanded in a period of Assyrian eclipse, survived despite severe attacks that followed the Empire's rejuvenation, continued to thrive in the heyday of Assyria's dominance of the Near East, and then collapsed shortly after Assyria's downfall. Chronology alone would suggest that the relationship between these two states was more complex than the simple picture of unalloyed hostility presented by the annals of Assyrian kings. Second, the geography of Urartu hardly seems conducive to the formation or survival of a centralized state. Mountain ridges isolate the restricted areas of arable land from one another, channeling communications along a few major routes. The passes over which these ran could easily be blocked by small military forces and were closed for most of the winter by the heavy snowfall that characterizes the region. Urartian architects exploited the defensive potential of this environment fully, using rocky projections beside agricultural areas as sites for their major citadels, which they provided with enormous storage facilities, and guarding strategic routes with smaller outposts. These arrangements appear to offer more encouragement to political fragmentation that centralization, and except for Urartu, no highly centralized state has ever been based in eastern Anatolia.[1] The modern population of eastern Turkey and adjoining areas is sparse, and, given the severely limited amount of land that can be put under cultivation because of the nature of the terrain, it is difficult to see how a large population could ever have been supported. Yet the building projects of the Urartians clearly demanded thousands of man-years of labor.

The success of the Urartians in dealing with both the limitations of their environment and the incursions of the Assyrians is undeniable. The wealth evidenced in artifacts unearthed at such sites as Karmir Blur and Toprakkale, as well as the scale and sophistication of Urartian architecture, inspires respect for the resources that this state commanded. It is not surprising,

therefore, that historians have often felt compelled to single out some causative factor of a political or economic nature in order to explain Urartu's rise, character, or relationship to Assyria. These hypotheses differ so widely in substance and detail, however, that it is clear that neither the economy nor the political structure of Urartu is really understood.

Trade, control of important trade routes, and access to vital resources are some of the most frequently repeated themes in these arguments. The most extreme example is a thesis advanced by Richard Barnett suggesting that trade was the ultimate cause of Urartu's rise to prominence. It is his view that the Assyrians brought a halt to overland trade through Mesopotamia and forced the east–west trade, which was developing rapidly with the emergence of new markets in Greece and the Aegean, to travel through the mountainous areas of Iran and Turkey. Thus, the benefits devolving upon the masters of a vital trade route fell to the inhabitants of what had hitherto been a cultural and economic backwater.[2] More recently, Louis D. Levine has argued that the military activities of both the Urartians and the Assyrians in the Zagros may be explained as attempts to monopolize an eastern trade that was a source for their "production of capital."[3] So important was this trade that its loss was sufficient cause to bring about a military decline in the empires in question.[4] In a similar vein, others have suggested that the battles between Assyria and Urartu in the eighth century B.C. were fought over control of specific resources. Saggs says that horses were at stake in northwestern Iran,[5] and Soviet scholars have pointed to iron as the motive behind struggles in northern Syria and the western Euphrates area.[6]

A more comprehensive and ambitious attempt to explain how the Urartian state and economy were organized was published by G. A. Melikišvili in 1951.[7] His conclusions are firmly rooted in doctrines of class struggle and historical materialism, portraying the economy as essentially state-controlled, with a large amount of property belonging to the king personally. Nearly constant warfare produced a steady influx of prisoners of war to work these estates as slaves. Most people living in and around royal citadels seem to have had no private property of their own and were probably supported by rations stemming directly from the king. Irrigation works, fundamental to the economic life of the country, were also firmly under royal control. Common people, who were not thought of as slaves, were exploited through taxation and various forms of conscription and corvée labor. The temple also had lands and slaves of its own, but benefited from considerable royal endowments as well. There was a bipartite aristocracy consisting of members of the royal family on the one hand and officials and military leaders on the other. The latter were given lands and slaves from conquered areas and, toward the end of Urartu's history, had acquired enough power of their own to constitute a threat to royal power. To counter this threat the king made increasing use of mercenaries, readily available among the Scythian and Kimmerian bands that were moving into Asia Minor at the time. In the long run, this had the same consequences for the Urartians that the hiring of barbarian mercenaries had for the Romans.

Melikišvili's article touched off a debate among Soviet scholars on the role of slavery and private property in Urartu. Diakonoff and others[8] attacked the position that the means of production were entirely in the hands of the king and argued that communal or communal–private agricultural production played an important role independent of the large state institutions.[9] Underlying this discussion, which continues to the present day, is a fundamental schism in Marxist thought between those who would retain the "Asiatic" precapitalist mode of production and those who would see it subsumed as a part of the "slaveholding," or "Classical," mode.[10] Due to the meagerness of the evidence from Urartu, the discussion has been conducted largely on a theoretical level, with some factual ammunition drawn from the magazines of other Near Eastern societies.

In the West, Urartu's political structure has been evaluated in quite different terms, placing emphasis on its "feudalistic" character. Nicolas Adontz maintained that Urartu's territory fell into three categories: (1) the land administered directly from the capital, (2) conquered territory that retained its independence in return for tribute, and (3) lands under Urartian political influence.[11] The state, governed by a "king of kings," was a feudal monarchy, similar, in this regard, to the Hittite and Assyrian Empires.[12] Toumanoff, following the same line of reasoning, has argued:

Expansionism seems to have brought into existence a group, or class, of ex-dynasts who may have retained some reduced rights and ranked below their still sovereign colleagues. Accordingly Assyrian documents mention the "great ones" (*ašaridutilrabute*) of the Kings of Urartu, besides their officials and warriors. . . . Urartian society appears, then, to have been one in which, in addition to the dynastic aristocracy, there already existed the somewhat lower stratum of the ordinary nobility and in which there obtained some feudalistic traits, notably, the lord–vassal relation binding together the king, the dynasts, and the nobles, and also the conjunction of land tenure with service to the king.[13]

Working with Urartian royal inscriptions, F. W. König also believed that he could identify both vestigial and operative "feudal" traits, including bondage of certain categories of people to the land.[14]

None of these theories is sufficient for explaining the dynamics of Urartian history or the character of Urartian institutions. They are attempts to discover, in evidence that is not particularly well suited for the purpose, hints that would justify the use of a preformulated typology. They are of little help in explaining why Urartu came into being where and when it did, and for the most part rest on generally phrased assumptions that either cannot be tested or have not been. Archaeological evidence has largely been ignored in these arguments, in favor of some rather dubious interpretations of textual material.

It is my thesis that Urartu's political and economic institutions may better be understood as an adaptation to an environment that was shaped by the two factors I mentioned at the outset: the might and proximity of the Assyrian army, and the potential for defense that was offered by east Anatolian climate and topography. Far from being detrimental to the development of a strong state in Urartu, these factors were what made one possible. Assyria's threat to Urartu was real but circumscribed; it could inflict local damage and even penetrate quite deeply into Urartian territory on occasion, but it could not conquer it completely. This external pressure both effected a political unification in Urartu and dictated that it be of a peculiar kind: a centralized power characterized by resilience rather than inelasticity. The institutional means by which the new state minimized its vulnerability will be investigated in the chapters that follow. I shall argue that the economic base on which the kingdom depended was decentralized and that the exercise of royal authority was not tied to a single geographical locus, thus making it impossible for an enemy from south of the Taurus Mountains to cause serious disruption in a single campaign. Offensive military activities of the Urartian king periodically provided expendable manpower which was used to create an internal network of defensive fortifications manned by modest numbers of soldiers. Bureaucratic mechanisms were designed to minimize the danger of political fragmentation without concentrating the administrative apparatus at a single site which could be attacked. The specificity of its adaptive response explains both Urartu's success in its homeland and its failure to expand outside the mountainous zone. Without the environmental factors that shaped its unique equilibrium between centralization and decentralization, Urartu could neither hold together nor command the necessary manpower and resources to compete with more populous states.

Regardless of the validity of this thesis, two further considerations make another look at Urartu's economy and political structure desirable at the present time. First, the amount of information relevant to the subject has increased considerably in the decades since Melikišvili and others wrote their articles. A great deal of new evidence from archaeological survey and excavation can now be employed to supplement and modify the picture suggested by royal inscriptions. The latter are also more numerous, and the value of many new pieces of evidence is enhanced by their discovery in situ. Second, scholarly interest in the formation, character, and typology of early states is currently quite intense. Urartian studies have hardly entered into the discussion of these problems,[15] no doubt because of their general obscurity as a subdiscipline of Assyriology and the formidable number of languages, both ancient and modern, that deter the nonspecialist from becoming familiar with them. Students of Urartu have concentrated primarily on either philology or art history and have not produced much information of value to those working on broader problems of historical inquiry. Yet Urartu is not without interest in this regard; its emergence as a state is fully historical and was observed by outsiders, the Assyrians, with a fair degree of chronological precision. The size of the kingdom alone would suggest that Urartu has

information to impart on the principles of political viability. An investigation of Urartu's economy and organization as a state could shed new and useful light on these and related areas of inquiry. There is also a need to make explicit what can and cannot be said about the structure of the state, since the factual basis on which theories of economic determinism in Urartu's history have been advanced has often been left unexplained.

Sources for the study of Urartian political and economic organization may be divided into three broad categories of evidence, each yielding its own kind of information but overlapping to some extent with the data provided by others. Most immediately useful are cuneiform texts composed in two languages: Akkadian and Urartian. There is also archaeological information from a limited number of excavated sites, and survey work on a great many more. Finally, there are what may broadly be categorized as geographical studies, concerning the physical environment and ethnography of the Urartian region, as observed in modern times.

The relevant cuneiform documents were written by the Assyrians and the Urartians themselves. The former were explicitly concerned with military and diplomatic affairs, but their testimony is more informative than this limited outlook might suggest since chronological, geographical, and organizational data of the Urartian state can also be derived from it. Virtually all of the Assyrian records pertaining to Urartu may be considered "royal" inasmuch as they concern the activities of the Assyrian king and his subordinates.[16] Under this rubric, however, one may make a subdivision between "public" and "nonpublic" inscriptions. The former category includes all texts that were written for display or permanent record, such as building inscriptions, annals, dating lists, and votive inscriptions. The second category includes administrative texts and, most important, letters sent to and from the royal court by individuals keeping watch on the Urartian frontier.

It is the public documents that are most essential in establishing the chronology of Urartu's development as a state. The reigns of Assyrian kings can be given absolute dates with a margin of error of one year for the period between 900 and 600 B.C., and a margin of error of ten years for the span from 1500 to 900 B.C.[17] The sequence of Urartian royal succession is known from the practice of frequently giving the name of the king together with the name of his father/predecessor. Dated Assyrian references to Urartian rulers, most often in reports of battles between the two powers, provide a scaffolding of synchronisms for the historical placement of the line.[18] All chronological distinctions that have been recognized in the typological development of Urartian pottery, architecture, and art are, in turn, based on this list of kings; for it is through their association with royal names that sites and objects are put in sequence.

The first Assyrian references to Urartu—as a geographical term—appear in the thirteenth century B.C. Four centuries later the annals of Assyrian kings, particularly Shalmaneser III (858–824 B.C.), chronicle the emergence of a unified kingdom from the plethora of smaller political units located in the mountainous uplands around Lake Van. Shalmaneser's successors confronted Urartu as a world power with which they were in armed conflict for more than a century. After the reign of Sargon II (721–705 B.C.), the frequency of Assyrian references to Urartu drops dramatically, and there is a change in their character; for the next century, until Assyria's collapse, there is no further mention of hostilities. On the contrary, diplomatic contacts and even acts of outright cordiality are recorded.

In their boasts of military victories, the Assyrian rulers also impart significant information on the historical geography of Urartu. This includes not only the names of prominent cities and provinces, but also clues about their location. There are, in addition, reports on alliances between Urartu and other powers, and the direction of Urartu's expansion, at least insofar as it affected the Assyrians, is made apparent. To some extent, these reports also provide glimpses of the internal organization of the Urartian government and its military establishment, although not to the same degree as the nonpublic inscriptions, to be discussed below.

One particular text deserves special mention: Sargon II of Assyria's "letter" of more than four hundred lines to the god Assur, reporting in considerable detail on a campaign against Urartu in 714 B.C.[19] On this occasion, Sargon defeated the Urartian king Rusa I in a major battle and then marched through his territory on a mission of pillage. On the return journey he also sacked Muṣaṣir, a buffer state lying between Assyria and Urartu,[20] but one with strong ties to the

latter because it possessed an important temple of Haldi, Urartu's chief god, and was apparently a place where Urartian coronations were performed.[21] The importance of this document lies in the detail with which it observes Urartu. The Assyrians were clearly impressed with what they saw there and, as outsiders, took pains to describe it.[22]

The propagandistic character of such Assyrian texts, and their outright prevarications about Assyrian military success, are relatively inconsequential in a study of Urartian political organization and economy. A greater problem is that the purpose for which they were written (i.e., the glorification of the Assyrian king) rarely coincides with the use that the economic historian wishes to make of them, and it is only incidentally that information on the nature of the productive and redistributive mechanisms at work in Urartu comes to light.

With nonpublic documents, the propagandistic tendencies are minimal, and the scope of information imparted is a good deal broader. Another problem, however, prevents these from being as useful a historical source as one might hope: the context of a letter or administrative text, clear enough to those who wrote it and for whom it was intended, is seldom known today. They are often undated and take for granted a detailed knowledge of the persons, procedures, and events discussed. Furthermore, the language used is more idiomatic and difficult to understand than the rather formal phrases of public inscriptions. Consequently although there is no question that the information contained in letters and administrative texts is invaluable, one cannot always be certain that it is correctly understood.

Letters to and from the Assyrian court constitute the most useful texts in the category of nonpublic documents. These have been found at two sites that were once capitals of the Assyrian Empire: Nimrud and Kuyundjik.[23] Many of the letters from both sites are intelligence reports from the Urartian border area, recording the activities of the Urartian king, his governors, and various ethnic groups within his empire. They shed some light on the organization of the Urartian state, its military institutions, the role of its king, and the ethnic makeup of the population. They are of critical importance in determining what degree of centralization existed in Urartu because they are virtually the only documents that are at all concerned with provincial officials.

Assyrian administrative and legal texts are less useful, since they are never directly concerned with Urartu. They are sometimes helpful in matters of historical geography, and occasionally mention people with Urartian names who were active in Assyria. They also illustrate administrative practices which other evidence suggests may have been paralleled in Urartu. To assume that the practices were identical, however, is to adopt an a priori solution to many problems of Urartian economic and social organization.

Written evidence from Urartu itself falls into the same general categories as the Assyrian material, but the distribution is vastly more lopsided in favor of display inscriptions.[24] The number of known inscriptions carved in stone for the purpose of commemorating the king's building projects and military conquests is now in the hundreds, whereas only twenty tablets and tablet fragments have been published to date.[25] In addition, there are two other types of evidence that may be considered under the heading of written documentation from Urartu: hieroglyphic writing and bullae.

In many ways, Urartian display inscriptions are disappointing as historical sources. They are highly formulaic, relying on a repertory of stock phrases and containing relatively little of the detailed commentary that makes their Assyrian counterparts so interesting. They are not datable to specific years; even the few texts that seem to be structured as annals do not give names or numbers to the yearly entries. On the other hand, public texts almost invariably give the name of the king who framed them, making it possible to assign all but a few to a given reign. They were often inscribed on large, nonportable stones in the area where the described action was performed, thus making it possible to trace shifting patterns of royal activity throughout Urartu's history. Like Assyrian inscriptions, they are essential for understanding Urartian historical geography but have the added value that the information they supply is often directly related to the problem of Urartu's economic and political development.

The rarest and lengthiest records are royal annals, of which we possess substantial redactions for only two monarchs, Argišti I and Sarduri II, whose reigns spanned the middle of

the eighth century B.C.[26] These list cities and countries conquered, booty taken, and prisoners brought back to Urartu. Occasionally, there are also cryptic remarks on the fate of the rulers of those lands, the role of Urartian governors, and the composition of the Urartian forces. Related to annals, but considerably more common, are accounts of individual campaigns that were inscribed on stelae or natural rock faces near the area where the campaign took place.

Urartian kings also left large numbers of inscriptions commemorating their building activities. They are normally quite brief but rarely fail to give the names of both the type of structure and the king at whose command it was built. The former piece of information is probably more useful to us than it was to the Urartians, because very often nothing survives of the work in which the king took such pride. These inscriptions record the building of cities, fortresses, canals, temples of various types, orchards,and vineyards. Occasionally, they contain a phrase stating that prior to this work the land was deserted and undeveloped. Like inscriptions concerning military campaigns, these locate focal points of royal concern, in terms of both where a king was active and what sort of projects he was interested in.

A major group of public inscriptions may be classified as dedicatory. Some are stelae that merely record the fact that they were erected by a certain ruler for a certain god. Others are short labels that were written on bronze bowls, shields, helmets, arrowheads, and quivers, giving the name of the king and the god to whom the object was dedicated. Other objects of the same sort merely have the name of the king in the genitive case and a logogram that may be the abbreviation of the word for either "gift" or "property."[27] The information imparted by these inscriptions has little direct bearing on the problem of the Urartian economy beyond helping to date archeological materials and sites. More important are stelae recording the establishment of sacrifices to various gods. If a culture's values can be seen in what it sacrifices, the distribution of different kinds of animals among ranked members of the pantheon reflects on the relative esteem accorded both the animals and the gods.

Nonpublic cuneiform writing accounts for virtually all of the microeconomic information available on Urartu. It is unfortunate that so few tablets survive, since it is they that deal most specifically with problems of interest to economic historians: land tenure, taxation, transfer of goods, and the role of slaves. With so few sources, and the interpretation of even those fraught with difficulty, no broad understanding of the economic practices intrinsic to Urartu is possible. They do serve to indicate the depth to which the central bureaucracy's operations penetrated to all levels of society and offer grounds for speculation on matters that would otherwise be totally obscured.

In addition to serving as the medium for royal edicts and letters, cuneiform was also employed in the routine administrative functions of the palace. Cuneiform signs were written on pithoi and other vessels to indicate their capacity, presuming a knowledge of the script by at least some of the personnel involved in maintaining food supplies. It is surprising, therefore, that more administrative records, such as those so common in Mesopotamia, have not been found. An explanation for this is suggested by hundreds of royal and nonroyal bullae found at Toprakkale, Bastam, and Karmir Blur.[28] For the most part, these are uninscribed but sealed lumps of clay formed over knots in strings that secured some other object. Assyrian parallels suggest that this object, in some cases, was perishable material on which there was writing, such as animal skin or papyrus.[29] If the Urartians committed the bulk of the administrative records to such materials, and reserved clay for special purposes, then we have little hope of ever unveiling the microeconomic detail behind the larger workings of the Urartian economy.

Besides cuneiform, we know of two other Urartian writing systems, but no long texts in either of them have been discovered. One consists of hieroglyphs that resemble, but are quite distinct from, those used west of Urartu in Neo-Hittite states.[30] Short notices in these Urartian hieroglyphs were used, like cuneiform, to mark capacity on vessels, as well as for unknown purposes on many other objects of clay and bronze. The script is so poorly understood that virtually no substantive information can be derived from it. The other system was simply to use Hittite hieroglyphs to record the Urartian language. This practice is in evidence only at Altıntepe, where it is restricted to capacity markings.

In addition to the records of the Assyrians and Urartians, there are a few other documentary sources that are near enough to being contemporary that they can be classified as pri-

mary evidence. The Bible mentions Urartu on a number of occasions, but provides no useful information for a study of the Urartian state and economy. The one reference to Urartu that was once thought to exist in hieroglyphic Luwian is now considered suspect.[31] Urartu was a distant land to the Babylonians, who mention it in a number of chronicles but otherwise have contributed nothing more than occasional notes identifying individuals in Babylonia as Urartians.[32] While no classical author mentions Urartu by name, there is interesting testimony by Xenophon, who passed through what had formerly been its territory on the homeward journey from Cunaxa.[33]

If there is one aspect of man's culture that archaeologists claim to be better at elucidating than all others, it is his economic life. Almost all archaeological evidence has economic importance of some sort — be it flotation samples and broken bones which suggest patterns of subsistence or monumental architecture and intricate works of art reflecting the resources at the disposal of the ruling class. In Urartu, however, archaeology is as uneven as the textual evidence; it has concentrated on the larger, richer fortresses and given minimal attention to such vital sites as settlements and cemeteries.[34] There is often a problem with the quality of the evidence, much of which has either been poorly excavated, poorly published, or both.

In Turkey, roughly a dozen Urartian sites have been excavated by legitimate expeditions, but major publications are available for only three of the sites: Altıntepe, Kayalıdere, and Çavuştepe.[35] The others, for the moment, can only be studied in brief preliminary reports. Much of the excavation, particularly at Van (the Urartian capital) was conducted without adequate control of the stratigraphy, and consequently most of the objects found there are without real context. Even where the work was done well, the aims of the excavators seem to have been limited to the recovery of architectural plans and objects of art. Botanical and faunal remains have received attention only in a few instances. It is unfortunate that so little attention has been devoted to survey and identification of less spectacular Urartian settlements in eastern Turkey. In the late 1950s, Charles Burney discovered, and drew plans of, a good number of Urartian sites, but his work was never followed up. A more thorough survey, making use of the sophisticated ceramic typologies now available for the early first millennium, would be highly desirable.

If the quality of the archaeological evidence is low, its utility is at least somewhat enhanced by the fact that there is a lot of it. Enough building plans have been published to give a reasonable idea of the range of variation in form of the major citadels; and exploration, particularly for written monuments, has been thorough enough to establish the geography of Urartian settlement in broad outline.

In the Soviet Union, there has been intensive excavation of three large sites: Karmir Blur, Arin-berd, and Armavir. Karmir Blur and Armavir have been published for the most part, but so far only the architecture and wall paintings of Arin-berd have received definitive treatment in print. The sites are all quite important — particularly Karmir Blur, which was violently sacked at the end of the Urartian period and has consequently yielded abundant archaeological evidence. Soviet scholars have not failed to devote attention to floral and faunal remains as well as architecture and small finds. These sites present a good picture of the material culture of the Urartians in both the eighth and seventh centuries in major administrative centers, and some effort has been made to uncover the nonroyal structures associated with them. The publications are not without flaws, however; one would hope for more systematic analysis of pottery and a detailed discussion of regional topography. Outside these three centers, the archaeological map of Urartian territory in the Soviet Union is a virtual blank. Findspots of inscriptions suggest the location of other sites and settlements, but no survey results have been published, and none seems likely to be. Evidence for citadel–hinterland relationships, therefore, will have to come from some other quarter.

In Iran, one major citadel, Bastam, has been excavated, and exposures of Urartian occupation have been made at several other sites, such as Haftavan, Hasanlu, Agrab Tepe, and Qal'eh Ismael Ağa. The work at Bastam is particularly important, for it has provided the nucleus for a corpus of Urartian pottery that has since been used to identify and date scores of other Urartian sites in Iran.[36] Well-preserved architecture, written records, bullae, numerous animal bones, and quantities of seeds from flotation samples have all been found in good archaeological con-

text at Bastam. Survey work has now been going on for more than a decade in Iran, and it is only in this part of the Urartian kingdom that our knowledge of the location and dating of Urartian fortresses remotely approaches completeness. Measured plans taking into account all walls that are still visible above ground are available for many of these.[37] In terms of publication, the Iranian evidence has fared better than that from the Soviet Union and Turkey, although there are some notable lapses.

There may also be Urartian sites in Iraq, although the Iraqi border appears to be quite close to the southern limit of Urartian penetration. The modern political sensitivity of this area is nearly as acute as it was in Sargon II's time, so it is unlikely that archaeological surveys to explore the Assyro-Urartian frontier will soon be conducted.

The third category of evidence, modern geographical studies, gives an understanding of the environmental factors that set limits to the range of feasible productive and distributive activities. It provides a basis for evaluating paleoenvironmental evidence, suggesting the degree to which the same factors were operative in antiquity. Modern evidence defines the separate and distinct territories of the Urartian state and permits evaluation of the relative accessibility, both in terms of communications and transport, between these regions and the capital. It suggests certain factors that affect military activity, which were of vital consequence for the social and economic organization of Urartu. In the nineteenth and early twentieth centuries, eastern Turkey and its Persian and Russian frontiers excited the interest of Europe, and an astonishing number of travelers recorded their impressions of these lands. Their writings are of value for this study, because they describe premechanized agricultural practices and the rigors of travel on horseback, more closely reflecting the conditions that prevailed in Urartu than the observations of present-day visitors. Technology, however, has its own gifts for our endeavor — a new understanding of the distribution of agricultural land in the area is made possible by photographs from the recently launched *Landsat* series of satellites.

There is no denying that the sources reviewed above do not provide the necessary factual basis either for validating or refuting the various theories about Urartu's organization that I discussed at the outset of this chapter. In view of the dearth of microeconomic information, there is little hope of reaching a detailed understanding of the Urartian economy. However, one of my primary theses is that state-controlled institutions, on which much of the evidence does have a direct bearing, were key factors in explaining the rise and survival of the kingdom of Urartu. I propose to demonstrate that Urartu was highly centralized, albeit with its own peculiar form of centralization, and that under such circumstances the study of subsistence patterns, local exchange, and technology of production is of less significance than in smaller or decentralized societies. In reviewing theories on the evolution of the state, Flannery has written:

> In states, the managerial superstructure becomes still more elaborate, multilevel, and centralized [than in chiefdoms]; and the royal bureaucracies who process data for hundreds of thousands of souls must be supported by costly tribute, corvée labor, and often the pillaging of less powerful neighbors. In the case of some ancient civilizations, such as the Classic Maya, such a superstructure was supported in spite of agricultural practices believed to be no more sophisticated (except in rare cases) than those of most egalitarian tribes. Looked at in this way, the most striking differences between states and simpler societies lie in the realm of decision-making and its hierarchical organization, rather than in matter and energy exchanges. Herein lies another problem faced by those "cultural ecologists" who place such primary emphasis on the ways that civilized peoples get their food.[38]

These observations are relevant not only to the formation of the state, but to the study of comparative economies of early states as well. The importance of ecological concerns in matters other than production, however, cannot be ignored in the study of nonpristine states — a category to which Urartu clearly belongs. If organization of the superstructure is the key to understanding and differentiating complex societies, the student of Urartu can hardly be dismayed. It is this superstructure that the sources illuminate best, and which maifests traits of cultural adaptation to the geography and warlike atmosphere in which Urartu existed.

2

THE LAND OF URARTU

In practical terms, the shape, size, and character of Urartu's territorial holdings are poorly represented by frontier lines drawn across a map to enclose a single, coherent expanse. Urartu is more effectively characterized as a terrestrial archipelago. Intersecting mountain chains and a propensity for volcanism have mangled its topography, leaving the rather modest amounts of arable land cut off from each other in irregular pockets, like islands in a sea. It is in these low-lying areas that human population has traditionally been concentrated; even transhumant groups cluster in them during the winter because they afford a degree of shelter and less extreme cold than the surrounding highlands. However, the archipelago metaphor is not entirely apt since the mountains, unlike the sea, channel and direct communications along specific paths. The severe winter, which eliminates many of these routes for much of the year, adds a component of seasonal variability to the shape of the state's domain. Those who governed Urartu, or sought to conquer it, had to contend with these geographical facts.

The conglomerate character of Urartu's territory is a fundamental element in the theory of adaptation advanced in the previous chapter. In the following pages, an attempt will be made to isolate and particularize those features of the physical environment that would be of consequence to the political and economic organization of any preindustrial state seeking to govern this area. The first step is to mark off the perimeter of Urartian control and evaluate the general character of the territory so enclosed. Second, the primary areas of sedentary agriculture—the "islands" of the archipelago—will be defined. Finally, the relationship between these units will be explored.

This is, of necessity, an exploration of potentialities. Ideally, one should gauge the extent to which the Urartians actually exploited the capacities of each area and determine how effectively they made use of each connecting route. Actual population, rather than a vague notion of agricultural carrying capacity, would be a more significant and useful variable to work with in evaluating the importance of various parts of the realm and the relationship of the kingdom as a whole to Assyria. Unfortunately, the current state of Urartian archaeology is far too impoverished for such intellectual luxuries. Potentials alone, however, are enough to demonstrate the really significant point: awesome and immutable environmental constraints insured that each area enjoyed a good measure of economic self-sufficiency.

The Perimeter of State Control

The distinction between a people, an artifactual assemblage, and a political entity is all too often blurred or ignored in archaeological literature. For example, "Urartian" territory might be construed as the area in which the Urartian language was spoken, or the expanse over which pottery and architecture of a specific type were distributed. Even for the Assyrians, who coined the term, "Urartu" had more than one meaning. It was originally a geographical designation for a land that contained several independent political entities. Later it became the name of a unified state which covered a much larger expanse.[1] It is in this last sense that I use the term here. Since the present investigation is concerned with economic motivations underlying governmen-

tal activities, it is essential that the territory discussed be defined by political, rather than cultural, boundaries. In a state that expanded as quickly as Urartu, it is hardly to be expected that the two would coincide.

Defining political entities with archaeological evidence is generally a thorny problem, but in the case of Urartu it is less acute than it might be: royal inscriptions, carved on living rock or semiportable building blocks, are direct indicators of state control. There are two fundamental levels at which this control is attested. (1) Inscriptions may boast of conquest, thus giving a date at which the territory was put under Urartian sway. In the case of nonportable inscriptions, the vicinity would have to have been securely in Urartian hands to prevent the text from being vandalized. (2) Inscriptions may speak of peaceful building or cultic activity, thus suggesting a more substantial commitment of the state's resources to the control of the area. The criteria of portability and level of control are employed in figure 1, which illustrates the spatial distribution of Urartian display inscriptions.

If the evidence presented in figure 1 alone is taken into consideration, the area governed by the state at one time or another is more restricted than what is generally assumed to be "Urartian" territory.[2] Urartian kings would have ruled all of the agricultural lands around Lake Van and Lake Sevan, and the southwestern shore of Lake Urumiyeh. The upper Aras, particularly the Armavir and Erevan areas, was firmly in their hands, and conquest took them as far north as Lake Çıldır. Along the Murat, evidence for royal control is surprisingly meager, but sufficient to put the Euphrates at İzoli within the conquered zone and the Elâzığ area in the narrower sphere. Campaign inscriptions are found well to the east of Tabriz, but the nearest evidence for firmer state control in that direction comes from Bastam, thirty-eight kilometers north of Khvoy. Missing from this picture are the large and fertile plains of Erzurum and Erzincan on the Karasu, the northwest shore of Lake Urumiyeh, the plain of Marand, and the middle Aras from Jolfā to the slopes of Mount Ararat. All of these are generally assumed to be part of Urartu in some sense, and it is worth examining other forms of evidence to see if there might be some grounds for including them within the perimeter of state control.

The eastern areas have the best claim for inclusion. Major citadels dating to the eighth and seventh centuries B.C. have been discovered by Wolfram Kleiss at Verachram, on the Aras; at Qal'eh Ismael Ağa, near Urumiyeh; and at Livar, beside the plain of Marand.[3] It seems very unlikely that fortresses on this scale could have been constructed without the resources of a fairly substantial state. They are located close to areas that inscriptions indicate were controlled by Urartian kings, and in some cases on roads between Van and the limits of Urartian conquest. Since the style of construction corresponds in every way to fortresses in the Urartian heartland, and there is no other candidate for a major state in the area, Urartian control seems probable.

The situation in the northwest is less clear. The plain of Erzurum—the largest single expanse of level arable land in eastern Anatolia—is remarkably free of any trace of Urartian culture, let alone political control. This is puzzling in that Erzurum has traditionally been regarded as a key to the plateau, lying astride the main road from Erzincan to Persia as well as on routes from the Black Sea to the interior. This dearth of evidence would be understandable if it simply lay beyond the sphere of Urartian influence, but there are grounds for believing that it did not. The site of Altıntepe, near Erzincan, is clearly Urartian in some sense. Its most conspicuous features are a temple of the standard Urartian form,[4] and several tombs which—although constructed of stone blocks—have plans that correspond to rock chambers at Van.[5] Urartian royal inscriptions were found on portable objects in these tombs,[6] and Urartian words, albeit in a non-Urartian script, were written on pithoi in a storeroom.[7] None of this proves that Altıntepe was under the direct control of the Urartian monarch, however, and the site is small enough that the manpower to build it could have been assembled locally.[8] But some tie with Urartu is clear, and since the most direct route to the east was via the Karasu and Aras valleys, whatever Urartian influence did reach the Erzincan area probably came through the plain of Erzurum.

In short, it is not possible to circumscribe with a firm line the territory governed from Van at one time or another. Rather, there are a number of zones of varying probability. The areas most certainly under the Urartian central government are the immediate vicinity of Lake Van,
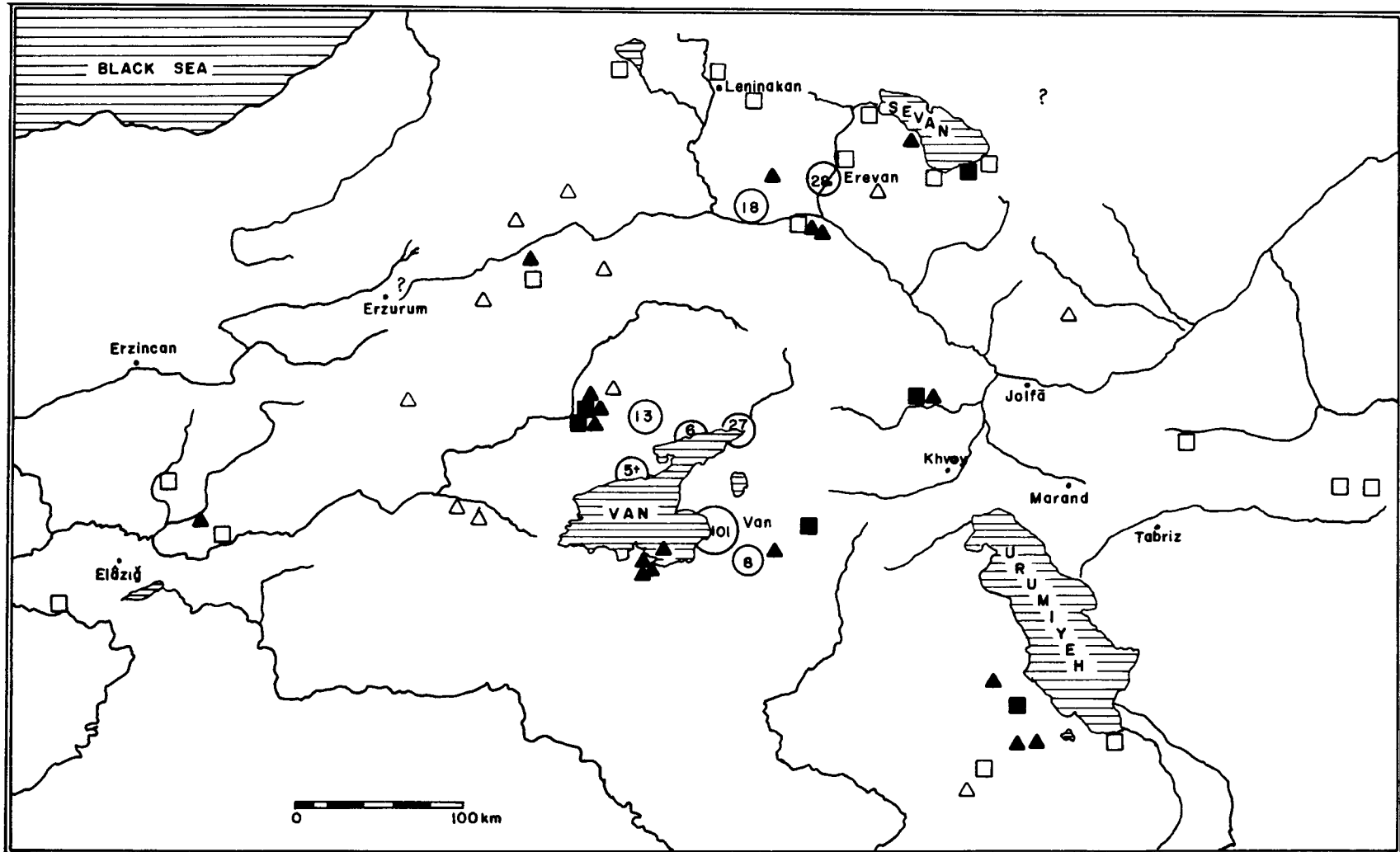
Fig. 1. Findspots of Display Inscriptions. Fully portable inscriptions, such as those on metal objects and clay tablets, are omitted. Inscriptions on pithoi are also not plotted, for although they meet the requirement of being relatively immovable, they give no indication of sovereignty. The portability of each inscription is indicated by the shape of the mark; the degree of royal control is indicated by whether the mark is filled in or is in outline. ■ = Inscriptions that are either carved on living rock or are known to be in situ for other reasons, such as being part of an Urartian structure; contents indicate cultic or building activities at the site of the inscription. □ = Inscriptions definitely in situ which attest to conquest or merely record the name of a king. ▲ = Inscriptions on blocks of stone that can be moved, but probably have not been moved far; many of these have been found built into Armenian churches and other post-Urartian structures; contents indicate cultic or building activity at the original site of the inscription. △ = Semiportable inscriptions that describe conquest or give only a king's name. ? = Reported location of an inscription of which the content is unknown. A circled number gives the total of all the above types concentrated in a small area.

the upper Aras valley, the Murat valley down to Elâzığ, the area of Erevan, the shore of Lake Sevan, the southwest shore of Lake Urumiyeh, and the Āq Chāy valley at Bastam. Salients of conquest extend the area to the neighborhood of Leninakan; to Lake Çıldır; to İzoli on the Euphrates; and to Našteban and Razliq, east of Tabriz. It is probable that the plains of Marand, Urumiyeh, Khvoy, and the middle Aras were also ruled by Urartian kings. The Karasu valley as far west as Erzincan is generally considered to be part of Urartu, but the only basis for this assumption is the finds from the isolated site of Altıntepe, which are inconclusive as indicators of political integration.

I shall treat all of these zones, including the Karasu valley, in the discussion of agricultural conditions and communications that follows. It is possible that future discoveries will add more territory to Urartu's erstwhile holdings—or even make it certain that they did not include some of the tentative areas mentioned here—but the general character of the geography of the Urartian realm is unlikely to be transfigured by such modifications.

DISTINCTIVE FEATURES OF URARTIAN GEOGRAPHY

The most conspicuous single characteristic of the region outlined above is division. What nature did with mountain chains, lakes, and volcanos, man has compounded with ethnicity, hostility, and borders. This has been no boon to the study of Urartu, since different patterns of research in modern nations and different forms of record-keeping make it extremely difficult to compare climatological, demographic, economic, and archaeological data for the state as a whole. The modern political boundaries are given in figure 2. Even topographic maps with scales of 1:500,000 or larger are not available to the public because of their military sensitivity. Thus, we can rarely offer complete data for the kingdom on such factors as the number of days of snow cover per annum, but must rely, as archaeologists frequently do in other situations, on the principle of *pars pro toto*. Since Turkey comprises so much of the whole, this approach has some validity.

The area of the whole territory that bears traces of Urartian presence is approximately 220,000 square kilometers,[9] roughly the size of Kansas. However, since Urartu probably never controlled the entire expanse at one time, a somewhat smaller state must be assumed. Moreover, in terms of agricultural capacity, it would be hard to find a more unsuitable comparison than Kansas: much of the territory is mountainous or unsuitable for cultivation for other reasons, such as salinity or the absence of adequate topsoil. Land-use statistics for the Turkish vilayets in question and Soviet Armenia are presented in table 1; it is unlikely that Iranian West Azerbaijan deviates significantly from this picture. Modern statistics are more indicative of the potential uses to which the land might have been put than actual practices in the Urartian period, but there is little room for flexibility in a mountainous environment. The amount of land level enough to be cultivated may be taken as a constant,[10] and it comprised only a small portion of the territory within the state's frontiers.

What makes Urartu's topography unique among Assyria's neighbors is not mountains but rather the arrangement of those mountains and certain climatic characteristics that are due, in part, to the mountains' elevation and position. Along most of the perimeter of Mesopotamia and Syria, the Taurus and Zagros chains create parallel lines of mountain ridges and valleys. Where the two chains meet, however, this pattern becomes irregular. The picture is further complicated by major volcanos and the convergence of other ranges—the Pontic and Anti Caucasus mountains. Thus, Urartu is not simply broken up, but is broken up in an intricate and alinear way (see fig. 3).

The hydrography of the area reflects these internal divisions. The three major lakes—Van, Urumiyeh, and Sevan—are all without outlet[11] and are fed by numerous small streams. The waters of the lakes themselves are virtually useless from an economic standpoint.[12] The rest of Urartu is drained by rivers flowing into the Persian Gulf and the Caspian Sea. The rivers have their sources in these highlands and do not carry large amounts of water while they are in the area. The Murat and Karasu flow westward, eventually to join and form the Euphrates above
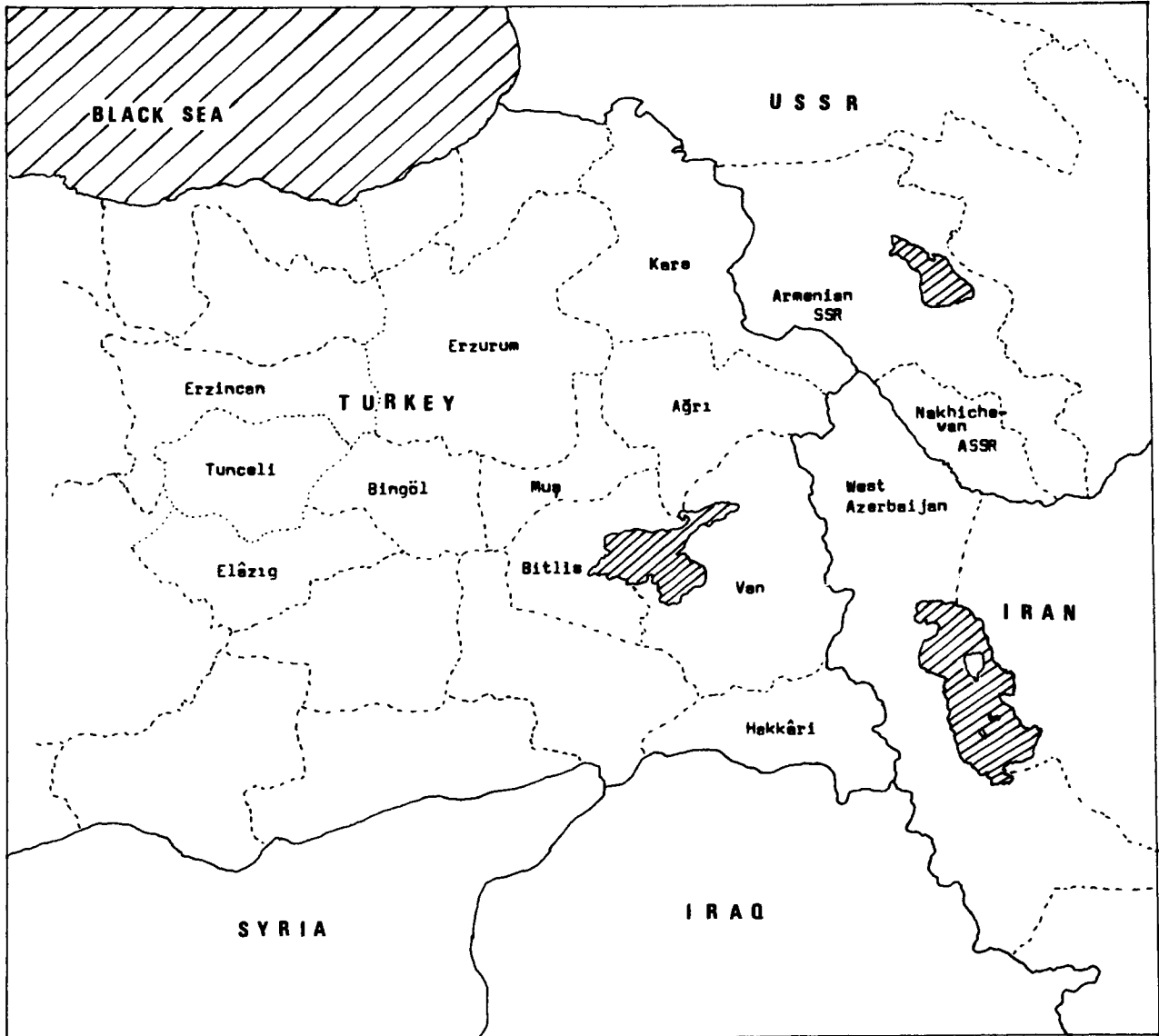
Fig. 2. Modern Political Divisions

Malatya. The Aras, from its source near Erzurum, moves in the opposite direction. The upper
reaches of the Great Zab, which also lie in Urartu, cut southward through the Taurus chain
before uniting and joining the Tigris. Thus, in contrast to the lowland riverine areas in which the
great early civilizations of the Old World arose, there is no uniform direction to the flow of
water—no single source vital to the welfare of the state which could be cut off by natural or
human cataclysm. The supply of water to the land as a whole could not easily be monitored
or manipulated by institutionalized authority.

Urartu's topography separates it from areas to the north and south far more decisively than
it does areas to the east and west. This contrast is particularly conspicuous when the criterion of
elevation is examined (fig. 4). While even the lowest parts of Urartu are considerably higher
than the Mesopotamian plains and the Kura valley, on both the eastern and western sides the
elevation of agricultural land actually increases beyond the frontiers. It is not elevation alone
that causes the separation from the north and south, however, but the character of the mountains
as well. The direction of folding there, in contrast to the irregular pattern of the central part of
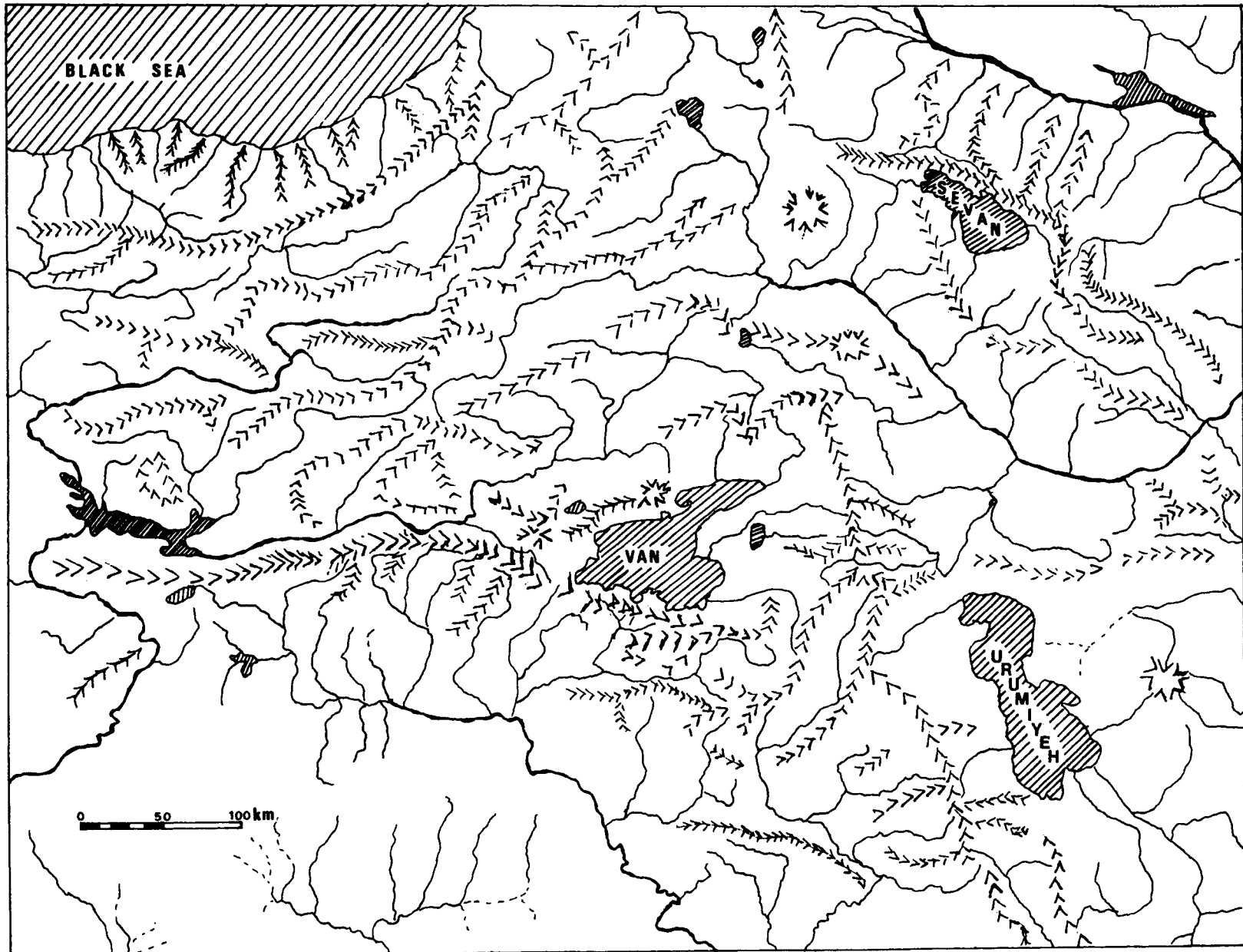Urartu, works against an approach from the north or south. To a certain extent, Urartu may be

Fig. 3. Orographic and Hydrographic Divisions

TABLE 1
LAND USE IN MODERN EASTERN TURKEY AND SOVIET ARMENIA

Province	Area in km²	Fields and Fallow	Fodder	Gardens, Vineyards, Orchards	Pasture	Nonagri-cultural	Unaccounted for Land
Turkey:							
Ağrı	11,488	18.0%	0.2%	0.2%	59.6%	21.7%	0.3%
Bingöl	8,911	7.2	0.2	0.1	33.7	58.8	0
Bitlis	8,551	11.4[a]	0.2[a]	0.2[a]	11.4[a]	54.9[a]	21.9[a]
Elâziğ	9,951	26.0	0.1	4.0	15.6	53.4	0.9
Erzincan	12,165	16.8	0	0.5	17.5	65.2	0
Erzurum	26,582	23.1	1.2	0.3	49.7	24.6	0.1
Hakkâri	9,885	0.6	0	0.4	b	b	99.0[b]
Kars	19,407	21.6	0	0.4	53.6	23.6	0.8
Muş	8,713	22.9	0.2	0.3	55.8	20.6	0.2
Tunceli	8,676	13.1	0.4	0.7	5.6	80.3	−0.1
Van	21,823	8.9	0.4	0.2	b	b	91.5[b]
USSR:							
Armenia	29,740	16.9	4.3	3.3[c]	23.0	52.5[d]	0

SOURCES: Statistics for Turkey were taken from Turkey, Devlet İstatistik Enstitüsü, *Türkiye istatistik yıllığı 1971* (Ankara, 1973), pp. 3, 202–3, and for the Soviet Union, from A. A. Aslanjan et al., *Armenija* (Moscow: Izdatel'stvo "Mysl'," 1966), p. 144.

NOTE: The figure given in the column Fields and Fallow represents the sum of the following categories in the Turkish statistics: cereals, pulses, industrial crops, oil seed, tuber crops, and fallow. For Soviet Armenia, only a single figure for the general category is available. The Unaccounted for Land column represents the difference between the sum of the figures in other categories and 100%.

[a] One or more of these categories is underrepresented, probably as the result of a printing error.

[b] No breakdown for pasture or nonagricultural land is available for these provinces, but those two categories together constitute all the land that is not otherwise accounted for.

[c] This figure is the sum of the categories "gardens and vineyards" and "personal plots."

[d] This figure includes the categories "woods and shrublands" and "land not used for agriculture."

considered a natural fortress, but it is a fortress that has much stronger walls on some sides than on others.

The formidable barrier of the Taurus Mountains, the relative abundance of pasturage on the Anatolian Plateau, and the severity of the winter are all factors that shaped the character of pastoralism in the Urartian area. Booty lists and faunal remains found at archaeological sites make it clear that sheep, goats, and cattle were of considerable importance to the Urartians. The evidence is inadequate to show what sort of a pasturing system was used in the Iron Age, but modern practices elucidate some of the environmental conditions which limit the range of possibilities. The difficulty of moving southward and the unpredictability of the onset of winter make true nomadism impossible.[13] Unlike pastoralists in Iraq and the southern Zagros, who cover long distances in the annual cycle of movement between summer and winter pasture and whose animals graze year-round, the modern transhumant peoples of the Urartian area spend the winter in mud and stone houses in sheltered valleys. In the summer, many abandon these houses for tents, but they rarely move very far from their winter encampments.[14] In other cases, most of the population remains in the village, with only a small percentage of its winter denizens accompanying the flocks. In either case, survival of the livestock during the winter is, in a good measure, dependent upon the agricultural produce made available to the pastoralists by the agriculturalists. That these conditions also obtained in antiquity is clear from Xenophon's description of houses in Armenia that he passed on his winter march:

> The houses here were underground, with a mouth like that of a well, but spacious below; and while entrances were tunnelled down for the beasts of burden, the human inhabitants descended by a ladder. In the houses were goats, sheep, cattle, fowls and their
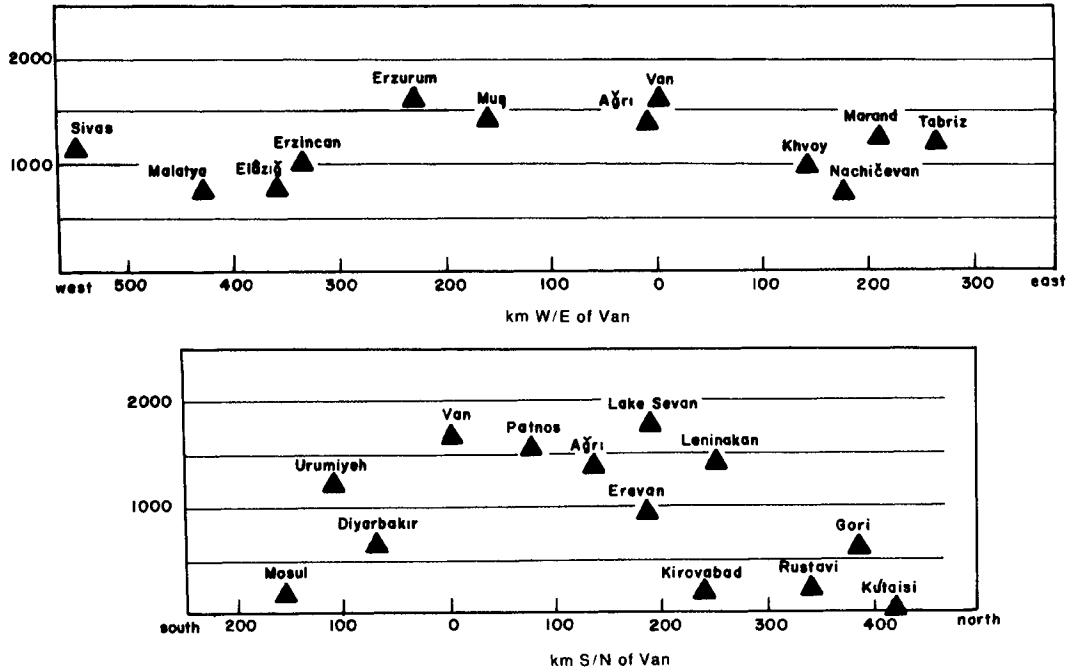
Fig. 4. Elevations of Modern Sites on Urartian Territory

young; and all the animals were reared and took their fodder there in the houses. Here were also wheat, barley, and beans, and barley-wine in large bowls.[15]

Accounts of similar houses and the inconvenience of sharing one's lodgings with various quadrupeds are a recurrent theme in the writings of nineteenth- and twentieth-century travelers in eastern Anatolia.

If this system of limited transhumance dependent upon sedentary agriculture was operative in Urartu, it is easy to see how it would have helped the state to survive Assyrian attacks. At the only time of the year that an invasion was possible, livestock and the people attending it would have been dispersed among the upland pastures. While crops in the fields, and even harvests in storage, might be subject to capture and destruction, the herds remained as a reserve to help see the victimized through the following winter. Complete destruction of the rural economy in Urartu, even in restricted areas, was beyond the power of the Assyrian army. Unless the Urartians failed to take advantage of the abundant pasturelands around them, which seems improbable, their food supply was far less vulnerable than that of regions more dependent upon direct cereal consumption.

Whatever the importance of mountain pastures to the state, it is clear that Urartian settlements and fortresses were concentrated on the broad areas of level land where sedentary agriculture is dominant. The distribution map of known Urartian sites[16] when compared with a map showing physical relief reveals that evidence of Urartian activity is virtually absent in the regions of the most intense folding. No major sites have been found in the rugged terrain of Hakkâri Province, in the Pontic Mountains, in the Karabach chain south of Lake Sevan, or in the mountains between Erzincan and Malatya. While it is possible that further exploration will discover an exception to this rule, it is unlikely that the general picture will change very much. Therefore, I turn now to an examination of these individual "islands" and their relationships.

THE FOCI OF AGRICULTURAL ACTIVITY

The general conditions of agriculture in eastern Anatolia have been succinctly summarized by Erinç and Tunçdilek:

Agriculture is handicapped not only by the steep slopes and resultant soil erosion, the long, severe winters, and the short, dry growing season but also by inadequate communications. Both the sparse population and the arable lands, as in Interior Anatolia, are concentrated oasislike in the depressions. But the oases are more widely separated, and the localization of the cultivated area is more the result of thermal conditions and of the accumulation of soil in the depressions, which serve as local base levels of erosion. . . .

Like Interior Anatolia, the eastern region is a land of grain production. More than 90 per cent of the arable land is in grain; summer wheat, suited to the short arid summers and the long severe winters, is the dominant crop. . . . Irrigation, fallow, and contour plowing are all employed in the struggle for water, and not without success; the irrigated plains of Eastern Anatolia are famous for their fertility.[17]

The actual practice of agriculture varies between these oases because of differences in elevation and related climatic contrasts. Erinç and Tunçdilek distinguish three subregions in the part of Turkey that was once Urartu: (1) the Kars-Erzurum subregion, where the soil is particularly fertile and irrigation is not used; (2) the Aras valley, which is lower and warmer and where irrigation is required; and (3) the Van-Tunceli subregion, where problems of aridity are extreme, and agriculture is for the most part subordinate to stock rearing, except in the depressions surrounding Lake Van, where there is intensive irrigation.[18] The Iranian parts of Urartu bear a certain similarity to the second of these subregions: their elevation is relatively low, and water is relatively abundant, but irrigation greatly increases the effectiveness of cultivation and hence is widely used where possible.[19] The area between Van and Urumiyeh is presumably a transition zone, but its mountainous terrain harbors no oases of irrigated land.

There is no reason to contend that the climate was significantly different in the Urartian period. Although paleobotanical evidence for this area is meager and unreliable,[20] there is general consensus among those who have written on the subject that prior to the Urartian period the climate was not quite so dry.[21] Deforestation, brought about by overgrazing and man's quest for fuel and building materials, is the putative cause of this shift. However, even those who argue for climatic change maintain that this change had already taken place by the Urartian period, and both the manifest interest in irrigation shown by Urartian kings and the classical descriptions of the Armenian winter show that the climate has not been radically transformed in the last two and one-half millennia.

In the following survey, the agricultural foci will be grouped together on the basis of drainage areas, to give a small measure of order to a somewhat chaotic subject. I do not contend that these groupings represent meaningful subdivisions of the Urartian state, but argue, both here and in later chapters, that the foci themselves do have significance in that regard.

The Van Drainage

Lake Van lies 1,680 meters above sea level,[22] and most of the irrigated land in its vicinity is found along its eastern and northeastern shores at very nearly the same elevation. On the southern and western sides, the mountains drop abruptly into the lake, and while the northwestern shore is less rugged, it too allows only small pockets of arable land. The mean annual precipitation is thirty to forty centimeters, but most of that falls in the spring and autumn.[23] Only six percent falls in the summer growing season, and all indices of aridity point to a significant water deficit.[24] Thus, irrigation is necessary for those crops which need more than a few weeks to mature.

1. The Van *Ova* (pl. 9). The most extensive irrigated area on the shore of the lake is the broad plain in which the city of Van is located. The waters of the lake itself, replete with soda,[25] are useless for agriculture, but a number of small streams from the mountains to the east, supplemented by major artificial works such as the Keşiş Göl Dam and a canal—now largely underground—from the Hoşap valley, bring water to the area. The town of Van has for centuries been famous for its walled and irrigated gardens, among which the houses for the wealthy are dispersed.[26] Even grain on irrigated land is harvested here in early July, while some crops, sown on more elevated ground, remain in the fields much longer.[27] In spite of the aura of fertility about

the place, one is always within sight of parched and arid land. If, as Armenian tradition has it, this was the site of the Garden of Eden, Adam and Eve did not have to walk far after the Fall.

While Van is a natural center for the region immediately bordering the lake, it has small claim to prominence on a wider scale. No major routes between the Anatolian Plateau and Iran pass through it, nor does it offer convenient access to the south. The road from the north down the east side of the lake, though relatively easy, is, in fact, a cul-de-sac. Speaking of the situation in the late nineteenth century, Maunsell noted:

> Wheat harvests in the Van province are as a rule very prolific, and grain sometimes rots for want of storage room or means of transport to a profitable market. This province suffers perhaps more than any other in this region from want of efficient means of communication with the coast and the outer world.[28]

With Urartu specifically in mind, Lynch has argued that this isolation made Van an ideal site for a capital during the Neo-Assyrian period, while keeping it obscure at other times.

> No better position for a stronghold against a Power operating from the lowlands in the south could have been discovered by the builders of an empire on the Armenian plains. In the later phases of the history of Armenia the movements of empires and peoples have generally proceeded between the east and the west. Against such currents the city of Van composes a minor obstacle, which they avoid on their more normal and northerly course. Always secure with a fleet on the lake and the passes of Mount Varag fortified, the true military value of the place only advances into first-rate importance when the centers of hostile forces lie in Mesopotamia. It is screened in that direction by perhaps the most impenetrable section of the entire outer or Iranian arc of the peripheral mountains which support the tableland. Moreover, the circumstance that the arc has snapped and sent out a splinter into the districts on the north, represented by the mountains in which the Great Zab has its source, and, further north, by the elevated but not impassable waterparting between the basin of Lake Van and that of the Araxes, has had the effect of concealing Van within the fork of a twofold parapet where it reposes with its back against the complex barrier and defies attack from the south or southeast.[29]

In his survey of roads and tracks in Anatolia, Transcaucasia, and Iran written at the end of the nineteenth century, General Charles Wilson describes five roads connecting the Van *ova* with surrounding areas.[30] Two of these tie it to the plain of Muradiye at the northeast tip of the lake, one via Erçek Göl connecting to a road that continues eastward to Khvoy.[31] Another route goes around the southern shore of the lake to Bitlis and the Murat valley.[32] Two roads lead southward to Mesopotamia, and both are praised for their scenery, not their convenience. One passes over the mountains but is extremely rugged and closed for all but a few weeks at the end of summer.[33] The other, after leaving Van, crosses over to the Hoşap valley and thence to Başkale on the Great Zab. From there it may be followed either to Mesopotamia or to Urumiyeh.[34] It seems probable that the last was the avenue followed by Urartian kings in their early conquest of the south shore of Lake Urumiyeh.

2. Muradiye (pl. 9). The plain of Muradiye, or Berkri, lies sixty kilometers northeast of Van and is watered by the Bendimahi Çay. The area of irrigated land is approximately sixty square kilometers, according to a recent satellite photo—roughly the same size as the neighboring plain of Erciş.[35] It is not possible to say how much alluvium was present in the Urartian period, however.

This valley forms an important link on the routes that connect Van to the north and west. In the nineteenth century, two roads between it and Van were in use, one passing from Körzüt along the east shore of Erçek Göl and the other following the shore of Lake Van.[36] To the west, the main route leading out of the valley also follows the shore of Lake Van, via Ernis to Erciş.[37] Most traffic to the north also takes this route, although there is another, more difficult, road following the Bendimahi Çay and crossing a pass on the flanks of Tendürük Dağ to reach Doğubayazıt. Nineteenth-century descriptions of the latter track are unenthusiastic, although the voiced fears are largely a consequence of the area's being dominated by Kurds.[38]

In view of the proximity of this valley to Van, it is not surprising that there is considerable evidence that it was under the control of the Urartians very early. More than two dozen inscriptions have been found here at three different sites. Although none is completely immovable, their preponderance suggests a focus of effort. All are relatively early, dating to the reigns of Išpuini and Menua.[39] Presumably, the area was completely developed at that time, and no further royal activity was needed there under subsequent kings.

3. Erciş (pls. 8 and 9). The plain of Erciş is bordered by mountains on three sides and Lake Van on the fourth. It is watered by several small streams that originate in the immediate vicinity, the most substantial of which is the Zilan Dere. The areas of intensively cultivated land lie at an elevation close to that of the lake, and a satellite photo taken on June 1, 1976, shows them to comprise about sixty square kilometers.[40] It is unlikely that the situation was the same in the Urartian period, however, since the shoreline has showed a tendency to move in historic periods. This particular part of the lake is very shallow, and one would expect that the soil washed down from the mountains would add continually to the amount of arable land.[41] However, there may be some countervailing factor at work, such as tectonic instability; unless a tell located in the swampy area near the shore is in fact built on an island, it must have been formed when the land around it was drier.[42]

Important routes lead out of this area in three directions. To the east is the road to the plain of Muradiye; to the west a road leads through areas where wheat is cultivated without irrigation[43] along the north shore of the lake to Adilcevaz; finally, there is a road to the Patnos/Malazgirt plain.[44] Only the last encounters any real elevation, but all of the routes are made difficult in winter by the prevalence of snow. In addition to the land route, it is also possible to travel from the area by water, as Lynch did on his trip to Van.[45]

The activities of the Urartian state are well attested over a long period of time here by six inscriptions, two of which are carved on living rock. The earliest of these date to the reign of Menua, and the latest to Argišti II. One of the Menua inscriptions mentions canal building, and references to agricultural works are found in all of the others that are preserved to any length.[46] The most conspicuous site in the area is Zernaki Tepe, celebrated for its gridlike layout of streets. The Urartian character of this site, however, is in doubt, as is the question of whether or not it was ever actually occupied.[47]

4. Other significant areas (pls. 8 and 9). Three other sites—Ahlat, Adilcevaz, and Çavuştepe—deserve consideration here, although none is currently associated with a major expanse of irrigated land. Ahlat, on the northwest shore of the lake, was a substantial city in the fourteenth century A.D.[48] and might be expected to have been a population center in the Urartian period as well. Such an assumption appears unjustified; no Urartian ruins and no inscriptions have been found there, and Burney states that the essential work to make the area arable was first undertaken by the Seljuks.[49] On the other hand, the narrow valley of Adilcevaz, also on the north shore of the lake, does appear to have been a major Urartian center. The citadel and settlement of Kefkale, at which royal inscriptions have been found in situ, are unusual in that they are not associated with a large expanse of irrigable or potentially irrigable land. While the valley is noted for its vineyards and fruit produce,[50] its contours restrict the area of irrigation to a small fraction of the size of the plains discussed above. Around Çavuştepe—a large and well-fortified center in the Hoşap valley—there is certainly a broad plain, but how intensively this land was cultivated in the Urartian period remains uncertain. Although Çavuştepe's excavator notes that the plain is well watered and productive,[51] I have found no evidence—either in satellite photos or on a personal visit in July 1975—for major irrigation works or intensive agriculture. Dry farming is currently practiced in the area, but nothing in the topography suggests that it would be impossible to create a system of canals. It remains an open question, therefore, whether this represents an area in which Urartian agricultural efforts were more intensive than modern ones, or whether it is another rare example, like Adilcevaz, of an Urartian center unassociated with an agricultural center.

The Urumiyeh Basin

At 1,274 meters above sea level, Lake Urumiyeh is significantly lower than the Van basin, but agricultural conditions along its shores are generally similar. The annual pattern of precipitation is the same, with most of the summer being quite dry.[52] Low-lying areas that are watered by streams are intensively exploited.[53] Some spring wheat is planted on higher ground, at a risk, in the hope that spring rains will suffice to bring it to maturity.[54] Winters are cold and characterized by heavy snowfall, but conditions are less severe in depressions along the lake than they are on higher ground.[55] The lake itself is highly saline, and the instability of its water level, coupled with its shallowness, makes settlement and agriculture on its immediate shoreline impossible.[56] In general, the size of the areas of intensive cultivation is larger here than around Lake Van.

1. Mīāndow Āb (pl. 15). Two rivers, the Rūd-e Tātā'ū and the Rūd-e Zarīneh, converge as they approach the southeastern shore of Lake Urumiyeh and then divide into a plethora of smaller channels that fan out in the broad alluvial plain. The land is relatively fertile when irrigated, and there are abundant spring grasses for grazing sheep and goats.[57] No physical barriers separate this plain from others along the shore of the lake. A modern road to Tabriz passes along the western flanks of Mount Sahand, and only a stretch of salt flats divides the Mīāndow Āb area from the Solduz valley. An important track to the south follows the Rūd-e Tātā'ū valley upstream and then crosses the mountains to Saqqez. Given the extent of the agricultural land and the access that the Mīāndow Āb area gives to other regions, there is surprisingly little evidence for Urartian interest in this area. The only inscription—found at Taštepe, which is hardly a major site[58]—deals with conquest rather than peaceful activities. Arslan Qal'eh, while substantial enough, reached its prime in the pre-Urartian centuries and may actually have been destroyed upon the arrival of the Urartians.[59] Šeytan-Abad, the remaining castle in the area, cannot be assigned to the Urartian period with confidence;[60] and while pottery from a tepe on the south edge of Mahābād does belong to that age, it is not distinctively "Urartian."[61]

2. Oshnovīyeh/Solduz (pls. 14 and 15). These two valleys of the Gadar Chāy, which are separated by a low ridge, have been the subject of extensive study by members of the Hasanlu project of the University of Pennsylvania. Rawlinson, who passed through the area in the autumn of 1838, described Solduz as the most fertile plain he had seen in Azerbaijan and made specific reference to the "vast numbers of canals, which irrigate as much land as is required for cultivation."[62] Here he noted great quantities of livestock,[63] which Arab geographers of the Middle Ages report were of considerable importance in this area's trade with Mesopotamia.[64] More recent observations and satellite photos confirm the general fertility of the valleys.

Of the two, Oshnovīyeh is the more enclosed. With mountains on three sides, it is a natural amphitheater, open only to the east. The mountains are, of course, not impenetrable, and one quite famous route leads from Oshnovīyeh across the Zagros Mountains to Iraq via the Kalleh Shīn pass. Lehmann-Haupt argued that this pass can never have served as an avenue for marching armies,[65] and Rawlinson, who visited it in November, also found it troublesome:

> I have already alluded to the danger of traversing this pass—it arises not so much from the depth of snow (for an active mountaineer, by threading his way along the most exposed points, can generally avoid this difficulty), as from the violent and deadly drifts which keep continually sweeping over the face of the mountains during the greater part of the winter months. These drifts come on so suddenly, and with such terrific fury, that a traveller who is once fairly caught in them will rarely escape, and as at the same time the pass of Keli-Shin is the only line of communication between Persia, and Rowandiz; and parties are thus found at all seasons who are bold enough to attempt to traverse it; but a winter is never known to elapse without several persons being here lost in the snow. From the frequency of these accidents an extraordinary degree of dread and mystery is attached to the pass; . . .[66]

Wilson, remarking that deep snow often covers the pass as late as July, recommends that the traveler from Rawāndūz to Urumiyeh take the longer, but easier, route via Rāyāt to Khāneh

and the upper valley of the Little Zab, which approaches the Oshnovīyeh area from the south.[67] However, the Kalleh Shīn pass was clearly of some significance to the Urartians, since one bilingual stele stood beside it, and two others have been found along the road approaching it.[68]

Another difficult road out of the amphitheater goes north over a mountain ridge to reach the valley of a small stream, which it then follows to the plain of Urumiyeh. This route is passable to modern traffic and is noted in Wilson's *Handbook*, but it is usually avoided in favor of the road along the west shore of the lake. Still, a rock niche with an inscription of Menua located beside the more difficult track is an indication that it was in use in the Urartian period.[69]

Urartu's control of this area is demonstrated by the site of Qalatgah, a major citadel from which at least one inscription is known.[70] The size of this fortress and the absence of any site of similar dimensions in the Solduz plain suggest that the Urartians preferred to concentrate their efforts in the more enclosed of the two areas. This does not mean that they failed to dominate Solduz, however. The conquered Hasanlu was refortified with a wall that is in the typical "Urartian" style,[71] and a number of minor sites attributed to the Urartians on stylistic grounds are to be found around the plain.[72] With a powerful Urartian establishment in the neighboring Oshnovīyeh valley, it is unlikely that any of these enjoyed any political independence.

3. Urumiyeh (pls. 14 and 15). The plain of Urumiyeh vies with Mīāndow Āb for the honor of being the largest agricultural area beside the lake, and it appears to be the more intensively cultivated today.[73] Particularly noted for fruit production and vineyards, it is also a major focus of grain production and is relatively well watered by a number of small streams flowing down from the mountains. It is effectively cut off from the valley of the Great Zab and its route to the Van area by these mountains,[74] and consequently, the main avenues of communication run north, to the plain of Shāhpūr, and south, to Oshnovīyeh and Solduz. The road to Shāhpūr involves crossing a pass of over 1,850 meters, which is not always free of difficulty. Navigation on the lake is also a chancy business, since a drop in the wind can leave a boat stranded on its waters for days.[75]

That this plain was part of the Urartian state is suggested by the inscription recently discovered at Mahmud Abad, which records sacrifices of Rusa I.[76] Also of importance in this regard is the site of Qal'eh Ismael Ağa, which is stylistically Urartian and appears to have been the primary fortress of the area. With its walls enclosing a surface of 9.3 hectares, size alone would suggest that it is the work of one of Urartu's rulers.[77]

4. Shāhpūr (pl. 10). This plain, between Khvoy and Urumiyeh, is smaller than each of its neighbors but has traditionally been a focus of settlement. The modern town of Shāhpūr is quite new, having been built in the 1930s to replace Dilman, which was destroyed by an earthquake.[78] But Arab geographers speak of Salmas, fourteen kilometers to the west, as a substantial place whose fortunes varied from the ninth to the thirteenth century.[79] The plain offers access to the north shore of the lake, which is of minor importance as an agricultural area[80] but is one of the main avenues to Tabriz and points east. Another important road goes northward to Khvoy, with no significant intervening mountain barriers. To the west, Wilson mentions a "difficult" track to Başkale and Van,[81] which is no longer in use today. The road to Urumiyeh has been mentioned above.

There is no direct and firm evidence that this plain was under the control of the kings at Van, but it is hard to see how it could not have been, with the rest of the western shore of Lake Urumiyeh in their grasp. Moreover, there are a number of small eighth- and seventh-century B.C. sites around its periphery that are identified as Urartian by Kleiss.[82] Haftavan, a settlement mound eight kilometers south of Shāhpūr, is the most substantial site of the Urartian period in the area, but it is not of the same order of magnitude as the fortresses of Qalatgah, Qal'eh Ismael Ağa, and Bastam.

5. Other areas in the Urumiyeh basin. On the flanks of Mount Sahand near the eastern shore of Lake Urumiyeh, there are a number of fertile valleys that resemble, at least in satellite photos, those on the opposite side of the lake.[83] Rawlinson praised these areas highly, noting in particular their fruit production.[84] No evidence of Urartian occupation or exploitation of them

has come to light, and it seems likely that they lay outside the territory controlled by the state. Given the absence of any physical barrier to Urartian expansion in this area, it would be useful to know why this is so. The two possible answers are that the area was too open—enjoying unrestricted access to both the north and the south—and that a slightly greater aridity on this side of the lake made grain cultivation less practicable outside the immediate areas of irrigation. These remain simply guesses, however.

The Aras Valley and Tributaries

The agricultural areas along the Aras and its tributaries are the lowest parts of Urartu and, in terms of mean annual precipitation, are also among the driest. Like the areas discussed above, they are subject to considerable aridity in summer, but they differ from them in that winter snowfall is not as heavy. Where possible, they are irrigated. In Iran, and in the parts of the Soviet Union on the opposite bank from Iran, the agricultural areas follow the same pattern as in the Van and Urumiyeh basins—pockets of arable land separated by uplands and broken relief. North and west of Mount Ararat, however, the countryside opens into a single broad plain that is considerably larger than any other in Urartu. The discussion below begins with the Urartian areas in Iran and moves upstream, in keeping with the generally counterclockwise trend of this survey of Urartian domains.

1. Marand (pls. 10 and 11). The plain of Marand is presently less intensively cultivated than those of Khvoy, Shāhpūr, or Qareh Ẕīā' od Dīn.[85] Much of its western end appears to be very saline and consequently useless for agriculture. Modern areas of irrigation cluster along the sides of the valley, leaving its center for grazing animals. This is the one area in northwestern Iran where I have seen impressive herds of camels, and it doubtless served equally well for horses in the past. If the salinization is a recent development, the productivity of the area might have been substantially greater in the Urartian period.

Although the plain is decisively marked off by mountains on all sides but the west, it is crossed by a number of major roads. Most significant today is the highway from the Turkish border near Mākū to Tabriz, which passes through the plains of Qareh Ẕīā' od Dīn and Khvoy. Another route, of greater importance in the past than presently, is the post road to Erevan, which goes northward from Marand to Jolfā and then northeast along the left bank of the Aras.[86] Both of these roads join in Marand and then cross a pass of 1,850 meters as they continue eastward to Tabriz. It is not absolutely necessary for travelers from Erzurum to Tabriz to pass through the plain of Marand; many in the nineteenth century preferred to go from Khvoy to the north shore of Lake Urumiyeh and eastward from there.[87]

As noted above, there are no inscriptions known from this plain, but a large fortress at Livar is of Urartian workmanship, and a few tepes in the plain have yielded pottery that is stylistically Urartian.[88]

2. Khvoy (pl. 10). Europeans who visited Khvoy in the nineteenth century tended to be quite enthusiastic about the fertility of the lands which surrounded it, praising both its gardens and its grain-growing capacities.[89] This productivity, which is still manifest, is not due to any abundance of moisture—Khvoy is the driest meteorological station on what was once Urartian territory. Annual precipitation here is less than half of what falls on Van and Urumiyeh, although the main discrepancy is in the winter months. A relatively damp May, early-maturing crops,[90] and irrigation water from the Qoṭūr—which has its sources above the 2,400 meter level in the mountains fifty-three kilometers east of Van—are what make agriculture possible here.

As in the case of the Marand plain, surrounding mountains create a sense of enclosure, although important routes converge here. The short trip to Shāhpūr involves an increase in elevation of three hundred meters but is free of natural impediments. There are two roads to the Qareh Ẕīā' od Dīn plain in use today: one fairly direct, which crosses a mountain ridge at an elevation of 1,825 meters; and another, longer, road via Evowghlī which never rises much above 1,200 meters. The Qoṭūr valley provides direct, if difficult, communications with Van[91] and is the route followed by the modern railroad from Tabriz. Elevations along this passage, however,

sometimes exceed 2,300 meters, so it can hardly be expected to serve as a major east–west avenue. An alternative to the modern highway to the northeast (Khvoy–Qareh Ẓīā' od Dīn–Mākū–Doğubayazıt) crosses a mountain ridge northwest of Khvoy and follows the upper Āq Chāy to reach Sīah Chashmeh. From there it continues in the same direction, over another series of ridges to reach the plain south of Mount Ararat a few kilometers east of Doğubayazıt. There are extreme elevations on this road—sometimes in excess of 2,500 meters—but Wilson, for reasons unspecified, regarded it as preferable to the modern road, which keeps to much lower ground.[92]

As in the case of Marand, Urartian occupation of the plain of Khvoy is not directly attested by inscription. Here, however, there is no citadel of comparable size to insure that the man-power resources of a state were at work. Seven minor fortresses, assigned to the Urartians on stylistic grounds, are located in the plain,[93] and a clear cultural affiliation with Urartu is also to be seen from a relief that was discovered not far from Khvoy.[94] The importance of the routes leading through this area, which connect the capital with other plains known to be Urartian, also strengthens the arguments for including it in the state's sphere of control.

3. Qareh Ẓīā' od Dīn (pl. 10). There is no question whatever about the political affiliations of this moderately-sized valley in the late Urartian period. Bastam, founded as King "Rusa's Small City" (Rusai-URU.TUR) in the seventh century, is one of the sites at which royal admin-istrative activities are best attested. In view of the prominence of this site—the most complex Urartian fortress in Iran—it is surprising that the Qareh Ẓīā' od Dīn plain is so obscure in other historical periods. It is rarely mentioned by travelers,[95] and the modern town, with a population of several thousand, is of no great consequence. The plain itself is enclosed by mountains on all sides but the northwest and is intensively cultivated with an irrigation system that draws its water from the Āq Chāy.

One possible explanation for the area's lack of fame is that it may be bypassed by alter-native routes in long-distance travel. It is true that the modern road from Mākū to Marand which bears most of the overland traffic from Anatolia to Iran cuts across it, but the Sīah Chashmeh to Khvoy road and the old post road from Erevan to Marand via Jolfā are both ways around it that have enjoyed favor in the past. If Bastam were any kind of a hub of communications in the Urartian period, one would have to hypothesize greater importance for roads and tracks that are little used today. One leading to the plain around Sīah Chashmeh appears to be marked out by sites, and another probably led north to the Aras. The latter passage, crossing an area where wheat is cultivated without irrigation, would not be particularly difficult, and the site of Qal'eh Oghlu[96] suggests that the Urartians were actively involved in this area. There was almost cer-tainly a track up the Āq Chāy as well, passing Ašaghi Qorul and presumably connecting with the Khvoy to Sīah Chashmeh road. No trace of this remains today, but there are fortresses along the way that could not have been independent of Bastam.

4. Nachičevan (pl. 10). Flowing down from the Anti Caucasus Mountains, the waters of the Nachičevančay form a delta of irrigable land as they reach the plain of the Aras. This zone, connected by road and rail with Jolfā and within easy reach of the Qareh Ẓīā' od Dīn and Ve-rachram plains, seems an obvious location for Urartian development. At the moment, however, this area is archaeologically *terra incognita*.

5. Verachram (pl. 10). Fifty kilometers northwest of Nachičevan, the Arpa[97] also forms a delta of fertile land on the Soviet side of the Aras. On the opposite bank, where there is rela-tively little arable soil, the fortress of Verachram—the second-largest Urartian site in Iran—commands a ridge facing these fields, with which it was once connected by a bridge.[98] Again, the attribution of this fortress to the Urartian imperium is based on cultural affiliation, size, and its position between other areas of known Urartian dominance rather than on direct attestation by inscription. At Verachram there are rock-cut chambers and a niche, a building of square plan that looks very much like the standard Urartian temple, and walls and pottery of the style that is known from Bastam and other Urartian fortresses.[99] The site is easily approached via the Aras valley from the Erevan area, and there are no difficulties in the road to Qareh Ẓīā' od Dīn.

Kleiss has suggested that Verachram also lay on a route to the Mākū and Doğubayazıt areas that is marked out by smaller Urartian sites.[100]

6. Erevan and the plain of Ararat (pls. 4 and 5). Between Mount Ararat and Aragac, the Aras plain broadens to a width of more than thirty-five kilometers, creating the greatest single expanse of arable land in Urartu's domains. The Aras itself splits into several channels to water this plain, and other rivers from the surrounding mountains supplement it in this task. Although the annual rainfall is considerably greater than at Khvoy, irrigation is equally essential here. Compared to Van, winters are quite dry, and the spring rainfall is not enough to carry crops through the arid summer. The mountains north of the valley, however, enjoy considerably more precipitation than those in more southerly parts of Urartu, and consequently more water from runoff is available to the cultivators of the valley.[101] The irrigation system in effect in Erevan in the nineteenth century was praised by many European visitors as both intricate and necessary for the survival of the city.[102]

It is difficult to judge the extent of the lands used by the Urartians in this basin, since this is one place in Urartu where topography is not a limiting factor. Modern irrigation systems making use of pumping stations have created two major groups of fields: one beside Oktemberjan and the other along the Razdan from Erevan to the Aras.[103] The Urartian citadel of Argištihinili was associated with the first of these, and Erebuni, founded by the same king, with the second.[104] Thus, the areas were distinct enough in antiquity to warrant their own centers, although no physical barrier separates them.

Modern conditions—in this case political boundaries—also stand as an impediment to tracing the main routes connecting this plain with other parts of Urartu.[105] I have already noted that the Aras valley served as a thoroughfare to the southeast. Another road of importance for traffic moving in this direction follows the Aras valley from Horasan to Tuzluca, skirts the plain on the Turkish side of the river to Iğdır, and then crosses a pass of 2,000 meters on the flanks of Mount Ararat and descends to the plain of Doğubayazıt. The road is often used by traffic from Erzurum to Tabriz when seasonal conditions make it advisable to avoid the Tahir pass (el. 2,500 meters) between Horasan and Zidikân. Another avenue to the west, and the north as well, skirts the western side of Mount Aragac to reach Leninakan and the valley of the Kars Çay. From there a circuitous route takes the modern railway through the mountains into the Kura valley. There is also a road from Erevan to Leninakan around the eastern side of Aragac, but it encounters higher elevations than the western one. Finally, the Razdan valley connects Erevan with the Sevan basin, from which other roads lead over the Anti Caucasus range to the Kura valley. Each of these routes into the plain of Erevan is in some sense a bottleneck, and the area, in spite of its greater size, is essentially sealed off as effectively as the depressions that make up the smaller "islands" in the Urartian archipelago.

7. Leninakan (pl. 4). As one moves from Erevan to the more elevated (1,525 meters above sea level) plain northwest of Mount Aragac, a new climatic zone is encountered. Cooler temperatures and a greater abundance of summer rainfall reduce the role of irrigation to secondary importance.[106] Perhaps coincidentally, major Urartian fortresses have not been found in this area, although inscriptions recording conquests would suggest that this valley was also a part of Urartu's holdings.[107] The main routes in and out of the area have been noted above. It is connected with Erevan by two roads around Mount Aragac and with the Horasan plain via Kars and Sarıkamış. A thick zone of mountains separates it from the Kura valley and other agricultural land to the north.

8. Lake Sevan basin (pls. 4 and 5). Lake Sevan is only a part of the Aras basin by virtue of an artificial channel that connects it with the Razdan, but I include it here since its only real contact with the rest of the Urartian world is through Erevan. In spite of its proximity to the Aras plain, it enjoys a completely different climate because of its elevation (1,900 meters above sea level) and mountainous surroundings. It is the wettest part of Urartu and receives most of its precipitation between April and October, rather than in the winter.[108] While it is comparable to Leninakan in this regard, it is cooler in the summer, so irrigation is even less of a necessity.[109]

Nevertheless, modern canals have been constructed along its southern shore, where the primary areas of agriculture are located.[110]

The Urartian presence is established here by several inscriptions found on the southern and western sides of the lake.[111] None of the fortresses associated with them has been excavated, so it is not possible to establish whether their architectural, artistic, and ceramic styles correspond to those of Urartian sites in the lower oases to the south.

9. Pasinler/Horasan (pls. 2 and 3). The plain of Horasan is a narrow strip of level land that stretches for more than fifty kilometers between two imposing mountain ranges. It enjoys a water surplus during the summer months and prolonged snow cover in winter. Agriculture may be practiced here without irrigation,[112] although most of the fields are completely parched by the end of summer.[113] Fruit trees and gardens are largely absent, but Cuinet noted that the area was renowned for its fertility, particularly in the production of grains and legumes.[114]

The main routes across this plain have already been mentioned. At its western edge there is a ridge which marks the divide between the waters of the Aras and the Karasu, which eventually arrive in the Caspian Sea and the Persian Gulf, respectively. This barrier was of considerable importance in the nineteenth-century wars between Turkey and Russia, for it was regarded as a bulwark protecting Erzurum, the key to eastern Anatolia. Lynch, however, thought that its military strength was overrated.[115] Other major roads out of the plain lead south to Hınıs; southeast over the Tahir pass to Ağrı; and northeast to Sarıkamış, from which both Kars and the plain north of Ararat may be approached.

As in the case of Leninakan, the inconsequence of irrigation is coupled with the absence of a major Urartian center. Yet there is no doubt that this area was subject to the state. Five inscriptions have been found on and around the periphery of the plain,[116] and others indicate royal interest in the road to Sarıkamış and the Tahir pass.[117] Although Menua claims to have built a "palace" here, there is no site comparable in size to the ones in Iran and the Soviet Union mentioned above. The only potential candidate is Hasankale, which stands on a mountain spur jutting out over the modern village of the same name.[118] This fortress has never been measured or studied in detail, but to my eye it appears much smaller than such centers as Livar, Verachram, Qal'eh Ismael Ağa, and Çavuştepe.

10. Doğubayazıt (pl. 9). The valley southwest of Mount Ararat, in which Doğubayazıt is the primary modern settlement, deserves mention here, although it is hardly an agricultural focal point. Cuinet noted the comparative inferiority and neglect of agricultural production,[119] which prevails to this day. A large part of the land is saline or covered with standing water as late as June. Much of the rest is pasturage. Of its strategic significance there can be no doubt; it is the easiest passage between Anatolia and Iran, and is also crossed by the most direct route from Van to Erevan. Nevertheless, the evidence for Urartian activity is minimal—a single rock-cut tomb, an atypical relief sculpture, the most paltry remains of a fortress, and no inscriptions.[120]

The Murat Drainage

From its sources near Ağrı, the Murat winds its way through Urartu for more than five hundred kilometers before joining the Fırat and flowing into the plain of Malatya. In spite of its length, the agricultural areas associated with it are fewer in number, more widely spaced, and generally less productive than those in the Aras drainage area. Four plains along its main course may be considered foci of agriculture—Ağrı, Malazgirt, Muş, and Elâzığ—while a fifth, Patnos, lies on one of its tributaries.

1. Ağrı (pl. 3). The plain of Ağrı (el. ca. 1,535 meters above sea level) stretches along the south side of a mountain chain that runs from the Ararat massif to the west—the "spine of Armenia," in the words of Lynch. On the opposite perimeter of the plain is another row of mountains, and streams from both ranges converge in the center, near Ağrı, to form the Murat. The contrast between this area and the Aras valley is stressed by Lynch:

We were reminded of the valley of the Araxes in the neighborhood of Erevan. Both depressions have the appearance of inland seas at the foot of mountains, the one on the northern, the other on the southern side. But that of Alashkert [modern Eleşkirt, or Zidikân, the other major village in the plain besides Ağrı] is much more elevated and less sheltered; you miss the presence of those extensive stretches of orchard and verdure which soften the landscape through which the Araxes flows. The eye wanders out over dim, ochreous tracts, broken by patches of fallow, and seamed by white rivulets. . . . We saw several insignificant villages; but the district was wild, the soil for the most part unreclaimed.[121]

The same problems that plague the farmer in the Doğubayazıt plain are impediments to agriculture around Ağrı. Winter is longer here than elsewhere in Urartu, with up to two hundred frost days per year[122] and prolonged snow cover.[123] When the spring thaws finally arrive, poor drainage leads to flooding and further delays in planting.[124] Under these conditions it is hardly surprising that very little modern investment has been made in agricultural works in this area, and that major Urartian projects are also unknown.[125]

At Ağrı a road south to Van via Patnos and Erciş departs from the major east–west artery. The importance of this crossroads is somewhat diminished by the existence of alternative routes, however. A track from Erzurum to Van that enjoyed favor for summer travel in the nineteenth century, although no modern road follows its course, bypassed the plain of Ağrı completely and went in more or less a direct line over the highlands to Malazgirt and from there through Erciş.[126]

2. Patnos and Malazgirt (pls. 3, 8, and 9). Neither of these two plains has the enclosed aspect of the areas discussed above. They are distinct agricultural areas but separated by infertile land rather than by physical relief. Patnos lies on the primary route from Van to the north, while Malazgirt is currently off the beaten track. In elevation and climate these areas are similar to Van, but in practice agriculture depends less on orchards and more on extensive fields of grain. Of the two, Patnos is the smaller and least productive, since irrigation here is hampered by lack of perennial water sources.[127] Around Malazgirt, where wheat and barley are the primary crops,[128] springs help to supply water for irrigation.[129] The difference between these areas and the Van shore is demonstrated by a satellite photo of September 6, 1975, which shows little growing around Patnos or Malazgirt, while Erciş is replete with foliage.[130]

In marked contrast to the plains of Ağrı and Doğubayazıt, evidence for Urartian activity in the Patnos and Malazgirt areas is abundant. Thirteen display inscriptions have been found in the vicinity of Patnos, most of which probably stem from Aznavur, although Giriktepe and Kancıklı are also important sites of the Urartian period.[131] Fewer inscriptions have been found near Malazgirt, but unlike the Patnos texts they make specific reference to canal building.[132] Bostankaya, the only Urartian site here known in any detail, is relatively small.[133]

3. Muş (pls. 7 and 8). On the map of known Urartian and early Iron Age sites, the plain of Muş represents a puzzling blank spot. It is one of the largest areas enclosed by mountains, and in view of its proximity to Van one would expect it to be an important center of the state's activities. But this assumption is not borne out by either textual or archaeological evidence: only two inscriptions have been found here,[134] and a survey failed to reveal a single major site that is stylistically Urartian.[135]

This paucity of material evidence for Urartian exploitation is not due to any deficiency of agricultural potential in the plain, nor to its isolation. Urartian campaigns much farther west are attested, and it is unlikely that they were conducted along any route other than the Murat valley. Both the modern railroad and highway follow the Murat through the plain of Muş to reach Lake Van. There are two ways of traveling north to Erzurum: in the summer, one may ride more or less directly, while in the winter it is advisable to hold to lower terrain on a road that passes by Hınıs to Hasankale.[136] Access to the south is also offered by a difficult road through Bitlis and Siirt.[137]

Both grain and garden cultivation are practiced here. The precipitation regime is similar to Van, with markedly dry summers, but water in the plain is relatively abundant, if not superabundant. Lynch remarked that it was allowed to collect in swamps rather than in irrigation

ditches when he passed through,[138] but other nineteenth-century writers reported the plain to be both fertile and productive, citing its vineyards in particular.[139]

4. Elâzığ (pl. 6). The floodplain of the Murat in the vicinity of Elâzığ has recently been transformed by the construction of the Keban Dam. Although this renders satellite photos less useful in terms of evaluating the amount of agricultural land, the loss is more than made up for by the abundance of archaeological and geographic data that was amassed under the Keban salvage project. This area belongs to a different agricultural zone than the Van region, although many of the same factors, such as relief and aridity, still limit the potential yields.[140] Irrigation is a necessity for survival in view of the absence of precipitation in summer, but because the climate is warmer than Van early in the year,[141] surrounding fields are often cultivated with dry grain crops as well. Variation in spring precipitation is great, and consequently the risks involved with the latter are unpredictable.[142] According to Huntington, this led to crop failures and hardship in the nineteenth century.[143]

The Urartian presence in this area is less well established than the number of "Urartian" sites recorded by Kleiss and others would suggest.[144] The lowlands around Harput and Elâzığ are well removed from the nearest area in which building under the state is attested textually, and although conquest is implied by the İzoli inscription, it may have been of short duration.[145] Hauptmann has argued that the middle Iron Age brought a change in the archaeological assemblage at Norşuntepe which may be associated with the Urartian state,[146] but no inscriptions have been found there, and the evidence of the ceramic inventory is inconclusive.[147]

The Karasu Drainage

Three enclosed plains lie along the course of the Karasu: Erzurum, Tercan, and Erzincan. They are all relatively fertile, more heavily populated in modern times than the rest of the Urartian area in Turkey,[148] and lie along the primary east–west overland route through eastern Anatolia. Yet in spite of their present importance, there is no evidence that they were ever part of the holdings of the Urartian state.

1. Erzurum (pl. 2). This plain enjoys both fertile soil and the severest winters in Turkey.[149] Summer and spring rainfall make irrigation unnecessary, but sowing and, consequently, harvest are delayed by the persistence of the cold weather.[150] This also rules out fruit production, and most of the agricultural effort is devoted to grain. There is abundant pasturage, and the area has always enjoyed a reputation for livestock production.[151]

In recent centuries, particularly in the nineteenth, when warfare between Turkey and Russia erupted periodically, Erzurum has enjoyed a reputation for strategic importance. This is derived not merely from its ability to provide food supplies and horses,[152] but from its location at the convergence of several important routes as well. Most Europeans traveling to Persia passed through it on their way from the Black Sea to Tabriz. The overland routes from Alexandropol, Erevan, and Van to the west also crossed through this plain.

Were these avenues, and the plain of Erzurum itself, used by the Urartians? The city of Erzurum is of late Roman foundation,[153] and no Iron Age fortress in the vicinity is known. Furthermore, only one inscription has been found in the area, and since it remains unpublished, its significance is uncertain.[154] Thus, the case for inclusion in Urartu's territory currently rests on the position of the plain between Hasankale and Altıntepe, but it is a weak case since, as noted above, the latter may have been politically independent.

2. Tercan (pls. 1 and 2). East of Tercan the Karasu valley opens into a substantial but historically obscure plain. Cuinet writes that here, as at Erzurum, production of cereals was emphasized in the late Ottoman Empire.[155] Brant recorded that crops in the area were well ahead of those at Erzurum when he rode through, and the winters were milder so that cattle could be put out to feed.[156] There is no evidence of Urartian activity on this plain.

3. Erzincan (pl. 1). The site of Altıntepe, which stands on a natural eminence in the midst of a spectacularly walled-off valley, represents the northwesternmost salient of Urartian material culture. If other sites of the same period guarded the approaches to the valley, as they do in

most cases in Iran, they have yet to be discovered; at the present time, Altıntepe appears to be an isolated site, far removed from the nearest place that was indisputably in the hands of the Urartian crown.

The Erzincan *ova* lies in a different agricultural zone than Erzurum, having fewer frost days and drier summers.[157] Erinç and Tunçdilek state that irrigation is not used for grain, but otherwise the region has less agricultural variety than the Malatya-Elâzığ subregion.[158]

This survey of the major depressions in the Urartian area has not covered all of the productive land, or even a sizable percentage of it. The expanses of lower alluvial and lacustrine acreage that have been reviewed simply represent the centers around which agricultural activity and modern population are concentrated. While inscriptions and building remains make it certain that many of these areas played the same role in the kingdom of Urartu, it is impossible to quantify their relative importance, either in comparison to highland areas or vis-à-vis each other. The introduction of new crops, the use of modern fertilizers, alteration in irrigation systems, and the results of twenty-seven centuries of erosion and salinization make current agricultural productivity a distorted indicator of past conditions. More research, particularly in Turkey, is necessary before any sophisticated appraisal can be made of the extent to which the Urartians exploited the potential of land both in and out of these depressions. Still, a number of broad, qualitative judgments are possible. First, there is no climatic unity in Urartu's territory, and agricultural conditions are far from uniform among the depressions. In some, irrigation is required, and in others, it is not. Indicators of royal building are concentrated in some of the areas and mysteriously absent in others which can reasonably be assumed to lie within the grasp of the state. Finally, there is no obvious correlation between the state activity and the need for irrigation. In most areas in which hydraulic works are necessary, state building is conspicuous, but there are some notable exceptions, like the plains of Muş and Doğubayazıt. On the other hand, where irrigation is unnecessary, there is less chance of finding a major center (viz., Erzurum and Leninakan), but again, there are exceptions (like Patnos).

COMMUNICATIONS AND CONNECTIONS

My thesis requires an examination of two basic aspects of Urartian communications: How were these foci of agricultural activity related to each other, and how accessible were they to Assyria? The fusion of these disparate units into a durable political entity was a unique imperial feat, and mountain roads were both the clamps and the glue of their bonding. I have already reviewed the primary routes in and out of each depression, but some observations on the network as a whole are in order. Figure 5 outlines the major avenues of communication, at least as they existed in the 1890s, and gives approximate riding time and distance between selected points.

Differences in accessibility according to the season of the year are not to be minimized. Writing of the east Anatolian Plateau at the end of the nineteenth century, Wilson warned prospective travelers:

> The winter is very severe: the temperature on the plains frequently falls to 15° below zero F, and the dry piercing cold is often intensified by strong winds. *Snow* falls in late autumn and covers the whole face of the country till March. The limit of eternal snow is about 11,000 feet. In consequence of the intense cold and drifting snow during winter storms and blizzards, many of the passes can only be crossed with difficulty and sometimes danger. Men and animals are often frozen to death or buried in the snow drifts when endeavoring to cross the higher passes. When the snow melts the rivers are greatly swelled, and only passable where there are bridges.[159]

There is no basis for contending that the climate was significantly different in the Urartian period. Classical authors sound very much like Wilson in their description of the Armenian winter and the impediments it posed to human movement. In crossing the western part of Urartu on his return from the battle of Cunaxa, Xenophon claimed that the snow was an armspan deep,

Fig. 5. Distances and Traveling Times in Urartu

and that many animals and men in his army perished in it.[160] Plutarch says that Lucullus and his army were driven out of Armenia by winter weather that came as early as the autumnal equinox,[161] and Antony lost eight thousand men on a winter march from the Aras to Lebanon.[162] Tacitus reports that the Armenian winter and an inefficient supply system compelled Vologeses to return to Parthia even though he was otherwise unopposed in his invasion of the plateau.[163]

The severity of its winter made Urartu exceptional among the various lands with which the Assyrians had to contend. The heavy snowfall and the early closing of mountain passes set firm time limits for the length of campaigns, since it was impossible to move armies, let alone supplies and siege machinery, during the winter. Moreover, these conditions militated most effectively against an opponent from the south, since no gradual approach to the plateau existed from that direction. From other quarters, such as western Anatolia or Persia, a hostile force could move in by taking one valley at a time and securing its position before moving on to the next. For Assyria, which customarily struck with a single large force under the command of the king himself, the wall of the Taurus made such tactics much more difficult.

The quality of roads involved is another significant variable. Given the way in which topography limits the paths one can follow in mountainous regions, the difficulty of improving these in an era without dynamite, and the absence of evidence of intensive Urartian concern for road-building, it is unlikely that any alternatives existed in the Urartian period which were unknown or unusable in the late nineteenth century, or that the quality of those alternatives was significantly different in the earlier period.[164] If one ignores the distinction between bridle paths on the one hand and roads open to carts (and chariots) on the other, the distance between Van and Mosul appears minimal:

> Looking at a map of the Near East, it is almost with disbelief that one realizes that Tušpa, the capital of Urartu on the shores of Lake Van, is only about 130 miles as the crow flies [better 150 miles, or 130 nautical miles] from Nineveh, i.e. about *half* the distance between Nineveh and Babylon. Urartu was, in other words, by far the closest to Assyria of all the powerful foreign countries.[165]

But all of the more or less direct routes from Mosul to Van were closed for most of the year and would not bear wheeled traffic when they were open.[166] Thus, the statement above has validity only in a limited sense: if no one stood in his way, a messenger traveling via Hakkâri and Başkale in the summer could move from one capital to the other in slightly more than eighty hours in the saddle. That is still more than a week's hard ride.[167] However, an army, at least one bringing siege machinery and supplies, could not take this or any of the other direct roads. Its most direct approach would be via Rawāndūz, Khāneh, and Oshnovīyeh, which would take 145 hours. The other good road, entering Urartu from the west via Elâzığ, would take even longer— 204 hours, assuming the easier trail around the north side of Lake Van was used in preference to the rugged one on the south side. All of these times are of course based on the assumption that only natural obstacles are to be overcome; for a hostile force there would also be barriers of Urartian creation.

The multiplicity of routes between Assyria and Urartu and their seasonal variability also meant that Urartu could be attacked from a number of angles, and no individual area of the kingdom was uniquely prone to invasion. Thus, the Assyrian threat was something that operated on the kingdom generally and could not be faced with a simple perimeter defense. Within Urartu the complexity of the network of roads was itself a source of security. In most of the areas where there is the highest certainty of state control, there were several connections with other valleys rather than a single vital thoroughfare. Thus, enemy control of one road or one pass could not sever it from the rest of Urartu. The heart of the kingdom was a web of roads, in contrast to outlying districts such as the Karasu valley and the lower Murat, where communications were arranged along linear axes.

In short, there was a limited number of paths along which men and commodities could move in Urartu. The difficulties of negotiating these, particularly in winter, reinforced the insular quality of the lowland areas in which agriculture was most successfully practiced and where nomadic populations took hibernal refuge. In terms of subsistence, the people of these

areas had to maintain a fair measure of self-sufficiency, and concentrations of population beyond the resources of the immediate area, such as those in northern Iraq,[168] were unsupportable. Yet these agricultural foci were bound to each other more closely than any one of them could ever be to the Mesopotamian plain. From the south, Urartu could be threatened, but not subjugated.

3

SETTLEMENT AND DEFENSIVE NETWORKS

How did the Urartians exploit the potential of their environment? It is my thesis that productive and distributive activities were decentralized to a degree uncharacteristic of Oriental monarchies, and this was accomplished through artifice as well as natural constraints. Although redistributive mechanisms undoubtedly served to enhance the wealth and power of the central authority of the state, they must have done so without excessively concentrating human and material assets in fixed locations. Otherwise, they could have been isolated and overwhelmed in short-term Assyrian incursions. I have also argued that Urartu was primarily a state born of military necessity; if fundamental economic changes on the east Anatolian Plateau accompanied its rise, they were the result of the state's emergence, not a primary cause.

The most direct evidence bearing on these concerns is the way in which archaeological sites are distributed across the landscape, and the relationship of those sites to each other. In the contemporary climate of archaeological theory, "settlement patterns" are often invoked to elucidate organizational principles and adaptive mechanisms of societies, and occasionally studied as an end in themselves. However, both in principle and in practice there are difficulties in applying much of the methodology of settlement studies to the case of Urartu.

A fundamental concern is that there are two separate concepts—not entirely unrelated, but capable of varying independently to a large degree—involved in the creation and survival of every Urartian site. The first of these is the idea of a settlement as a place to live, determined by economic factors such as access to the means of production and redistributive arrangements. The second is the idea of a system of defense. It is clear from both Assyrian descriptions of Urartu and the surviving archaeological remains that these two factors could interact in different ways in determining the character of an Urartian site. One extreme, where military considerations completely outweigh the habitation site concept, may be seen at the site of Qal'eh Sarandj. It is built at the peak of a rocky outcropping and consists of very little more than a strong perimeter wall. Hardly any pottery was found there, and Kleiss doubts that it served as anything but a place of refuge for the inhabitants of the area in times of trouble. At the other extreme are sites like Tepe Kasyan, Qahramanlu, Tepe Marand, and Haftavan Tepe.[1] These are located on tells that rise slightly above the level of surrounding arable lands, and there is no evidence that they possessed any fortifications. Their military significance cannot have been great, and their primary raison d'etre was to provide people a place to live. These are only extremes, however, and in the majority of cases one and the same location formed part of both the settlement system and the system of military defense. The important point is that in an area of mountains and plains, a place that was significant in one system need not have been significant in the other.

In practice, settlement studies in Urartu are greatly hampered by a number of factors which vitiate both the quantity and quality of the available raw data. First, since eastern Anatolia is a sensitive area, systematic surveys for Urartian sites, using such methods as aerial photography, are largely out of the question. It is generally impossible for one person to work in all four modern countries, and thus, surveys of Urartian sites tend to be restricted to areas within a single modern country.

A second problem is that Urartian sites are apt to be badly preserved, and sometimes completely obliterated by the forces of nature, which are not benign in this part of the world. The Urartians usually built on elevated ground, and consequently, erosion and earthquakes have de-

stroyed all trace of many sites. At some of the largest installations, such as Livar and Qalatgah, there is very little that would indicate to the untrained eye that they were once powerful citadels. If this is the case for the largest sites, it goes without saying that many smaller ones have escaped notice entirely.

Third, the attention that has been given to Urartian sites has tended to focus on the larger fortresses, leaving aside the problem of where and how the majority of the population actually lived. In Iran, where detailed studies of the ceramics associated with Urartian occupation have been undertaken, several tepes with Urartian levels have been identified. One may suggest that similar villages existed in other parts of Urartu, but so far proof for this assumption is lacking. In any event, studies of Urartian settlement patterns must take into account that discovery and excavation have favored one particular type of site, the fortress, which is a very specialized kind of settlement to say the least.

Finally, there is the problem of dating sites. There are essentially three indicators by which this is accomplished in the archaeological surveys of Urartu: (1) inscriptions, (2) architectural style, and (3) associated pottery. The first is the most precise but gives no clue as to how long a site was inhabited, for Urartian inscriptions normally record only the founding of a site or a structure. Nor are such inscriptions particularly abundant. The second or third can, at best, resolve the century in which the site was built or occupied. But because many of the sites are not settlements at all, there is often very little pottery to work with. Consequently, what appears to be one kind of pattern when sites are viewed cumulatively may actually have been a succession of quite different patterns.

These difficulties make it impossible to treat some of the favorite themes of settlement archaeology, such as change in demographic patterns. Since the surveys emphasize fortresses, rather than settlements as such, we must bear in mind that we are observing a pattern that was for the most part imposed by planning, rather than something created by communities spontaneously emerging at points favorable for resource acquisition and product exchange. The incompleteness of the data for most of Urartu compels us to build our models on the basis of evidence from Iran, with only partial corroboration from other countries.

None of these problems, however, is sufficient cause to ignore the evidence of site distribution. Our concern is with organizing principles, and it does not take completeness of the archaeological record to reveal principles. We have a fairly clear idea of the range of settlement types, if not their relative distribution. Our prime objective is to elucidate how the government organized its dominions, and fortresses are better evidence of governmental planning than settlements. There is also a major source of information of a kind that is not generally available to prehistorians studying occupational patterns of extinct communities—a written contemporary description of part of the Urartian kingdom. Sargon II of Assyria, in his zeal to destroy the Urartian countryside, immortalized it.

In the following pages this text and the archaeological evidence from Iran will be used to explore the relationship between military and economic concerns in the organization of the state. Was the defensive network structured in a way consistent with the theory that we have expounded above—that Urartu's enemies could exercise short-term superiority but lacked the power of endurance for serious conquest? Is there a distinctive and consistent "Urartian" settlement pattern that would indicate Urartu's expansion was accompanied by fundamental economic changes in the territory it controlled? An affirmative answer to the first question would be suggested by geography alone; a negative to the second will emerge below. The first task is to define the various types of sites that have been called "Urartian," and the second is to explore the relationship of those types to each other and to their natural surroundings. In closing, Sargon's text will be invoked for refinement and confirmation of the pattern suggested by archaeological evidence.

PROBLEMS IN SITE TYPOLOGY AND HIERARCHY

Although Iran is a rather arbitrarily defined part of the kingdom, at least from the point of view of the Urartians, it has been the most fertile ground for the kind of archaeological research

necessary to reveal patterns of occupation. By the autumn of 1978, 97 Urartian sites had tenta-tively been identified there, ranging in size and significance from the findspots of single inscrip-tions and objects to the massive fortress/temple/settlement complex at Bastam. Of these sites, ninety have been discussed at varying length in publications;[2] the remainder have been discovered so recently that their location has yet to be announced in print.[3] Excavations have been made at only a handful, and in most instances for objectives other than the recovery of remains of the Urartian period.[4] Nevertheless, this data base constitutes a sizable portion of the known Urar-tian sites and offers a less distorted picture than other parts of the kingdom. Iran is where studies of Urartian ceramics and architecture have matured to greatest refinement, where it has been possible to identify nonfortress sites on the basis of pottery alone, and where probably the highest percentage of sites of the eighth and seventh centuries B.C. have been identified.

In examining this archaeological evidence, the caveats of our last chapter must be ob-served: It is one thing to define and delineate a range of archaeological features that constitute an assemblage, and quite another to correlate that assemblage with a political entity. Since we are concerned with Urartu as a state, not a culture, archaeological evidence must be used with circumspection. However, it is pointless to consider only those sites where inscriptions have been found, since that would restrict the discussion to so small a number that no significant generalizations could be made. Consequently, we shall direct our attention to all sites in Iran that date to the Urartian period and lie within the perimeter of conquests marked out by inscrip-tions. In searching for patterns and regularities, it is better to take in too much than too little.

Geographers working with contemporary data have many variables to choose from in clas-sifying settlements; population, area, types of industry, and levels of governmental authority have all been used to create hierarchies of sites. For archaeologists, this first step in spatial analysis is not so easy. The criteria by which they assign sites to one category or another must be conspicuous and durable enough to be found with reliability in surface surveys. Surface area is a most obvious and quantifiable variable, and in Mesopotamia, where architectural features are virtually impossible to discern without excavation, there is very little else to work with. Pottery is useful as a dating tool, but rarely provides any information on the kind of site in question. In Urartu, architectural features do frequently survive, and these make it apparent that area, when used by itself, is a deceptive indicator.

Surface area is not even particularly easy to measure when dealing with partially preserved architecture rather than amorphous tells. Since fortresses on elevated ground tend to be de-stroyed in the course of time, it is not always possible to establish the complete circuit of their walls. The presence of settlements on lower ground beside them is often apparent from sherds found on the surface, but the extent of these settlements is difficult to judge because their archi-tecture is usually buried by soil eroded from the surrounding heights. Tepes that still project above the level land of low-lying areas present problems of another kind: their size reflects the cumulative debris of all periods in which they were settled, not the Urartian period alone.

If these difficulties are glossed over by guessing at the most probable arrangement of for-tress walls, using rough estimates of settlement sizes where only pottery is present, and assum-ing that each tepe was occupied to its present diameter by the Urartians, the figures for area so derived do not suggest any obvious typology (table 2). The hierarchy of sites may be broken into classes in a number of ways, but each alternative tends to group together sites that are obviously of dissimilar function and to separate those that would appear to be similar. For ex-ample, the range may be divided into equal increments and the number of sites within the limits of each increment plotted (fig. 6A). The histogram thus produced indicates that the vast majority of Urartian sites in Iran for which the surface area can be calculated fall into a single group at the smaller end of the scale. Larger sites show no modal size and tend to be fewer and farther between as one moves toward the end of the scale with the highest area values. Alternatively, the range may be divided along a logarithmic scale, so that as one moves from left to right on the x-axis, each unit covers a larger range of site areas (fig. 6B). This approach permits finer dis-tinctions to be made at the lower end of the range and presupposes that the percentage of size variation is a more important factor in grouping sites than the absolute variation. For example, sites of 0.9 ha. and 1.0 ha. would be classed together because the former is only ten percent

TABLE 2
SURFACE AREA OF URARTIAN SITES IN IRAN

Site Name and Number	Area (in hectares)	Site Name and Number	Area (in hectares)
Bastam (12)[a]	20.8	Qal'eh Oghlu (20)	1.1
Verachram (2)	13.6	Qal'eh Kamana[b]	0.94
Qal'eh Ismael Aǧa (63)	9.3	Kuh-e Zambil (41)	0.88
Dučgagi (8)[b]	6.8	Sangar (4)	0.65
Livar (22)	6.1	Gerde-Sureh (62)	0.59
Turki Tepe (65)[c]	5.0	Qiz Qal'eh (Khvoy) (72)	0.52
Qahramanlu (68)	4.9	Danalu (5)	0.42
Qal'at [b]	4.1	Ašaghi Qorul (14)	0.34
Qal'eh Gavur (28)[b]	3.3	Tepe 54 km S of Urumiyeh (46)	0.33
Qiz Qal'eh (Evowghlī) (17)	3.1	Čeraqayeh Amir (18)	0.29
Kafir Qal'eh (31)[b]	1.9	Qal'eh Vaziri (34)	0.23
Allahverdikand (74)	1.5	Uzub Tepe (16)	0.19
Qal'eh Haidari (64)	1.4	Kaniki Zar (77)	0.17
Qal'eh Sarandj (1)	1.4	Qal'eh near Haidarabad[d]	0.05
Qal'eh Siah (7)	1.2	Agrab Tepe (51)	0.05
		Qal'eh Gohar (19)	0.04

NOTE: The sites listed here include all those for which scale plans have been published, except Haftavan and Hasanlu. The site number is taken from Kleiss et al., *Topographische Karte von Urarṭu*, Archäologische Mitteilungen aus Iran Ergänzungsband 3 (Berlin: Dietrich Reimer Verlag, 1976), where references to publications on each of these sites are to be found. The areas, which were computed by measurements from the published plans, are of necessity approximate and somewhat subjective in view of the difficulty of deciding what to measure. I have taken the whole area of tepes, the area delimited by the outer walls of fortresses, and what, through rough guess, I perceived to be the extent of settlements beside fortresses.

[a]Computed as follows: fortress, 11.4 ha.; settlement, 7.9 ha.; Ostbau, 1.5 ha. Total: 20.8 ha.

[b]Plans for these sites are published in W. Kleiss and S. Kroll, "Urartäische Plätze und Anlagen des 2.–1. Jahrtausends v. Chr. in Iran," *AMI* 11 (1978): 27–71.

[c]Area of the entire settlement is 5.0 ha., which includes the small fortress at its center, which is 0.10 ha.

[d]See W. Kleiss and S. Kroll, "Urartäische Plätze in Iran," *AMI* 10 (1977): 78.

smaller than the latter, whereas sites of 0.09 ha. and 0.19 ha. would be placed in different classes from one another because the second is more than twice as large as the first. In both cases, the absolute difference in size between each pair is the same—0.10 ha. Plotted this way, the data suggest four clusterings of sites, of which the two in the middle of the range are significantly larger than the groups at the extremes.

If surface area were the only criterion available for evaluating sites, these groupings might be considered significant. But any system that puts Turki Tepe, Qahramanlu, and Qal'eh Haidari in the same category is obviously missing important distinctions. The first is a very small fortress surrounded by a large settlement consisting of rather elegant houses with stone foundations. The second is a tepe with no visible architectural remains. Qal'eh Haidari is a rock spur crowned by a fortress with stout walls, within the perimeter of which is an impressive rock-cut staircase leading to an underground chamber.

Area is a useful means of classifying sites in cases where a single, overriding factor is responsible for the size and location of all sites under consideration, such as the systems of exchange implicit in central-place theory. Its failure to reveal meaningful categories in Urartu is an indication that more than one hierarchy was at work, and that a complex interaction of several components determined the character of each site. Associations of dissimilar sites and separations of similar ones are brought about by plotting too many variables on one axis. For example, if the fortress component could be separated entirely from the settlement component, then surface area would be useful in defining classes of fortresses on the one hand, and classes of settlements on the other. But fortress area and settlement area may not be equated.

In theory, it is possible to create an abstract system of site classification that takes several variables into consideration. Three factors, in addition to size, are to a certain extent observable
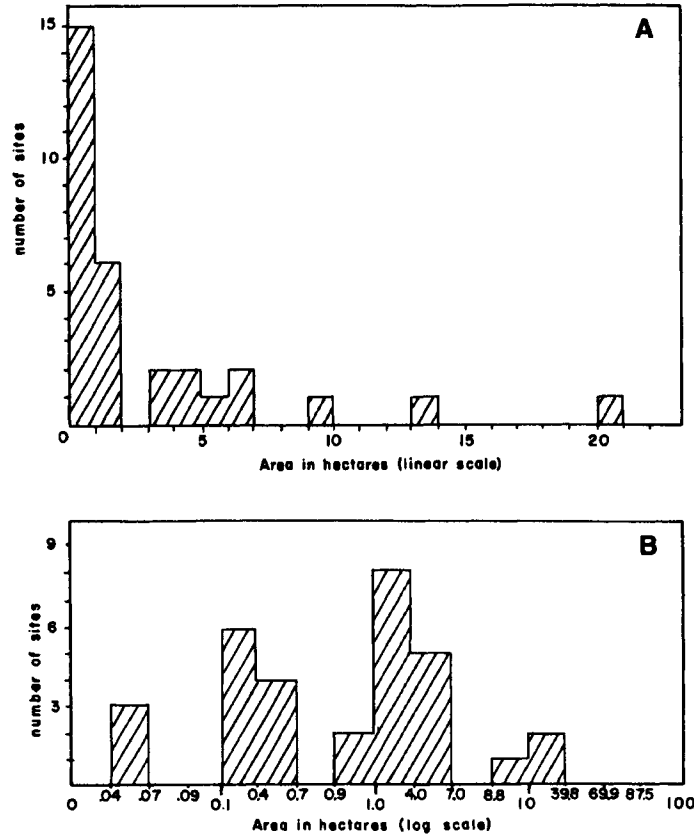
Fig. 6. Distribution of Urartian Sites by Size

and significant in a study of political and economic organization. We have already mentioned military value, which may be judged by the presence or absence of fortifications and the position of the site in relation to elevated ground. The idea of a site as a locus of habitation for people engaged in agricultural production has also been discussed, and its most significant indicator is the quantity and accessibility of the surrounding agricultural land. Finally, it is useful to have some idea of the degree of organized human activity involved in the creation of a site and its component structures. For example, does it consist of individual houses, or is there evidence of collective activity indicative of various levels of social authority, such as rock-cut tombs or major public buildings?

The problem with such a complex typology is that it contains too many categories and, thus, offers little in the way of abstraction. To be sure, sites like Bastam, Verachram, Qal'eh Ismael Ağa, and Livar all fall into a single category: large size, resident population with access to major expanses of arable land, and abundant evidence of collective works. But many other sites, like Turki Tepe, stand alone in their class, leaving one in doubt as to whether it is a significant category at all. Since the relationship between sites and the surrounding landscape is itself important in evaluating their function, it makes sense to pursue the discussion of location with description substituted for abstract classification as a means of characterizing them. Thus the variables of military significance, habitational function, scale, and relationship to government can be considered with more sensitivity to the incompleteness and vagueness of the available evidence than if sites were reduced to types at the outset.

THE DISTRIBUTION OF URARTIAN SITES IN IRAN

If the Urartian conquest of what is now northwestern Iran had brought with it fundamental changes in the patterns of agricultural activity and resource distribution, one would expect to

discover certain uniformities in the way that sites were arranged throughout the area. If, on the other hand, the Urartians simply took over existing settlements and fortresses and later added new sites as the need arose, the existence of a conspicuously "Urartian" settlement pattern would be far less likely.

In addition to discovering most of the Urartian sites in Iran, Wolfram Kleiss has also proposed the generally accepted model of their distribution:

> Gibt man die heutigen, landwirtschaftlich genutzten Flächen in Ebenen und Flusstälern an, so kristallisieren sich Landschaftsräume heraus, die in Beziehung zu den urartäischen Plätzen gebracht werden können. Es fallen Gruppierungen von urartäischen Burgen am Rande der Fruchtebenen auf, wie etwa in der Ebene von Shahpur. Oder diese Plätze folgen einem Flusslauf, wie in der Gegend von Bastam. In der Mehrzahl aber liegen sie schützend am Rande der landwirtschaftlich genutzten Flächen, die in den zur Debatte stehenden Landschaftsräumen Azerbaidjans sich auch heute noch nicht von den antiken Gegebenheiten unterscheiden. Grosse zusammenhängende Landschaftsräume haben immer einen urartäischen Platz, der sich durch seine Grösse und Bedeutung aus der Kette der restlichen Plätze heraushebt und der offensichtlich der Hauptort, das Verwaltungszentrum und der wichtigste militärische Stützpunkt war.[5]

He lists ten sites which belong to this category of chief places serving as military strongpoints and centers of government: Verachram, Sangar, Qal'eh Haidari, Bastam, Qiz Qal'eh (Evowghlī), Livar, Seqindel, Haftavan, Qal'eh Ismael Aġa, and Qalatgah.[6]

While this scheme might suggest a certain uniformity in the relationship of sites within agricultural areas, that impression dissolves quickly upon comparison of the *Hauptorte*. They vary tremendously in size and character. Not all are fortresses. Not all are associated with settlements. Not all are even located in major agricultural areas. But if the system of designating primary centers appears to be somewhat haphazard, it may reflect arbitrariness on the part of the Urartians about the way in which they chose to exercise their authority over individual areas within the frontiers of their state. Is there in fact a set of criteria by which these or an alternative list of *Hauptorte* may be singled out? Table 3 summarizes the case for each of these putative centers.

Verachram meets all the qualifications that one might suggest for a locus of the first order. It presently stands in isolation in its agricultural area, but this may simply be due to lack of survey work on the Soviet side of the river.

Sangar is more problematic for two reasons: scale and its relationship to agricultural land. How small can a site be and still be regarded as a focus of governmental activity? Sangar is indeed a site with fortifications, settlement, and rock-cut tomb,[7] but it is only half the size of the next smallest of Kleiss's centers, Qal'eh Haidari. Furthermore, it is difficult to define the territory which it once controlled. It is one of several sites along a route from Verachram to Doğubayazıt,[8] but the land along this route is all relatively open rather than divided into oases of intensive agriculture. The same satellite photo that clearly shows the limits of the major areas of foliage and cultivation in northwest Iran displays only a thin line of greenery running between Sangar and the Aras.[9] Beside this line, and not far from Sangar, is the site of Danalu. It is not significantly smaller than Sangar and may also have been associated with a settlement which now lies hidden under the modern village of Danalu.[10] Apparently the reason for choosing Sangar as a center is its tomb, but this seems a fine distinction to make. There is, after all, no tomb at Bastam, which must be considered the Urartian center par excellence.

Qal'eh Haidari is located at one side of the agricultural land in a small depression and consists of a castle with an associated settlement area.[11] Its staircase attests to the collective efforts of organized manpower. As a complex site and the most obvious focus of Urartian activity in the area, Qal'eh Haidari differs in scale rather than any apparent function from the largest centers in Iran. The only other known site in the valley is Turki Tepe, which lacks perimeter walls and cannot have been a significant military stronghold.[12]

Like Verachram, Bastam is a true center by any definition. Located at one end of the plain of Qareh Ẕīā' od Dīn, its tie to the government is confirmed by inscriptions. Major public buildings are present both on the citadel and in the lavish settlement below. For the most part it was solidly fortified, and although the settlement may not have been entirely protected by defensive

TABLE 3
FEATURES OF URARTIAN CENTERS

Name	Size	Fortifications	Associated Irrigable Land	Associated Settlement	Special Features
Verachram	large	strong	much	large	tomb, niche, temple
Sangar	small	medium	little	present	tomb, staircase
Qal'eh Haidari	small	strong	little	small	staircase
Bastam	large	strong	medium	large	inscriptions
Qiz Qal'eh (Evowghlī)	mediun	strong	much	none	sculpture?
Livar	large	strong	much	present	. . .
Seqindel	large	strong	little	?	inscription
Haftavan	small	weak	much	none	. . .
Qal'eh Ismael Aga	large	strong	much	present	. . .
Qalatgah	large	strong	much	?	inscription

walls, there is no doubt that the site was an important military center. The Ostbau, which stands on level ground beside the settlement, has the appearance of a military camp[13] and is itself larger than two-thirds of the measured Urartian sites in Iran.

The second largest site in the valley, Allahverdikand, is also located on one of its edges. It consists of a rectangular building atop a hill, encircled by a fortress wall lower down the slope.[14] Although there are some internal structures, they do not appear to be houses, and the nonresidential character of the site is further suggested by the rarity of ceramic finds.[15] The latter, however, were sufficient to allow Kroll to identify the site as both Urartian and contemporary with Bastam—that is to say, that it was founded in the seventh century B.C.[16] The site apparently functioned as a military stronghold, perhaps built to protect a surrounding network of irrigation canals.[17] According to Kleiss, the central building represents an Urartian Hofhaus of a type found also at Bastam and Čeraqayeh Amir and may have served as the seat of a local ruler or landlord.[18] Two other military strongpoints are associated with Bastam and the Qareh Zīā' od Dīn plain: Uzub Tepe and Ašaghi Qorul.[19] They are quite similar to each other in appearance, consisting of rectangular enclosures and traces of interior walls. Both control access to the plain, and neither appears to be a center of habitation.[20]

The question of where the majority of the people who worked the land of this plain actually lived is not adequately answered by the archaeological work that has been done so far. Urartian pottery has been found on tepes at Kasyan[21] and in the modern city of Qareh Zīā' od Dīn,[22] both of which were unfortified and stand closer to the center of the valley than the military positions mentioned above. But these are small sites and could not account for very many inhabitants. The excavated parts of the settlement at Bastam are composed of large houses and public buildings, and thus can account for only a few wealthy people.[23] In short, the Urartian presence in this area manifests itself more in terms of military control than rural settlement.

The plain of Khvoy shows a different pattern of Urartian occupation. Its foliage is nearly six times as extensive as that associated with Qareh Zīā' od Dīn, yet there is no site approaching Bastam in size and complexity. Kleiss has designated Qiz Qal'eh near Evowghlī as its primary center on the strength of a relief found there.[24] However, the castle is of quite modest dimensions, and no settlement is associated with it. Although it stands beside an important route, it cannot be said to control it since the valley is wide at that point, and the site could easily be bypassed. Kleiss has suggested that it was built in two phases: first, in the ninth century B.C., a residence with fortifications was constructed at the top of the conical hill; and then in the seventh century it was further strengthened with another fortification wall circling the hill lower down.[25] While this may indeed have been the castle residence of a governor as has been suggested, it is much more reminiscent of Allahverdikand than such large, complex fortress/settlement centers as Bastam and Verachram. Six other castles are scattered around the edge of the plain, and one is actually larger than Qiz Qal'eh.[26] Again, there is very little evidence of actual settlement, with only one known tepe of the Urartian period.[27]

The plain of Marand is another of the areas that is dominated by a single Urartian site—

Livar. Like Bastam and Verachram, Livar is built on a mountain spur at one side of the agricultural land and consists of a highly fortified citadel and a lower fortress enclosure wall.[28] On still lower ground there is a large settlement area, of which it is difficult to judge the character since only pottery has been found there. Once more there seems to be no correlation between the area of arable land and the size of the Urartian center; Livar is smaller than Verachram and Bastam, but the depression in which it is located is larger.[29] The few associated sites follow the same pattern regarding agricultural land as the parts of Urartu so far discussed: fortresses around the edges and unfortified tepes more centrally located. Tepe Parpar, Marand Tepe, and Burunne are members of the latter category at which Urartian pottery has been found; Čeraqayeh Amir, the remaining site of importance to this area, is a military "residence" overlooking the road between Marand and Jolfā.[30]

It is premature to say anything about Seqindel. Only a sketch plan of the site has been published,[31] and the results of a survey undertaken in the Ahar valley in the autumn of 1978 are also not yet available. The sketch appears to show a major site of the largest sort, but the valley is less intensively cultivated than the major plains of northwest Iran.[32]

If, as Kleiss suggests, Haftavan Tepe is to be considered the primary Urartian site in the Salmas plain, then it is a center of a very different sort from those discussed above. In the first place, it is a tepe and stands away from the mountain flanks surrounding the depression. Second, it is tiny—the Urartian ruins on the mound may belong to a single residence.[33] Finally, far from being a fortress, it hardly appears to have been fortified at all.[34] Yet Kleiss is not alone in regarding this site as the administrative center of the district; Charles Burney, Haftavan's excavator, has stated his belief that it was the residence of an Urartian provincial governor.[35] Nothing has been uncovered at Haftavan to confirm these views; on the contrary, the dissimilarity to other centers and the rather paltry Urartian remains would argue against them. However, if Haftavan is rejected, there is no clear candidate for the role of Urartian center: the one other tepe on the plain where Urartian pottery has been found is uninvestigated,[36] and the six small castles built on rocky outcroppings around the plain and beside Lake Urumiyeh are all minor affairs.[37] Two of the latter are distinguished by carved rock chambers,[38] but this is hardly enough to single either of them out as a locus of central authority. Thus the Salmas plain seems to fall into the same category as the area around Khvoy, its larger neighbor to the north: instead of one large, obvious center at which a considerable investment of manpower can be seen in the scale of building alone, there are a number of small fortresses around the periphery. Patterns of residence are even less obvious here than elsewhere.

Qal'eh Ismael Aǧa is clearly the focal point of one of the largest Urartian agricultural areas in Iran. Its situation is similar to that of Bastam; it stands on a steep rocky ridge beside a river at the edge of the alluvial plain. Unlike Bastam, the entire site appears to be enclosed by a single circuit of walls. A settlement area lies on lower ground between two more elevated castles that stand on opposite ends of the ridge, but the whole site is well above the level of the surrounding flatlands.[39] The archaeological exploration of Qal'eh Ismael Aǧa has only just begun, so it is not possible to identify any public buildings beyond the two highly fortified castles mentioned above. However, there is no doubt that this is a complex site and dwarfs all other ruins of the Urartian period in the plain of Urumiyeh. Minor sites are fewer in number than in the smaller plains of Khvoy and Salmas, and are almost exclusively military strongpoints. There are traces of a fortress on the north side of the plain where mountains force the road to Shāhpūr closest to the lake.[40] Kuh-e Zambil, protected by a rocky outcropping beside Lake Urumiyeh, is a well-planned fortress of medium size,[41] regarded by Kleiss as a purely military construction.[42] On the southern side of the plain, Qal'eh Zendan and Mahmud Abad probably served the same function, if indeed they are Urartian.[43] If Geoy Tepe is pre-Urartian, as Kroll has argued,[44] there are no known sites of the Urartian period that existed solely as settlements.

It is difficult to say much about the relative size of Qalatgah, since it has yet to be measured and drawn to scale, but to one who has climbed it, it seems comparable to Livar. It is situated on a spur at the side of the Oshnovīyeh valley, separated by a saddle from a higher mountain on which stands an Urartian watchtower.[45] On the flanks of this neighboring mountain, well above the plain and far too high up for any normal settlement, there is an area in which Urartian pottery is quite abundant, although no structural remains are visible.[46] No settlement area has been

identified on the lower ground at the foot of the main fortress, so it is impossible to say to what extent the site served as a population center. Traces of walls on the upper part of the citadel, however, mark out large buildings which, together with the fortress walls, speak for extensive building activity. Other Urartian sites in this and the neighboring Solduz valley conform to no uniform type. Hasanlu, a tepe with important public buildings, was violently destroyed when the Urartians entered the area and later refortified with a strong perimeter wall. It is unusual for an Urartian fortress in that it is surrounded by agricultural land. Agrab Tepe, a small stronghold nearby, was probably related to the defense of this site.[47] It is possible that Hasanlu was reoccupied to serve as some sort of subordinate center for the Solduz plain, which was separated from Qalatgah and the Oshnovīyeh valley by a low rise and an inconvenient distance. Other fortresses guarded the approaches to the valley in a more characteristically Urartian fashion: the road to Kalleh Shīn was commanded by Kaniki Zar;[48] Yediar overlooked the route to Urumiyeh along the shore of the lake together with the Qal'eh near Haidarabad;[49] a castle by Sufian controlled the route into the Oshnovīyeh valley from Khāneh,[50] which presumably would be the most likely approach for an Assyrian army.

These ten *Hauptorte* on Kleiss's list leave two major agricultural areas unaccounted for: the plains of Mīāndow Āb and Nachičevan. On the other hand, some noteworthy sites outside the larger plains are also excluded. Qal'eh Sarandj, Qal'eh Siah, Dučgagi, and Qal'eh Oghlu are all larger than the Urartian establishments at Sangar and Haftavan. Is there some basis on which they can be eliminated from consideration as Urartian centers? None is associated with a major expanse of arable land, but to require such an association introduces a circular logic to the claim that centers are found in the oases. The sites themselves are neither unique nor particularly distinguished in their features. Qal'eh Sarandj is the easiest to dismiss as a candidate, since it may never have had permanent inhabitants.[51] Qal'eh Siah is a small fortress built on a surprisingly low hill in the middle of a small area of cultivation along the Mākū Chāy.[52] No settlement area has been found nearby, so the site may be said to be military rather than habitational. However, it is not a particularly defensible position, so the site may indeed owe its existence to the need for some sort of governmental authority in this small plain. Dučgagi is remarkable in the other extreme—it appears to be primarily a settlement on a high and defensible mesa.[53] Qal'eh Oghlu is also removed from any compact area of intensive cultivation and, like Qal'eh Siah, is surrounded by relatively open ground. Of the two, however, Qal'eh Oghlu is the more defensible, since the rocky eminence upon which it is built is considerably higher. Still, it is hard to see what the site was designed to control or protect. It is one of the earliest fortresses of the Urartian style built in Iran, and no settlements are associated with it.[54]

In summary, it is hard to come up with a workable definition of an Urartian center that includes all of the sites that Kleiss proposes, and excludes the ones that he does not. Neither size, nor complexity, nor dominant position in a circumscribed area consistently discriminates sites in a way that yields a coherent pattern for the Urartian areas of Iran as a whole. However, if a center is defined as a site larger than five hectares, a specific type emerges: it includes both a fortress and a settlement, is built on a mountain spur at one side of an expanse of arable land, and no more than one such site is found in any given agricultural area. Under this definition, the number of centers is considerably smaller than in Kleiss's list: Verachram, Bastam, Livar, and Qal'eh Ismael Āga may be included without qualification; Qalatgah and Seqindel probably also belong to the category but are in need of further study. This definition leaves major areas, such as the territory around Khvoy and Shāhpūr, without a single, central focus of Urartian governmental activity. To what extent would uniformity of arrangement, or composition, of centers be expected in Urartu? Until more and better archaeological evidence is forthcoming, the last word belongs to Sargon.

URARTIAN SITES IN SARGON'S EIGHTH CAMPAIGN

Although the route of march followed by the Assyrian armies on Sargon's eighth campaign is a matter of debate, all of the itineraries proposed to date suggest that much of the Urartian territory crossed now lies within the frontiers of Iran.[55] This is fortunate, since it is precisely this
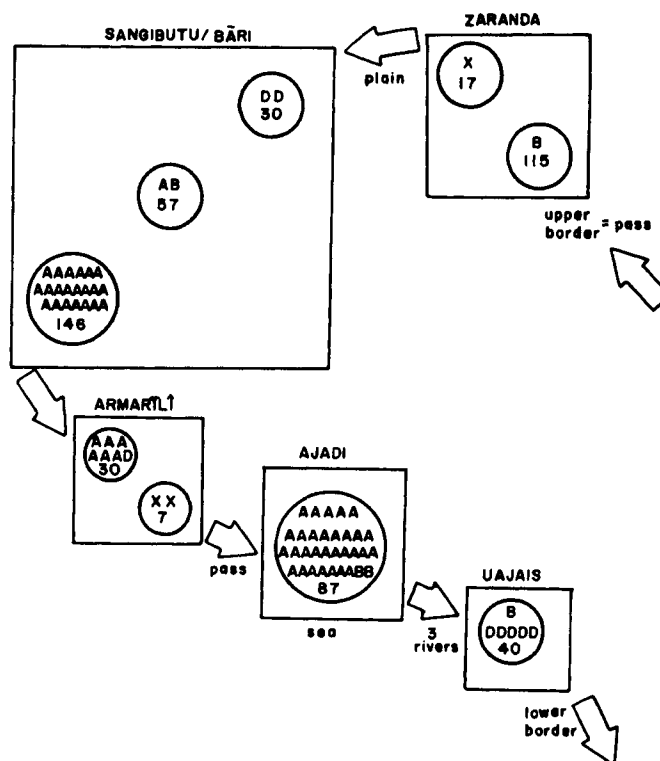
Fig. 7. Schematic Diagram of Sargon's Eighth Campaign. The area of each of the boxes is proportional to the number of lines of text devoted to the respective province in Thureau-Dangin, *Huitième campagne*. Circles enclose episodes in the campaign, with the following symbols used for types of named sites: A, *āl dannūti*; B, *birtu*; D, *bīt dūri*; X, other. The unnamed "cities in the vicinity" for each episode are given as numbers.

part of Urartu that is best known archaeologically. Thus there is some basis for comparing the written and the archaeological record in analyzing the organization of Urartian settlement in Iran.

Figure 7 summarizes the campaign of Sargon as it is related in the primary text. He passed through six provinces of Urartu, only five of which had been in Urartian hands for any length of time. It is in these five—Zaranda, Sangibutu/Bāri, Armarīlî, Ajadi, and Uajais—that the hierarchy and arrangement of sites may be expected to reflect an "Urartian" pattern.

There is a formulaic quality to the way in which the campaigning is reported. The Assyrians enter a province and encounter a major site, or a small number of major sites. These are always mentioned by name and sometimes described in further detail, occasionally at length. The army then inflicts damage on them, and, before moving on to the next major site or grouping of sites, the account adds that a given number of "cities of the neighborhood" (*ālāni ša limīti*) were also destroyed.[56] These usually total several score, and their proper names are never mentioned. The army then turns to the next major center, and the process is repeated. The number of cycles differs in individual provinces: there are two in Zaranda, three in Sangibutu, and only one in the other provinces.[57]

The proper names of the major sites are invariably preceded by the determinative URU, used in cuneiform writing for settlements of all sizes. They are further qualified by one of a small number of stock terms for sites. It is probable that the meanings of these overlap somewhat—indeed, in one instance two of them are used for the same place. However, in general, they do seem to reflect distinct categories of sites—at least in the eyes of the Assyrians.[58] Let us examine them individually.

āl dannūti

Literally, these words mean "strong city" or "city of strength," and one would expect an *āl dannūti* to be a fortified city rather than a fortress.[59] Although the two concepts are related, they

are not identical; a fortified city implies a habitational site, while the ultimate purpose of a fortress is to serve as a military bastion. The Assyrians, when they used the term *āl dannūti* in Urartu, were certainly putting no stress on the urban character of the sites so designated, and thus translators have favored neutral renderings, such as "stronghold."[60] But vagueness on this point does not compel an equation of the *āl dannūti* with the *birtu*, or fortress. It would seem, rather, that it was a general term which could be applied to any fortified locality without implications of military significance.

Sixty Urartian sites are called *āl dannūti* in the account of Sargon's eighth campaign: twenty-two in the province of Sangibutu, seven in Armarīlî, thirty in Ajadi, and one in Uajais— the site of Uajais itself.[61] Uajais is also described as a "great fortress" (*birtu rabû*) and was the seat of a provincial governor.[62] This site and the city of Ulhu, are the only two *ālāni dannūti* that are treated individually in Sargon's account; the others are merely listed by name as groups. The destruction of each group is recorded together with the "cities in the vicinity" as a single event.

There is every indication that *āl dannūti* was a term that could be applied to sites of considerable importance. Uajais is explicitly stated to be the strongest of Rusa's fortresses.[63] The boast that its "back" was captured suggests it had a certain directional quality, and its association with orchards implies proximity to an area that could be irrigated.[64] Ulhu is treated at greater length than any other Urartian site, and it is possible to glean information on its relationship to the landscape and to other sites nearby.[65] It was a walled city on agricultural land and not a mountain fortress. There is a reference to it in Sargon's annals, paralleled by a broken passage in the eighth campaign inscription, that says the city was at the foot of Mount Kišpal.[66] A great deal of the discussion about Ulhu has to do with the construction of irrigation works and the bountiful results achieved by Rusa through his building activities.[67] A canal ran immediately beside or through Ulhu, since the text states that Rusa built a royal dwelling place by its side, and later says that Sargon marched to that palace when he entered Ulhu.[68] Additionally, the city contained storehouses, gardens, vineyards, and orchards.[69] No mention is made of nonroyal residential quarters, and since the palace was built by Rusa "for his leisure,"[70] there is no suggestion that it was a large administrative complex. Although the city was walled,[71] its defenses do not seem to have been regarded as trustworthy, since Ulhu's inhabitants abandoned the site at the approach of Sargon's army.

In this regard, Ulhu's relationship to a second locus, Sardurihurda,[72] deserves scrutiny. Sardurihurda was a fortress built "as an outpost"[73] in which Rusa settled a certain people for the defense of his land. The Assyrian narrative treats Sardurihurda and Ulhu together, although virtually all of the description is lavished on Ulhu. The contrast between that description and the rather perfunctory notes about Sardurihurda, which are omitted entirely in the annals, leads one to doubt that the latter did indeed fall to the Assyrians. Another curious feature of the sack of Ulhu is that only agricultural stores are mentioned as plunder. In the capture of a royal palace, one would expect some reference to precious goods, as in the case of the palace of Urzana at Muṣaṣir, gleefully described later in the same text. The lack of any such spoils, which surely would have been mentioned had they been taken in significant quantity, suggests that the inhabitants of Ulhu escaped with their valuables. It is not unreasonable to assume that Sardurihurda was in fact the place where Ulhu's population sought refuge.

The passages in the text dealing with the remaining fifty-eight *ālāni dannūti* suggest that Ulhu and Uajais were more important than most of the sites so designated. They treat the sites in three groups, rather than individually. The first group consists of twenty-one places, listed by name, which are said to comprise the rest (i.e., in addition to Ulhu) of the *ālāni dannūti* of the province of Sangibutu. In contrast to Ulhu, they are described as standing out on the peaks of a mountain, like trees.[74] Since a single mountain is in question, the implication is that they were closely grouped together. But like Ulhu, they were walled, had deep moats, and were associated with a well-watered plain.[75] The last two features suggest that the claim the sites were on peaks is an exaggeration, if not a poetic flight of fancy, and probably reflects the Urartian penchant for fortifying buttes and mountain spurs. Large palaces, storehouses, and residential dwellings were also associated with them.[76] Also of interest is a reference to "their citadels" (*kirhīšunu*),[77] presumably referring to a more strongly fortified area within the walls of each city. The second group consists of seven *ālāni dannūti* at the foot of a different mountain in the neighboring

province of Armarīlî. Two of these are singled out for special comment: Bubzi is called a fortress (*birtu*), and Hundur is described as being surrounded by two walls and a ditch or moat.[78] Otherwise, the only information about the group of possible relevance is that they contained granaries and were associated with orchards.[79] The third group consists of thirty[80] such sites in the province of Ajadi, which are said to be located on the shore of the sea[81] at the foot of the mountains. Two fortresses (*birtu*), one of which is not named in the list of *ālāni dannūti*, served as refuges for the population of these sites.[82]

These examples suggest that while a *birtu* could be called an *āl dannūti*, it was not necessarily the same thing and could, on occasion, be contrasted with one. The problem is probably due to vagueness in the second term rather than the first. One final bit of evidence hints that *āl dannūti* is merely a general term for any fortified site large enough to have a proper name and is not consistently associated with a specific type. It may be argued that the number of minor sites around a major site is indicative of the importance of the latter. Since Sargon claims complete destruction of the areas he visited, the number of unnamed *ālāni* overwhelmed represents the whole number that existed. It is irrelevant that the actual amount of destruction was probably exaggerated—the number of *ālāni* per *āl dannūti* may be taken as Sargon's index of significance. The figures, presented in table 4, vary wildly, suggesting considerable differences in status among the *ālāni dannūti* in question.

Thus the available evidence points toward a rather general application of the term *āl dannūti* in Urartu. The sense of the words implies fortification, and nothing in the further description of the sites so designated contradicts this. Not all *ālāni dannūti* can have enjoyed the same prominence as Uajais and Ulhu since twenty-one are found on a single mountain in a single province. Although there is some inconsistency about the topographic settings of *ālāni dannūti*, they are usually associated with agricultural land.

birtu

For the period of Urartu's floruit, the *Chicago Assyrian Dictionary* recognizes two basic meanings for this Akkadian word: "1. citadel, castle (as part of a city), 2. fort (placed in strategic locations outside of cities and villages). . . ."[83] In the course of his eighth campaign, Sargon's references to *birāti* number only six: Ušqaja, Sardurihurda, Argištiuna, Qallania, Bubzi, and Uajais.[84] Of these, the last three, and possibly Argištiuna as well, are also called *ālāni dannūti*. But *birtu* imparts a specialized meaning. In cases where the two terms appear together, *birtu* comes second, as a further explanation that would be totally superfluous if it only repeated the same information.

The function of the *birtu* is consistently represented as military defense in the eighth campaign inscription. In all but the case of Bubzi, which is only described in the briefest of terms, Sargon explicitly states that a garrison was stationed in each *birtu* he encountered. There is also the suggestion, not entirely free of ambiguity because of a facet of cuneiform writing, that most of them were constructed on mountains, or at least on elevated ground.[85] Ušqaja controlled access to the land of Urartu itself,[86] and Uajais is also depicted as a major frontier stronghold.[87] In other instances, *birāti* stood guard over concentrations of sites. The function of the *birtu* and its relationship to other sites is perhaps most clearly seen in Sargon's description of his ravages in the province of Ajadi:

> . . . to the land of Aiadi I drew near. [A list of twenty-nine cities, including Qallania, is given.] 30 of its strong cities [*ālāni dannūti*], which line the shore of the terrible sea, at the foot of great mountains, and all stand out like boundary stones: Argishtiuna, Kallania [i.e., Qallania], its strong fortresses [*birātešu dannāte*] erected among them, shining above Mount Arsidu and Mount Mahunnia, like stars,—their foundation walls were visible to a height of 240 cubits; his warriors, his picked troops, powerful in battle, bearing shield and lance, the defense of his land, were stationed therein; they saw the overthrow of Armariali, their neighboring province, and their legs trembled. They abandoned their cities with their possessions and fled like birds into the midst of those fortresses.[88]

Two other aspects of the *birtu* should be noted. First, its proper name is always given in Sargon's text. Second, the *birtu* is never encountered in isolation. It is always associated with

TABLE 4
RATIOS OF *ālāni* TO *ālāni dannūti*

Location	Associated Sites	Number of *ālāni dannūti*	Number of *ālāni*	*ālāni* per *āl dannūti*
Ulhu	1 *birtu*	1	57	57.0
In Sangibutu	none	21	146	7.0
In Armarīlī	none	7	30	4.3
Uajais	5 *bīt dūrāni*	1	40	40.0
In Ajadi	2 *birāti*	30	87	2.9

other sites—a number of *ālāni* as a bare minimum, and usually *ālāni dannūti* or *bīt dūrāni dannūti* as well. These factors support the general idea that a *birtu* was a special form of *āl dannūti* and a focus of military strength.

bīt dūri

Bīt dūri is another term for a walled or fortified locality[89] and was used by Sargon on two occasions in Urartu: for the sites of Tarui and Tarmakisa, the first places he came to after entering the province of Sangibutu;[90] and for five sites in the vicinity of Uajais.[91] In each instance the term is qualified with the adjective *dannūti* "strong." Only in the first case is any information offered that might aid in further specification of the meaning of the term:

> Tarui and Tarmakisa, strong, walled cities, situated in the plain of the land of Dalaia, where he [Rusa] had great supplies of grain, whose walls were very strong, whose outer walls were well built, whose moats were very deep and completely surrounded them; in the midst of which are stabled the horses, reserved for his royal army, which they fatten each year. . . .[92]

The explicit statement that these sites were located in the plain is contrary to what one would expect if they were *birāti*, although this single reference is an insufficient basis to posit a general distinction between the two terms. The following phrase, "I let the battle rage between their fortified cities [*ālānišunu dannūti*]," could be construed to mean that the *bīt dūrāni* were themselves *ālāni dannūti*, thus supplying further evidence that the latter term is quite general.[93]

ālu

We have already noted that each named site that Sargon encountered was associated with a number of unnamed sites, designated *ālāni* ("cities"). The paucity of particulars prevents any judgment as to whether the term was meant to refer to minor sites alone, or was just a collective designation for all of the other sites in a given area, besides the ones to which the Assyrians devoted most of their efforts. There is only one instance in which *ālāni* are given proper names:

> On my march I came to Arbu, the city of the father's house of Ursâ [i.e., Rusa], and Riar, the city of Ishtar-dûri [i.e., Sarduri]. 7 cities of their neighborhood in which dwell his brothers, his royal seed, (with) strong defenses,—those cities I destroyed, I leveled to the ground. The temple of Haldia, his god, I set on fire like brush and destroyed his shrine (sanctuary).[94]

The brevity of this account suggests that these "royal cities" were not very substantial. They are, perhaps, best understood as a series of country estates rather than cities or even villages.[95] The Urartian royal line was too old and well established for its princes to be emerging from villages, and the clustering of so many places together would argue against anything larger. Since Sarduri was the father of Rusa, one would expect the city of Sarduri and the city of the father's house of Rusa to be the same place. Nothing in the text suggests that these sites were fortified, although apparently they were guarded by military forces.[96]

Other Sites

In one case a site is mentioned by name but not categorized with any of the terms discussed above. The only distinctive feature of this site, Aniaštania, is that it is called the "home of Rusa's herds";[97] otherwise the account of its destruction follows the pattern for *ālāni dannūti*, including the mention of seventeen *ālāni* in the vicinity.

One final type of site deserves mention before leaving the subject of Sargon's eighth campaign, although it is not a settlement as such. In his account of the destruction of the twenty-one *ālāni dannūti* of Sangibutu, Sargon states that the Urartians used towers on the peaks of mountains to observe his movements and warn each other with fire signals of the approach of his armies. The discovery of a small Urartian enclosure at the top of a mountain above Qalatgah[98] and a similar structure in the mountains ten kilometers west of Verachram[99] provides archaeological confirmation for the existence of such watchtowers.

To summarize, the vast majority of the named sites are called *ālāni dannūti*, a general term which could also be applied to sites that were more specifically fortresses. When the latter aspect was to be stressed, the designation *birtu* or *bīt dūri* could also be used. The former may be associated with elevated ground and the latter with fortresses in the lowland areas, but there is not enough evidence to be certain on this point. The terminology is not sufficiently distinctive or precise to permit definition of a typology or hierarchy of Urartian sites on this basis alone. It demonstrates that all but a few of the sites important enough to be named were fortified, although the defenses of some were regarded as more trustworthy than others. Probably the most significant contribution of the text is that it indicates an astonishingly high number of Urartian sites. Even if one downplays the significance of the unnamed *ālāni* and considers Sargon's ravages to comprehend *all* of the sites in each province rather than simply those along the path of his march, we are still faced with an extraordinary number of walled sites to account for—sixty-nine to be exact. This suggests that archaeological investigations have only scratched the surface of the problem of Urartian site distribution.

Certainly it is by no means easy to correlate the archaeological evidence with Sargon's text. The idea of a single, central authority for each province is absent in the Assyrian account; only one site, Uajais, appears to dominate a whole province. Elsewhere, the description seems to give approximately equal weight to a number of sites in each area. But this is not inconsistent with what is now known of the distribution of archaeological sites in northwest Iran. Although a few major centers, like Qalatgah, surely existed in Sargon's time, many others, like Bastam, had not yet been built. In their absence, one would expect the prevailing pattern to be like that which is now observable in the plains of Khvoy and Shāhpūr (Salmas), where a single dominant site was never built.[100] Presumably a site like Qalatgah was a *birtu*, and the same term extended to cover somewhat smaller fortresses as well. Much more tentative is the application of the words *bīt dūrāni* to fortified tepes like Hasanlu. Any fortified site of significant size could be called an *āl dannūti*, and the majority of archaeologically known Urartian sites in Iran would fall into that category.

Two glaring problems remain unresolved in the archaeological record: First, since most of the sites that have been unearthed or identified are primarily military strongpoints, where did the majority of the population live? Second, how are the hundreds of *ālāni* that Sargon claims to have destroyed to be accounted for? The number of tepes of the Urartian period discovered to date is far too small to provide an answer to these questions, and even those tepes that have been excavated, such as Hasanlu and Haftavan, have not proved to be villages. Thus the idea of a primary center in each plain, surrounded by small villages in which the majority of the agriculturalists live—the pattern of modern Azerbaijan—is probably misleading for interpreting the Urartian period. A model that would better fit the Assyrian descriptions, and explain the lack of archaeological evidence, is suggested by Lynch's mid-nineteenth-century travels along the southeast shore of Lake Van:

> Vostan is no town, nor even a village, but is a district or zone of gardens at the foot of the Kurdish mountains about the spurs of Mount Ardos. On the east it extends to the village of

Atanon, on the west to the promontory. The orchards keep to the high land about the base of the range; between them and the lake there is an extensive strip of alluvial soil which, in the neighborhood of our quarters, had a width of about two miles. I was assured on all sides that there were four or five hundred houses within the limits of the district of Vostan, but people get confused when dealing with an area of this description and with the dispersed units of which such a settlement is composed. I doubt whether there could be found more than half that number.[101]

Whatever the distribution of settlements, it is clear from archaeological evidence that a profound change took place in the late ninth century, at roughly the same time as the first recorded Urartian campaigns in the area. This evidence has recently been summarized by Kroll:

> In der Frühen Eisenzeit, im 10. und 9. Jh. v. Chr., besassen die Täler und Ebenen überwiegend dörfliche Siedlungsstrukturen, nur wenig grössere Orte wie Hasanlu IV und Aslan Qal'eh sind bisher bekannt, das mag jedoch auch am Forschungsstand liegen. . . .
>
> In etwa Ende des 9. Jh. erfolgt in Azarbaidjan ein Umbruch in der Siedlungsstruktur. Von den bisher über 30 bekannten Siedlungen der Frühen Eisenzeit werden etwa 2/3 aufgegeben, lediglich 1/3 werden weiterbesiedelt. . . . Gleichzeitig werden mit Vorliebe an den Talrändern auf Felsnasen in Bereich von Flüssen oder Quellen Festungsanlagen errichtet, die aufgrund verschiedener Kriterien als urartäisch bezeichnet werden müssen.[102]

This transformation was accompanied by changes in burial practices and pottery styles, leading Kroll to the conclusion that the area had undergone a political and economic reorganization. As an indicator of the new economic order, he points to the introduction and widespread use of a very uniform type of pithos for storing the harvest in castles. But, Kroll cautions:

> Hinter dieser Neuorganisation muss nicht unbedingt der Gedanke einer straffen Planwirtschaft zu suchen sein, eher wäre denkbar, dass hier Sicherheitsfaktorn den Ausschlag gaben, bei durchziehenden Reitervölkern in Krisenzeiten nicht unbedingt die ganzen Vorräte einzubüssen. Zudem sind alle Festungen immer so weiträumig gebaut, dass eine ständige Bewehrung mit ausreichender Garnison kaum gedacht werden kann; man hat nicht den Eindruck hier Zwingburgen vor sich zu haben, sondern eher Fluchtburgen für den Krisenfall, die die Landbevölkerung aufnehmen können. Das erklärt wohl auch das häufige Auftreten der urartäischen Festungen.[103]

In short, what we know most about from the archaeological record and textual descriptions of sites is the Urartian system of defense. It was organized in such a way as to protect the population of the arable lands, rather than to prevent invaders from securing specific resources. Although some minor sites were set up along routes of communication, they served more to watch these than to block them. The entire state was protected by a system which compelled hostile armies to face continuous resistance when they passed through it.

There was no uniformity in the way each agricultural area was defended. In some, a major center served that purpose, while in others the responsibility for protecting the population fell to several smaller sites. It is perhaps significant that the size of the center was not a function of the area of arable land; Bastam, the largest Urartian site in Iran, is located in a plain that is much smaller than the Khvoy or Shāhpūr areas, which have no centers of comparable size. The sheer breadth of these larger plains may have made assembly of the population into a single fortress impracticable.

The system of settlement is still largely a mystery but was manifestly a system that did not leave many remains that are perceptible on the surface today. There are some settlement areas beside larger fortresses, but the only houses that have so far been excavated in Iran belonged to the wealthy.[104] All of the known settlement areas can account for only a small part of the population, and the rest must have been more dispersed. There is no evidence in Urartu for anything that might be called a city in the strict sense of the word.

The presence of elaborate tombs and elegant residences at scattered sites speaks for the existence of local elites, but until further work is done investigating houses and burials, the social structure of Urartu will remain only vaguely known.

The role of government at all levels in effecting the redistribution of surplus agricultural

produce is likewise a mystery. Coordinated efforts of large groups of laborers were necessary for the construction of the fortresses, and some system of taxation filled their magazines with grain and other foodstuffs. At Bastam it is possible to assume that the site was a major focus of redistributive activity, but in other places there is no site that had the storage capacity to perform such a role. Thus, if the economy was centrally directed at all, it was done inconsistently among the various oases of settlement.

4

THE MONARCH AND HIS ROLE
IN THE DEVELOPMENT OF THE URARTIAN STATE

Although modern historiography eschews the once fashionable practice of relating the past as the deeds of great men, a study of the structure of the Urartian state must inevitably devote considerable attention to the activities of the king. This is not simply an onus imposed by the restricted focus of the relevant historical sources, but because royal actions are, to a large extent, equatable with state policy rather than a reflection of an individual personality. They outline the development of the kingdom in time and space with far more certainty and precision than archaeological evidence alone would permit. In a milieu where economic, political, and religious institutions are so inextricably bound together that none can be studied in isolation, the king's position at the apex of society makes an examination of his role essential to the study of political and economic process in the state. The economic sphere is particularly difficult to delineate precisely, since it did not exist as an independent entity. Only through an appreciation of other institutions in which it was embedded is any understanding of its nature possible. The present chapter, therefore, offers an analysis of the king's role in the Urartian kingdom's formation, territorial expansion, and economic development.

THE EMERGENCE OF THE URARTIAN STATE

A monarchy of more than local consequence first appeared in Urartu in the late ninth century B.C., and within a few decades of that time one may speak confidently of an Urartian state.[1] The actual mechanism by which this state was formed is poorly understood, but there can be little doubt that Assyrian influence played an important role. In its outward appearance, the Urartian kingship was certainly inspired by Assyrian traditions: the style and iconography of art associated with the Urartian court are clearly derivative; and in form, language, and content early royal inscriptions are close enough to Assyrian examples to insure that they are the product of deliberate imitation.

The Urartian state itself seems ultimately, if unwittingly, to have been a creation of the Assyrians. From the thirteenth to the ninth centuries, their military incursions, which were apparently directed toward the acquisition of tribute and booty rather than permanent conquest, undoubtedly placed a severe burden on the disunified populations in the highlands around Lake Van. In keeping with a principle expounded by Herbert Spencer, defensive alliances that formed to counter the Assyrian menace would have become more solidly integrated as its threat assumed greater intensity and a more permanent character:

> As further showing how integration of smaller societies into larger ones is thus initiated, it may be added that at first the unions exist only for military purposes. Each component society retains for a long time its independent internal administration, and it is only when joint action in war has become habitual that the cohesion is made permanent by a common political organization.[2]

The unification need not have been as voluntary as this quotation implies; destruction wrought by the Assyrians in the mountainous countryside was selective rather than universal,

and by weakening some peoples and leaving others unscathed, the way toward territorial aggrandizement was cleared. Peoples stripped of their own leadership and reduced in military capability by the ravages of the Assyrians would be absorbed by their more fortunate neighbors whether they liked it or not. The threat of a renewed Assyrian attack would be sufficient to keep them from reasserting their independence.

The significance of Assyria as a dynamic factor in Urartian state formation may be overstated here, but neither archaeological nor textual evidence is sufficiently abundant or informative to permit identification of any other causative variables in the process. Assyrian texts are virtually the only source for Urartu's emergence as a political entity; it is only after the state is clearly in existence that Urartian inscriptions and archaeological evidence contribute anything of a positive nature to the discussion. For all their biases and inadequacies, however, these texts do at least offer a chronological framework in which to view the unification.

Urartu's first appearance in cuneiform records predated its emergence as a political unity by many centuries. At the beginning of his reign, the Assyrian king Shalmaneser I (1274–1245 B.C.) crushed a rebellion in Uruaṭri,[3] conquering its eight lands and fifty-one cities in three days.[4] If, as is generally agreed, this name is simply a variation of Urarṭu,[5] its political connotations were hardly what they were to become five centuries later. Shalmaneser's inscriptions contain no reference to an Urartian ruler of any kind, and the picture painted of the country is hardly one of social cohesion or military prowess. There is no further mention of Urartu (in any form of the name) until the eleventh century, when the obscure Assyrian king Aššur-bel-kala campaigned there. The damaged texts that recount his activities give no clue as to the nature of Urartian political conditions.[6]

In the two centuries that separate Shalmaneser and Aššur-bel-kala, however, another geographical term that is of importance in Urartu's history figured prominently in Assyrian royal inscriptions—Nairi. The relationship between the names Nairi and Urartu is so complex that an entire monograph has been devoted to the problem.[7] In the ninth century, when writing in Assyrian, Urartian rulers called their own kingdom Nairi.[8] On the other hand, their contemporary Assyrian neighbors used the term Urartu for the same thing. This does not prove that the terms were simple equivalents, however. It is Salvini's thesis that they actually denoted distinct entities from Middle Assyrian times until Urartu, unified under a single leader, began expanding in the late ninth century. Caught between an aggressive Assyria and the rapidly congealing Urartian state, Nairi's territory was divided and absorbed. Part of it appears as an Assyrian province in the mid-eighth century B.C.,[9] while so much of the rest went to Urartu that early Urartian kings felt Nairi was a suitable name for the kingdom they ruled.

The texts of Shalmaneser's successor, Tukulti-Ninurta I (1244–1208 B.C.), first mention Nairi and demonstrate that it was, if anything, even more politically fragmented than Urartu in the thirteenth century; they emphasize the remoteness of the place and mention forty kings.[10] The situation was much the same more than a century later, when Tiglath-Pileser I (1115–1077 B.C.) led Assyrian armies into the area once again. His inscriptions speak variously of thirty,[11] twenty-three,[12] and sixty[13] kings of Nairi. No prominent individual stands out among them.

The first indications of political consolidation in Nairi and Urartu appear in the early ninth century, when the Neo-Assyrian Empire began to exert less sporadic pressure on the lands that lay to its north. Aššurnaṣirpal II (883–859 B.C.) claims to have entered Nairi and taken the strong city of Madara, which was surrounded by four walls. This and sixty other "cities" (*ālāni*), also conquered by Aššurnaṣirpal, were ruled by a certain Lapturi, son of Tubusi.[14] The location of all of them at the foot of a single mountain, believed to be the modern Tur Abdin,[15] does not give the impression that the territory of Lapturi's kingdom was extensive.

In the reign of Shalmaneser III (858–824 B.C.), the Assyrians attacked Urartu itself for the first time since Aššur-bel-kala. In four of the five campaigns that Shalmaneser directed against it, his opponent was a single, specifically named, Urartian ruler. In the accession year,[16] and campaigns of the third[17] and fifteenth[18] regnal years, a certain Arame was the victim of Assyrian attacks. His rule extended over more than one city of consequence, since two of them, Sugunia and Arṣaškun (conquered in the accession and third years, respectively), are designated as "royal" cities. Even after these two had been captured, Arame was capable of mustering an

army from elsewhere.[19] In the fifteenth year, Arame was still at large.[20] In Shalmaneser's twenty-seventh year, the Assyrians invaded Urartu once again, and this time they were opposed by a king named Seduri.[21] It is almost universally accepted that this Seduri is the same man as Sarduri I, son of Lutipri,[22] founder of the dynasty that was to rule Urartu for at least seven generations. Shalmaneser made one final sortie against Urartu, as part of a campaign against Muṣaṣir. On this occasion he claimed to have destroyed fifty cities of the Urartians, but he did not mention the name of their king.[23] In short, after the beginning of the reign of Shalmaneser III, there is no evidence of more than one king ruling Urartu at a given time.

While this consolidation of leadership was taking place in Urartu, no parallel development occurred in Nairi. Throughout the reign of Shalmaneser III and at least as late as the reign of his successor, Šamši-Adad V (823–811 B.C.), Nairi continued to be represented in Assyrian records as a land with a multitude of leaders.[24] A victim of the expansion of its two powerful neighbors, it ceased to exist as an independent entity around the beginning of the eighth century.

Archaeology unfortunately throws very little light on the formative period of the Urartian state. Few known sites in eastern Turkey were occupied in the late Bronze and early Iron Age, and even the location of such significant places as the textually attested royal cities of Sugunia and Arṣaškun is a matter of pure speculation. Both southern Transcaucasia and northwestern Iran, which is comparatively well studied for this period, are outside the area in which the Urartian state was formed.[25] In the latter case, however, the example of Hasanlu IV demonstrates that at least one walled site of some importance, containing several public buildings, was already well established before the beginning of the eighth century in what was later to be Urartian territory.

If the Assyrians had been in contact with the territories around Lake Van since the thirteenth century, why was it that the political consolidation was delayed until the ninth century? The answer is to be sought in an increase in the intensity and regularity of Assyrian campaigning. The reduction in the number of political units in the highland areas, the emergence of "royal cities," and the first appearance of the royal line that was to rule Urartu in its heyday, all coincide with a new Assyrian aggressiveness in which annual, rather than desultory, conquest was the modus operandi.[26] The artifactual traits that characterize Urartian culture and indicate that Urartu had in fact become a state, are perceptible only in eighth-century contexts, but the possibility that they existed earlier cannot be ruled out. Whether these developments took place because of or in spite of increasing Assyrian military pressure cannot be proven absolutely one way or the other, but the temporal coincidence is there.

URARTIAN ROYAL TITULARY

A discussion of royal titulary is in order for two reasons: first, it demonstrates, perhaps better than anything else, the highly derivative character of Urartian notions of kingship; and second, it has been suggested that it contains, in itself, information on the sociopolitical makeup of the Urartian kingdom.

Display inscriptions were intended for the glorification of the ruling monarch, and consequently the name of the king and his patronymic were essential elements for the fulfillment of that purpose. Only inscriptions that were damaged fail to provide this information.[27] The Urartians have left no king lists as such, but because of this habit of giving both the name of the king and that of his father, an unbroken line may be traced from Sarduri I to Rusa II, a period of nearly two hundred years.[28] After the middle of the seventh century, documentation is too meager to either confirm or disprove that this trend, the orderly succession from father to son, continued.

As mentioned above, the epithets of Urartian kings reflect a Mesopotamian, and in particular, Neo-Assyrian, tradition. Urartian kings were not deified, and whenever the divine determinative is written in a proper name, it is part of a theophoric element, not an indication that the bearer of the name was himself divine.[29] Sarduri, son of Lutipri, the earliest Urartian for whom an inscription survives, claimed, in Akkadian, to be "great king, mighty king, king of the universe, king of Nairi, king who has no equal, wonderful shepherd who does not fear battle, king

who makes the insubordinate submit."[30] Exactly the same titles, with the substitution of "king of Assur" for "king of Nairi," are found in the titulary of Aššurnaṣirpal II, an Assyrian king of the preceding generation.[31] Sarduri's use of the epithet "king of kings, who receives the tribute of all kings," also has its precedent in the annals of Aššurnaṣirpal.[32]

Subsequently, Urartian rulers dropped many of these epithets and added a few that were peculiar to their own kingdom. The titles used in Urartian texts are presented in table 5. In general, Urartian titulary was far less elaborate than that of contemporary Assyrian kings and contained fewer references to the gods. One honor is particularly conspicuous and is used at the conclusion of virtually every titulary formula: *alusi* uru*Tušpa*-URU. From variants where the word *alusi* is replaced by the logogram EN, it would appear that the word meant something like "lord";[33] but a further nuance of "governor" is implied by the Kalleh Shīn bilingual, where GAR (*ŠAKIN*) appears in the corresponding places in the Assyrian version.[34] Thus the title means "lord/governor of Tušpa city," referring to the capital at Van.[35] Clearly, control of Van was deemed highly significant by Urartian kings since it was so often specifically mentioned, and a special word was used to express it.

F. W. König, in an admittedly speculative discussion of Urartian social structure, saw the reflection of both pastoral traditions and feudal institutions in the Urartian royal titulary. He argued that the fundamental meaning of *alusi* was "shepherd," and that one could see in it a tie between an older, nomadic way of life and the ruling dynasty.[36] Although the grounds for this definition are unconvincing,[37] the Urartian kings did occasionally claim, with other language, the role of "shepherd."[38] Shepherds are not necessarily nomads, however, and it is hard to see why the significance of this claim should be greater for the Urartian monarchs than it was for the Assyrians from whom they borrowed the title.

König's thesis that a feudal tradition lies behind some of the royal titulary is complicated, tenuous, and ultimately unconvincing. The Urartian kings regularly claimed to be kings of the *šuri*-lands[39] and kings of Biainili, or the *Biai*-lands. In the bilingual inscription of Kalleh Shīn, these correspond, respectively, to the Akkadian titles *ŠAR KIŠŠATI* ("king of the universe") and *ŠAR MĀT NAIRI* ("king of Nairi").[40] In the later Topzāwa bilingual, *ŠAR MĀT URARTU* ("king of Urartu") replaces *ŠAR MĀT NAIRI* in the same formula.[41] There is generally scholarly consensus, therefore, that the Urartians, who used the term Urartu on only this single occasion, called their kingdom *Biainili*, and the title "king of the *šuri*-lands" was a claim to overlordship of the rest of the world.[42]

König, on the other hand, maintained that logograms borrowed from Mesopotamia corresponded only roughly to Urartian institutional concepts and should not be taken as precise translations. In his view, *Biainili* was not really a political entity, but a socioeconomic one— a designation for those areas that the Urartian king ruled which were inhabited by a settled population engaged in agriculture.[43] In contrast, he regarded *šuri* as a political term inherited from the Hurrians of the preceding millennium. According to him its original meaning was "chariot,"[44] and from that it was extended to include the land possessed by a person who was required to produce a chariot in time of war, i.e., a fief. Political power in the Hurrian world had been built on a chariot nobility, and consequently the claim to be "king of the chariot lands" was a boast of political omnipotence. König took this to be a traditional title for the Urartians which indicated the heritage of their concept of kingship, rather than a reflection of the political realities of their own day.[45]

While it may indeed by true that the meanings expressed by the same logogram in Urartu and Mesopotamia were not completely equivalent, there are fundamental problems with the rest of König's argument. In the first place, the word *šuri* cannot positively be shown to connote a military chariot in any era. A giš*šuri* occurs only in Urartian, where it is an implement of conquest always associated with the god Haldi. Soviet scholars prefer to translate the word "weapon,"[46] leaving its precise meaning vague, while Calmeyer has suggested it refers to an empty chariot which served as the symbol of the god.[47] For ordinary chariots, the Urartians used the logogram giš GIGIR, which does not alternate with giš*šuri*.[48] Furthermore, if the *šuri*-lands are related to the giš*šuri*, it is hard to see why the determinative GIŠ was never used with the former. It seems unlikely, therefore, that the *šuri*-lands have anything to do with chariots.

Second, the link between Urartian political institutions and Hurrian precedents is quite

TABLE 5
Royal Titulary in Urartian Inscriptions

King	Titles							Examples		
	Mighty King	Great King	King of the Lands	King of Biainili	King of Kings	Lord of Ṭušpa	Other	No.	%	References (*UKN* Number)
Išpuini	L	U	...	+	...	+	...	1	50	25
	L	U	U	+	...	+	...	1	50	19
Menua	L	U	...	+	...	+	...	19	54	37, 39, 43, 44, 45, 57, 58, 65, 67, 68, 69, 92, 101, 104, 106, 107, 108, 376, 379
	U	U	...	+	...	+	...	7	20	42, 59, 61, 92, 106, 119, 375
	L	...	...	+	...	+	...	7	20	66, 70, 79, 91, 102, 103, 105
	L	U	?	?	?	?	?	2	6	33, 125
	L	L	...	....	...	+	...	1	3	29
	L	U	U	+	...	+	...	1	3	376
	U	U	U	+	U	+	...	1	3	72
	?	U	?	?	?	?	?	1	3	92
Argišti I	L	U	...	+	...	+	...	11	65	128, 131, 137, 144, 145, 147a, 147b, 390, 396, 397
	L	U	...	+	...	+	...	6	35	130, 134, 136, 138, 146, 388
	L	U	...	+	L	+	...	1	6	128
Sarduri II	L	U	...	+	...	+	...	2	14	158, 173b
	L	...	...	+	...	+	...	2	14	173a, 419
	L	U	U	+	...	+	...	1	7	155g
	L	U	U	+	L	+	...	1	7	156a
	L	L	L	...	L	+	...	1	7	161
	?	U	?a	+	?a	+	...	1	7	164
	L	L	L	+	L	+	...	1	7	165
	L	U	U	+	U	+	...	1	7	168
	L	?	?	+	?	?	?	1	7	170
	?	?	?	+	...	+	...	1	7	173
	L	U	L	+	...	+	...	1	7	417
	L	...	...	...	...	+	...	1	7	426
Rusa I	L	...	...	...	...	...	A	1	50	265
	L	U	?	?	?	+	...	1	50	269
Argišti II	L	...	...	+	...	...	B	1	100	276
Rusa II	L	?	?a	+	?a	?	...	1	25	278
	L	...	L	+	L	+	...	1	25	280
	L	U	U	+	L	+	...	1	25	281
	L	...	...	...	...	+	...	1	25	282
Rusa, son of Erimena	L	U	...	...	...	+	...	2	33	287, 296
	...	...	...	...	...	...	C	2	33	293, 295
	L	...	...	...	...	+	...	1	17	292
	?b	?	?	?	?	?	?b	1	17	294

NOTE: The table includes the titulary from all inscriptions written in the Urartian language and excludes those written in Assyrian by Urartians. The titles were used in the order that they read from left to right, i.e., "mighty king" was always first and "lord of Ṭušpa" always last. The plus signs indicate the use of a title in which there are no significant orthographic variants. The letter L represents an orthography that is primarily logographic, while U stands for one in phonetic Urartian. Thus, under "mighty king," L is *ŠARRU DANNU*, and U is *ŠARRU taraeli*; under "great king," L is *ŠARRU GAL-ni*, and U is *ŠARRU al(a)s(u)inile*; under "king of the lands," L is *ŠAR KUR* (.KUR)^meš (*-ue*), and U is *ŠAR šuraue*; under "king of kings," L is *ŠAR ŠARRĀNI*^meš (*-ue*), and U is *ŠAR erelilaue*. The letters in the column marked "Other" stand for the following rare titles: A, *ŠARRU DANNU aluše* ^kur*Biainili nulduali* ("mighty king who rules Biainili"); B, ^d*Haldie[i]* ^lú*buran[i* ^lú*s]ie muṣi* ^lú*UKU*^meš ("servant of Haldi, shepherd of men"); C, *ŠARRU DANNU* ^uru*Ṭušpae URU* ("mighty king of Ṭušpa city"). The figure in the column marked "%" represents the number of inscribed blocks which bear titulary for each ruler divided into the number bearing this particular arrangement, multiplied by 100. Since one block may have more than one series of titles, the percentages thus derived can add up to more than 100 for each ruler. A ? indicates a broken passage where the use of the relevant title is possible but not established.

ªHere Melikišvili has restored "king of the lands" in a break, but "king of kings" seems a better restoration. His reading would make these passages the only cases where "king of the lands" follows "king of Biainili," whereas "king of kings" would preserve the normal order of titles.

ᵇOnly *ŠARRU DAN-NU* is preserved, which could be either "mighty king" by itself or part of title C, which is used elsewhere by Rusa, son of Erimena.

problematical. The languages and pantheons of the Hurrians and Urartians are indisputably related, but it is a moot point as to whether this is the result of direct lineal derivation or descent from a common ancestor.[49] To assume that the Urartians, who inhabited a physical and political environment differing vastly from the areas in northern Mesopotamia and Syria in which second-millennium Hurrian states flourished, retained a memory of Hurrian political institutions is even more dubious.[50]

In summary, König's thesis that both nomadic and feudal traditions were heavily stressed in Urartian royal titulary rests on very weak foundations. A far stronger influence appears to be the model of the Neo-Assyrian monarchy, from which the titulary epithets were adopted with only minor modifications and occasionally translated into Urartian terms. The uniquely Urartian elements are few, and so poorly understood that they shed very little light on the nature of Urartian political leadership.

OBJECTIVES AND PATTERNS OF MILITARY CONQUEST

The endless campaigning recorded in cuneiform annals, the imposing fortifications of Urartian sites, and the quantity of weaponry and armor discovered in their excavation leave no doubt that warfare was the dominant concern of the age. In conformity with the general paradigm of ancient Near Eastern monarchy, the Urartian king acted as commander-in-chief of his armies. The decisions he made in that capacity had a direct bearing on both the short-term and long-term political and economic development of his kingdom.

The objectives for which Urartian kings initiated military activity are never explicitly stated, presumably because they were obvious to the people living at the time. In seeking to understand these objectives, therefore, the historian can only posit what he sees as the most probable benefits accruing to the ruler and his kingdom as a result of campaigning, and then evaluate the extent to which textual and archaeological evidence for the actual course of events supports the assumption that they were indeed vital considerations in the conduct of war.

The hypothetical motives for extensive royal military activity considered here fall into three broad interlocking categories: (1) security, (2) material gain, and (3) social solidarity. There may, of course, be others, such as the psychological needs of the individual Urartian kings, but our capacity for detecting such motivation is so small that to pursue it would hardly be a fruitful line of inquiry. Security includes what would normally be thought of as offensive action as well as defensive, since the expansion of the frontiers and reduction of the military potential of states beyond the frontiers could also be construed as a means of protecting the kingdom. The second category may be divided into two subheadings: (a) acquiring plunder, and (b) increasing the productive capacities at the disposal of the state. The two are not unrelated. Much of the plunder taken by the Urartians consisted of captured peoples and livestock, which could in turn be used to produce more agricultural surpluses. Territorial aggrandizement may be thought of as achieving much the same objectives by another method—moving the state to the means of production rather than the other way around. Finally, the importance of warfare in maintaining the social order must be taken into consideration. This would include such simple actions as redistributing population to check imbalances that could create social instability, or provoking an external threat in order to promote loyalty for and dependence on the existing regime. In an atmosphere as warlike as the one in which the Urartian state thrived, it is not inconceivable that the entire social fabric of the kingdom was woven around military activity, and its curtailment could bring about chaos. For example, the king's role in redistributing captured territory, people, and livestock might have been one of the foundations of his power. As Service has noted:

> Redistribution seems to be closely allied to the rise of and perpetuation of leadership. And to the extent that redistribution is extended and formalized, so may be the power of the leader, as his position as a redistributor becomes more useful or necessary. Conversely, the better the leadership, and the more stable, the more it may be instrumental in extending and formalizing the exchange system. And of course, once the society comes to depend heavily on the system, it depends on the continuity of the leadership.[51]

In order to evaluate which of these theoretical concerns, single or in combination, were of significance in Urartu's political and economic development, we begin with a discussion of the mechanics of royal campaigning in general. This will be followed by an outline of the chronology and geography of Urartian military activity.

Urartian display inscriptions bearing accounts of military conquest, which vary little in format from their first appearance around the end of the ninth century to the last examples in the early seventh, focus their narrative on the actions of the king. Notwithstanding an occasional reference to the army and the indispensable presence of the god Haldi,[52] the subjugation, destruction, and plundering of enemy lands and peoples are represented as his personal deeds. Unlike Assyrian annals, where there is an occasional reference to a high-ranking subordinate, no other individual except an opponent is mentioned in Urartian campaign records. This is not to say, however, that the military command structure was so arranged as to prevent any other individuals from attaining a position of prominence. The Assyrians watching the Urartian frontier deemed certain officers significant enough to warrant mention in reports to their own court.

Assyrian testimony confirms that the Urartian king did indeed lead his troops in person, at least on major campaigns. On three known occasions his life was in danger and his camp sacked: once at the hands of the Kimmerians[53] and twice after defeats by Assyrian kings.[54] The commencement of a royal campaign was heralded by the mustering of forces of a number of governors at some strategic Urartian stronghold. The king, who had his own contingent of troops, would join the armies of these governors and lead them into the field.[55] Not all campaigns were conducted according to this pattern, however. Where rapid action was necessary, the forces of the king alone sometimes sufficed.[56] An Assyrian letter reporting on an attack by an Urartian governor omits any reference to the Urartian king, implying that minor actions could be initiated at a lower level.[57] One interpretation, albeit disputed, of several passages in Urartian annals suggests that the army could also undertake major campaigns without the king being physically present.[58]

The texts of Argišti I and Sarduri II provide the only basis for estimating the frequency and duration of royal expeditions. Argišti I appears to have gone into the field annually, and accounts for sixteen of his years are completely or partially preserved.[59] These yearly campaigns often had several objectives, and our imperfect knowledge of the historical geography of most of the lands surrounding Urartu prevents a clear understanding of whether these were attacked in separate sorties or in a single circuit. Occasionally an account is divided into major subsections, with the second being introduced by a clause stating, "In the same year I set out. . . ."[60] This seems a fairly clear indication that more than one campaign could be conducted in a single year.[61] The fragmentary annals of Sarduri II contain similar annual groupings, but the text is too incomplete to yield a specific number. In general, Sarduri's campaigning seems to be very much of the same level as that reported in the annals of Argišti.

The military activities of other kings are known only from scattered texts which report single campaigns. This evidence, such as it is, indicates a minimum of three expeditions for Išpuini and Menua jointly,[62] and seven for Menua alone.[63] After Sarduri II, only two discrete campaigns are demonstrable from Urartian records: one by Rusa I[64] and one by Argišti II.[65] From the time of Argišti II on, there are very few Urartian documents of any kind, so the lack of attention of military activity should not be taken as proof that an era of peace had arrived.

While it is impossible to draw a line between offensive and defensive functions of any military establishment, the Urartian army was strongly oriented toward the former, inasmuch as all of its known major actions were fought outside Urartu. Urartian royal records fail to mention campaigns within the frontiers, as one might expect, but to a certain extent Assyrian evidence also supports the view that the king led his massed troops only in actions against foreign territory. In each of the major defeats of the Urartians mentioned by Assyrian sources, the king and his forces gave battle beyond their own border.

The tactic employed after such debacles was dispersal rather than an attempt to regroup. Apparently it was to the walls of their fortresses and the inaccessible areas of their kingdom that the Urartians turned when confronted by an army, such as Assyria's, that was superior to their own in the field. Such a course of action would explain why Tiglath-Pileser III and Sargon II

encountered so little effective armed resistance while making deep incursion into Urartian territory, despite the fact that the kingdom was then at the zenith of its power. Dispersal of forces and abandonment of indefensible settlements, which is reported both by Sargon[66] and a letter describing the behavior of Rusa and his troops after the Kimmerian defeat,[67] are understandable as a defensive tactic given the normal character of warfare in eastern Anatolia. Allen and Muratov, speaking of the nineteenth and early twentieth centuries, have written:

> War in the borderland between the Caucasus and the mountain ranges covering the approaches to the Iranian and Anatolian plateaux has essentially the character of mountain war: battles for saddles and defiles, followed by attacks on fortified localities commanding main alleys of communication along river valleys. Transport and supply difficulties impose the use of relatively small forces accustomed to the rigors of climate in the Armenian highlands. The experience of former wars shows that when the commanding saddles have been lost fortified localities can sustain long sieges owing to the difficulty of transporting heavy artillery and the supplies necessary to the support of a siege force.[68]

Under such conditions, the Assyrian army with its superior numbers and refined siege machinery would be far less effective in Urartu than it was in other areas of the Near East. The Urartian king did not need a large army to defend his homeland, providing that the soldiers he had were competent and his fortresses were sufficiently strong and well supplied.

It would be of interest, therefore, if the actual number of troops commanded by the Urartian king on his expeditions could be established. Urartian texts are not altogether unhelpful on this matter, although the information they supply is somewhat ambiguous. Four inscriptions, two of which contain identical figures and probably refer to the same campaign, give what appear to be musters of Urartian forces (see tables 6 and 7). Three pertain to joint actions of Išpuini and Menua, at a very early point in Urartu's territorial expansion; the fourth, coming from the reign of Sarduri II, is fraught with difficulties of interpretation. They are consistent in dividing the army into three branches: chariotry, cavalry, and infantry. The ratio between these categories, however, differs widely from text to text. The figures are obviously inadequate for deriving a reliable estimate of how many troops the Urartian king commanded at any point, let alone tracing the fluctuations in the size of his army in the course of the kingdom's history. The numbers for Išpuini and Menua suggest a credible order of magnitude for the royal army in a single campaign; the high number of foot soldiers in the inscription of Sarduri implies something quite different and needs to be examined in detail.

It is difficult to know what to make of Sarduri's text, which was carved into the living rock of the rear wall of a niche at Van, but it definitely contains significant information on the composition of the army. It is clearly related to Sarduri's annals, which were inscribed on a stele that stood in the same niche. The difficulties in comprehending the text lie in modern ignorance of the Urartian language rather than damage or incompleteness.[69] Sarduri says that when he ascended to the throne of his father:

3) *a-li ar-di-i-e i-ni i-si-ú-še* KUR *šú-ra-a-ni e-di-ni tú-ru-ú-bi* 92 ^{giš}GIGIR^{meš}
4) 3600 *PIT-HAL-LU*^{meš} 35 *a-ti-bi* 2011 ^{lú}ERÍN^{meš} *e-'a PIT-HAL-LU*^{meš}-*e-i*
5) *e-'a* ^{lú}ERÍN.GÌR^{2meš}-*e-i i-na-ni ar-da-i-e* ^{lú}A.SI^{meš}-*na-ni e-di-ni tú-ru-bi*
6) *a-li i-si-ú-še ma-a-nu huˇ-ú-bi* . . . [there follows a list of people and commodities]

A sampling of the published translations of this passage amply illustrates the uncertainty of its interpretation:

> Was an Macht-Stärke (und) Tross (Ausrüstung usw.) vorhanden (war), so hob ich von den Wagen-Ländern stets (für immer) aus 92 Wagen(-Krieger), 3600 Pferde(-Krieger) und 352.011 Krieger zu Fuss; sowohl an Reitern wie an Fuss-Truppen war diese Macht-Stärke vorhanden, hob ich von den Gefolgen stets (für immer) aus, was an Tross (Ausrüstung) vorhanden war, so liess ich anhäufen.[70]

> I eliminated this offering *ini isiuše* (unnecessary?) for (?) (from?) (the whole) kingdom: 92 war-chariots, 3600 saddle-horses, 352,011 soldiers—mounted and on foot. This offering(?) I eliminated for(?) (from?) the troops. What was *isiuše* (unnecessary?), I eliminated.[71]

TABLE 6
NUMBERS OF TROOPS IN THE URARTIAN ARMY

King	Text	Numbers of Troops		
		Chariots	Cavalry	Foot Soldiers
Išpuini and Menua	21 (6a)	66	X,460	15,760
	22 (6)	66	1,460	X5,760
	24 (7) obv.	106	9,X74[a]	X2,704[b]
	24 (7) rev.	106	XXXXX	XX,704
Sarduri II	155G (103A)	92	3,600	352,011

[a]9,174, 9,274, and 9,374 are all possible according to *UKN*.

[b]This number begins a line and there is space between the margin and the initial preserved signs, 2 LIM 7 ME. . . . Although Melikišvili takes these to be the beginning, and thus believes the whole number is 2,704, it is more likely that some multiple of 10,000 stands in the gap. König's reading of 22,704 is certainly possible, but since there are no traces of signs in the lacuna, any multiple of 10,000 may be restored equally well.

TABLE 7
RATIOS OF TROOPS IN DIFFERENT BRANCHES OF THE ARMY

Numerator and Denominator	Text (*UKN* No.)	Ratio		
		Chariots	(to) Cavalry	to Foot
Overall	21, 26	1	22	239
	24	1	87[a]	497[b]
	155G	1	39	3826
Foot	21, 26	. . .	1	11
Cavalry	24	. . .	1	6[c]
	155G	. . .	1	98

[a]Based on restoration of 9,274 for number of horsemen in text. The actual ratio could be 88 also.

[b]Based on a hypothetical 52,704 for the number of foot soldiers in the text. Permissible restorations allow a range in the ratio from 120 to 874.

[c]Based on restorations of 9,274 and 52,704, respectively. Permissible restorations allow a range in the ratio from 1.4 to 10.

This is the burden(?) of obligation that I eliminated for the *šureli*: 92 war-chariots, 3600 saddle horses, 352,011 soldiers—mounted and on foot; I eliminated this obligation for the troops; what was a burden, I did away with.[72]

There is less disagreement on the list that follows, which I present here before weighing the merits of the translations given above:

121 people, 10,408 horse, 132 mules, 12,321 bovines, 9036 cattle—total: [2]1,357 cattle[73]— 35,467 sheep,[74] 2114 soldier's weapons, 1332 bows, 47,970 arrows, 1,022,133 *kapi* of wheat, [X]11 *aqarqi* of wine,[75] 86 *aqarqi* 7 *ţerusi* of *mankali*-oil, 707[X] minas of copper,[76] 336 months for the *ururda*-people,[77] I eliminated (*turubi*).

Much of the disagreement on what this text says stems from different interpretations of the very *turubi*, a third person singular transitive past tense from a verbal root *tur*-. König derives his definition of "aufbieten, ausheben" from the context of this very inscription,[78] which is hardly clear enough to lend it any certainty. Melikišvili more reasonably equates it with imperative forms *turi* and *tuli*, which appear in curse formulae with the meaning "to destroy."[79] This interpretation, which enjoys the advantage of being less ad hoc, rules out König's view that the quantities listed constitute a muster of Urartian forces at a point in Sarduri's reign.[80] If Melikišvili and Diakonoff are correct in their view that the list is an elimination of something,

the 336 months might well represent some sort of corvée.[81] The *ururda* would be groups of people subject to monthly obligations that were now being lifted in whole or in part. This remains only a suggestion, however, since the *ururda* are not mentioned elsewhere.

Whatever the significance of this text, it cannot be offered as proof of the existence of a standing army hundreds of thousands of men strong. If it is indeed a reduction of obligations, the figure 352,011 could represent the number of people eligible to serve, or a fraction of them.[82]

The inscriptions of the Urartians relating information about military campaigns leave no doubt that the acquisition and orderly disposition of booty was an important concern of the king. In the two sets of annals, booty lists conclude the account for the activities of each year, thus appearing with far greater consistency and regularity than such lists in Assyrian annals. Similar lists occur in shorter Urartian texts from the reigns of Išpuini, Menua, and Argišti I (see table 8). After Sarduri II, there are no surviving examples of booty lists. Unlike the Assyrians, the Urartians never recorded the seizure of treasures, such as those listed in the narrative of Sargon's eighth campaign. Instead, they were concerned with only a few staple items: prisoners of various categories, horses, cattle, sheep and goats, and, rarely, camels. Precious metals were sometimes mentioned as tribute imposed,[83] but only once as booty.[84] Objects of value were undoubtedly pillaged by the Urartians on their raids, but their sum total was apparently not considered worth reporting in royal annals.[85]

Booty-producing actions were repeatedly directed against the same opponents. Most of these, such as Mana, Diauhi, and Etiuni, were close at hand and could hardly have posed a serious military threat to a state with such impressive defenses as Urartu. Booty from more serious opponents, such as Aššur or Muški, is unimpressive and rarely mentioned.

The disposal of captured people and animals seems to have been a prerogative of the king. Nothing is ever said specifically about the fate of the captured animals, but there are a few passages which are so ambiguously phrased that they may include them. Human prisoners are mentioned at the head of every list and appear more frequently than references to animals, making it seem that they were the primary consideration. In an inscription found at Van that Melikišvili believes to be a fragment of Menua's annals, two separate accounts conclude by giving a number of prisoners and then the phrase "*ali 'aše manu arubi* ^{lú}*huradinau*[$e^{meš}$] (what men there were I gave to the soldiers)."[86] What the soldiers then did with them is not stated. Another phrase that concerns the disposition of spoils of war appears in three passages of the annals of Sarduri II: "*inani* ŠÁRRU-*e nunabi mei ali* ^{lú}A.SI^{meš}-*še partu* (var. *irbitu*) *šeri partu* (these things went to the king, but what the troops[87] took, they took separately)."[88] Since the phrase immediately follows the number of cattle and sheep and goats of the booty list, it might be argued that it pertains only to animals, but a fourth passage found in the same position in relation to the list speaks explicitly of people: *šeri 'aše* ^{sal}*lutu* ^{lú}A.SI^{meš}-*ue arubi* (I gave men and women to the troops separately)."[89] These passages raise the question as to whether booty lists normally account for only the king's share or for all of the plunder taken in a campaign.[90] There is one additional phrase in Urartian texts that appears to concern the disposition of booty, but in each of the four texts in which it has been found, it is damaged and unintelligible.[91]

The fate of the captives that remained in the royal share is a matter of considerable controversy in Soviet studies of Urartu, in a debate that has been undertaken on the basis of very scanty evidence. The chief point of contention is whether these captives, who averaged about twenty thousand per campaign if the claims of the Urartian annals are to be taken seriously, were retained as personal property of the king or assimilated into the state in some other capacity. Melikišvili has argued that they served as agricultural laborers on large plantations belonging to the king.[92] Diakonoff, on the other hand, contends that while some may have worked in royal workshops, on temple estates, and even in royal gardens, the majority must have been settled on state land and allowed to practice agriculture independently, in return for taxes. Many were also drawn into the Urartian army and served in the garrisons of local fortresses. His arguments rest primarily on the theoretical position that the numbers of these prisoners were so vast that the means to manipulate them in large groups as slaves were not available to Urartian rulers.[93] There are, in fact, only two inscriptions that mention the fate of foreigners in Urartu: One is a passage in the annals of Argišti concerning the founding of the fortress of Erebuni, where it is

TABLE 8
PRISONER AND BOOTY LISTS

King and Campaign	Primary Opponent	Groups of People, Listed:				Livestock			
		First	Second	Third	Total	Horses	Camels	Oxen	Sheep and Goats
Išpuini:									
20 (6)	Etiuhi	720 ?	X,670 Wm	. . .	. . .	X26		13,54X	20,785
24 (7)	Baršua	483 ?	X,XXX ?	X6,600 ?	. . .	1,120	(X)X65	12,000	(X)X5,000
Menua:									
28 (16)	Marma, Uliba, Dirgu	. . .	. . .	. . .	. . .X55 TM	. . .	. . .	. . .	. . .
28 (16)	near Hatti	. . .	. . .	. . .	2,113 TM	. . .	. . .	. . .	. . .
32–34, 38 (18–20)	Etiuni	. . .	. . .	. . .	5X,XXX T[M]	1,733	. . .	7,616	15,320
Argišti I:									
127 I (80 1)	Diauehi	19,255 A	10,140 Ss	23,280 Wm	52,675 TM	1,104	. . .	35,015	10X,829
127 I (80 2)	Etiuni	[XXX] ?	[XXX] ?	. . .	20,279 UM	1,280	. . .	[XXX]	126,XXX
127 II (80 3)	Hatti, Malatya	2,539 A	8,X98St	1X,X4X L	29,284 TM	[XXX]	. . .	17,962	XX,XXX
127 II (80 4)	Etiuni, Ubarda	8,648 ?	2,655 St	8,497 ?	19,790 UM	232	. . .	X,803	11,626
127 III (80 5)	Aššur	. . .	. . .	. . .	(X)X,X40 UM	. . .	. . .	X,987	[XXX]
127 III (80 6)	Aššur, Buštu	. . .	. . .	. . .	18,827 TM	606	184	6,257	33,203
127 IV (80 7)	Buštu, Iani, Mana	. . .	. . .	. . .	18,243 TM	79X	100	22,529	36,830
127 IV (80 8)	Mana, Irkiuni	. . .	. . .	. . .	6,471 UM	206, var. 286	. . .	2,251	8,205
127 IV (80 9)	Mana, Buštu	. . .	. . .	. . .	7,873 TM	2XX	101	4,909	19,550
127 V (80 10)	Mana	. . .	. . .	. . .	8,270 TM	170	62	2,411	6,14X
127 V (80 11)	Mana	. . .	. . .	. . .	13,979 TM	308	. . .	8,X21	32,538
127 V (80 12)	Mana, Etiuni	. . .	. . .	. . .	[XXX]	1,2XX	. . .	29,504	6X,XXX
127 VI (80 13)	Taruini, Etiuni	. . .	. . .	. . .	24,183 UM	25	. . .	X,744	48,825
128 B1 (82 rs.)	Diauhi	15,181 ?	2,734 ?	X,604 Wf	. . .	4,426	. . .	X,478	73,770
Sarduri II:									
155A (103 16v)	Mana	8,135 A	25,000 Wm	6,000 G	. . .	2,500	. . .	12,300	32,100
155A (103 16ix)	Etiuni	3,500 A	15,000 Wm	4,000 G	. . .	. . .	. . .	8,525	18,000
155A (103 16xi)	Urme	1,100 A	6,500 L	2,000 G	. . .	. . .	. . .	2,538	8,000
155B (103 14)	Mana	3,225 A	4,928 L	. . .	8,153 U	412	. . .	6,665	25,735
155C (103 3)	Qulha, Abiliani	X,890 A	3,496 St	6,408 Wm	9,904 U	65	. . .	X,090	10,897
155C (103 4)	Eriahi, Abiliani	. . .	. . .	. . .	7,150 UM	500	. . .	8,560	25,170
155D (103 11)	Qulha, Uiṭeruhi	8,100 A	9,110 L	. . .	17,200 U	1,500	. . .	17,300	31,600
155E (103 8)	Puladi, Eriahi	6,436 A	15,553 L	. . .	21,989 T	1,613	115	16,529	37,685
155F (103 15)	Etiuni	10,000 A	4,600 St	23,200 L	37,800 U	3,500	. . .	40,353	214,700
156C (102)	?	12,610 A	1,829 St	7,751 L	. . .	352	. . .	5,747	19,062

NOTE: The numbers of people and animals given in this table have been checked against photographs of the texts, since the readings of Melikišvili and König vary considerably. X indicates the presence of a digit which is unreadable; [XXX] stands for an entry where the number of digits cannot be made out. The number seen in the "Total" column is the total given by the Urartian text, not by my addition of the component groups. The terms that are used for these groups cannot be translated precisely, but as a rule they appear in a definite order, suggesting, on the analogy of the animals, a hierarchy of value. The code letters used in the columns marked "First," "Second," and "Third" stand for the following words and phrases in the inscriptions, given here with rough translations and listed in order of rank: (1) A = arše, read ubše by König; (2) Ss = lúÉRINmeš šehiri, "living troops"; (3) St = lúTImeš, "living people"; (4) Wm = lúuediani; (5) Wf = saluediani; (6) L = sallutu, "women"; (7) G = lúgunušini. There are no instances of contrast between Ss and St, or Wm and Wf, so these may in fact be the same thing. The abbreviations used in the "Total" column stand for the following: T = lútaršuani, "people"; U = lúUNmeš, "people"; TM = lútaršuani MU, "people (for the?) year"; UM = lúUNmeš MU, "people (for the?) year."

stated that 6,600 soldiers from Hatti and Šupani were settled there.[94] The other is a broken text in which Rusa II mentions the people of Muški, Hatti, and Halitu in regard to the building of Ziuquni, presumably near Adilcevaz.[95] In neither of these cases is it certain that these people are on the same footing as those mentioned as captives in booty lists. While foreign peoples are indeed serving the ends of the Urartians in some capacity in the areas being developed, their personal status with regard to the Urartian king is quite unclear. In the Assyrian Empire of the same period, population groups from troublesome areas were deported to other parts of the empire in order to facilitate pacification of conquered territory. If this were also the case in

Urartu, the integration of the foreign groups into Urartian society would not be as complete as Diakonoff suggests, nor as oppressive as in Melikišvili's scheme.

With regard to conquered territory, the Urartian king exercised several options: (1) He could leave the area without making any arrangements for its future at all. (2) He could spare the local ruler on the condition that tribute be paid. (3) He could appoint a governor of his own and, presumably, integrate the conquered territory into his kingdom. Campaign inscriptions show that these options were exercised with diminishing frequency in the order that they are listed. Most make no mention of any arrangements; occasionally there is a statement that the king was spared on the condition of payment of tribute,[96] but only in rare instances is the appointment of a governor mentioned.[97]

The history of Urartian expansion does not suggest that territorial acquisition was of vital consequence to most Urartian monarchs, particularly after the reign of Menua. In contrast to Assyria, where continued enlargement of the empire has been theorized to be a sine qua non of state survival, Urartu spread over a large area quite early in its history and survived thereafter with only minor additions to its territory. Since the history of the kingdom has been treated in detail elsewhere,[98] it will be reviewed here only in broad outline.

Sarduri I, the first of the royal line to attract the attention of the Assyrians, left inscriptions only at Van, and the kingdom he controlled was probably quite small. The texts of his successor, Išpuini, fall into three categories: those bearing his name alone; those in the name of Išpuini and his son Menua; and those of Išpuini, Menua, and Menua's son Inušpua. It is usually assumed that texts of the second and third type are later than those bearing Išpuini's name alone, although there is no question of a period of coregency since the royal titulary is never applied to the son or grandson in these inscriptions. If these joint inscriptions are later, then all of Išpuini's early texts concern building and come from the vicinity of Van and Patnos.[99] In association with Menua, however, Išpuini initiated a major thrust to the southeast, observable both in the bilingual inscription at Kalleh Shīn (Kelishin) and a building inscription found at Qalatgah, between Kalleh Shīn and the southern shore of Lake Urumiyeh.[100]

Menua, the Urartian king who has left by far the largest number of inscriptions, appears also to have effected most of the territorial expansion of the kingdom. He pushed the frontiers close to their ultimate limit in all directions but northward. A temporary eclipse of Assyrian power no doubt facilitated this task and is also probably responsible for the fact that Assyrian sources never mention this most dynamic of Urartian kings. In the southeast, he continued building activities in the area of Qalatgah and extended the kingdom at least as far as Taštepe,[101] between Mahābād and Mīandow Āb—as far as it was ever to go in that direction. To the north his domains extended as far as the Aras valley, where he built two major fortresses on the south side of the river.[102] In the northwest, he built a fortress near Erzurum,[103] and in the west he carved an inscription on the rock face at Palu, which reports that he exacted tribute from the king of Malatya.[104]

Despite the length of their annals and the nearly continuous warfare of their reigns, the territorial gains of the next two kings, Argišti I and Sarduri II, hardly compare to those of Menua. Most of their achievements were confined to the north, where Argišti built two major strongholds beyond the Aras, Erebuni and Argištihinili;[105] and left campaign inscriptions both on the shore of Lake Sevan[106] and in the vicinity of Leninakan.[107] A king Argišti is also mentioned in an inscription from Altıntepe,[108] but whether it refers to this king or his great-grandson of the same name remains in doubt. Sarduri II left a campaign inscription at Lake Çıldır,[109] representing the northwesternmost penetration of an Urartian ruler. A fortress and inscription at Seqindel show that he also acquired new territory in the northeast.[110] In the west, Sarduri moved the frontier to Izoli, where he recorded a crossing of the Euphrates and attacks on the countryside around Malatya.[111] He also apparently entered into an alliance with Mati'-ilu of Arpad, shortly before he was defeated by Tiglath-Pileser in Kummuh.[112] Thus, while the state did increase in size during the reigns of Argišti and Sarduri, the gains were not as impressive as one might expect, given the continued military impotence of Assyria throughout most of this period.

The revival of Assyria under Tiglath-Pileser III was followed by a number of defeats for the Urartians. These military reverses, however, do not appear to have greatly reduced either the

size of the wealth of the kingdom, to judge by archaeological remains. Written testimony from the Urartians becomes increasingly rare for activities of all kinds after the middle of the eighth century, and almost vanishes in the seventh. Yet most of the major Urartian centers seem to have been built in this latter, more shadowy period of Urartu's history.

With textual sources wanting and no systematic surveys aimed at dating Urartian sites having been undertaken in Turkey, it is difficult to determine the territorial extent of Urartu during the late eighth and seventh centuries. There are no inscriptions in the lower Murat valley after Sarduri II, so these western conquests may indeed have been lost. In other directions, however, Urartu appeared to have held its own. Rusa I is attested on Urartu's southern frontier both by the Topzawa stele and frequent Assyrian references to his control of Uaşi (Uajais), which must lie somewhere nearby. He built citadels on the shore of Lake Sevan as well,[113] indicating that the Urartians, at least into his reign, were still quite active in the north. Rusa's successor, Argišti II, is the last king who can be demonstrated to have expanded the kingdom in any way, but there is no firm archaeological evidence for the fortresses he claimed to have built in the vicinity of Sarab, in spite of the testimony of his inscriptions.[114] The next king, Rusa II, appears to have been Urartu's greatest builder, if one judges by the scale of his surviving works rather than the number of his inscriptions. A later Urartian king whose exact chronological placement is uncertain, Rusa, son of Erimena, was also responsible for building activities in the Erevan area and is attested on several portable objects at Toprakkale.[115]

In summary, Urartu's territorial expansion, for the most part, took place over a short period of time. After the initial growth of the kingdom, intensive campaigning yielded relatively little new land. Urartu's territory was always confined to mountainous areas, and its army was ineffective in pitched battles against Assyria once that empire was again possessed of competent leadership. After the reign of Sarduri II, Urartu may have lost some of its western holdings, but on other frontiers it either held its ground or added modest amounts of territory.

In attempting to formulate general conclusions on the political and economic significance of the king's military activities, it is important to bear in mind the uneven nature of the documentary evidence that has been reviewed above. From the Urartian side it is abundant for only a short span in the eighth century, perhaps not more than a few decades. This leaves the greater part of Urartu's history untouched—particularly the seventh century, which is the time during which the state's ability to survive is most remarkable. Consequently, the conclusions presented below must be considered tentative.

The question is not really which of the three goals (security, acquisition, and social integration) were served by the king's military role, but rather in what way they were served. Military actions led by the king were acquisitive in character, and the form of the acquisition, after the frontiers of the state were established, seems more oriented toward securing manpower and livestock than territory. The role that these campaigns served in promoting the security of the state came indirectly from this acquisitive function rather than directly from the campaigns themselves. The Urartians were unable to compete with a strong Assyria in the field, so it was through constructing fortifications with manpower that was secured through raiding that their smaller armed forces were able to defend the state. The king's authority in the allocation of these plundered resources was probably responsible for much of the centralized character of the regime, while the nature of the terrain and climate demanded a decentralized defense when armies of the enemy were actually at hand.

ROYAL BUILDING ACTIVITIES

The testimony of Urartian display inscriptions suggests that the king's role in the initiation of construction projects was on a par with military leadership as a conspicuous royal function. Excluding short dedicatory notations on such objects as shields, quivers, and bowls, records of building activities are the most common royal inscriptions. As is the case with all other types of public documentation, there are no nonroyal examples known. The motives for which the king undertook these constructions may be gleaned from the functions of the buildings themselves;

and like military activity, building activity may be observed to change focus in the course of time, both geographically and in terms of the kind of projects executed. From the economic viewpoint, these motives may be categorized under four rubrics: productive, defensive, re-distributive, and cultic. As is the case with military goals, these categories overlap and interlock to a large extent. Projects that were aimed at enhancing production included canal building and the laying out of orchards, vineyards, and fields. Defensive structures included fortresses and royally sponsored cities, both of which also fall into the redistributive category, along with ad-ministrative buildings and storehouses. The numerous cultic buildings, which are often associ-ated with sacrifices, may also have had some redistributive function.

For the most part the format of building inscriptions is standardized: they begin with a dedication to a god, usually Haldi, followed by the name of the Urartian king, the name of the structure, and a verb that pertains to the construction or dedication of the structure. The verb used varies with the type of building, and most buildings seem to be associated with only one verb. Occasionally the inscription closes with a curse formula. Most of these texts were carved on large blocks of dressed stone that were presumably incorporated into the masonry of the building they mention, but relatively few have been found in situ. In addition to formal building inscriptions, royal annals and campaign inscriptions also occasionally note construction activi-ties. This concern, however, is limited to fortresses, cities, and canals—in short, the under-takings of the grandest scale.

A general overview of building activities based on the information in formal building inscriptions and military reports is presented in figure 8. In the early years of the monarchy there is an extremely rapid rise in both the number of inscriptions mentioning building activity and the number of discrete structures referred to. Both figures reach maxima in the reign of Menua, diminish somewhat under his successors Argišti and Sarduri, and then fall to insignifi-cant levels in the reigns of later Urartian rulers.

In themselves, the data presented by this graph are an insufficient basis for postulating generalizations about levels and trends of building activity in the course of Urartu's history. The curves might look very different if the number of projects were plotted against time rather than
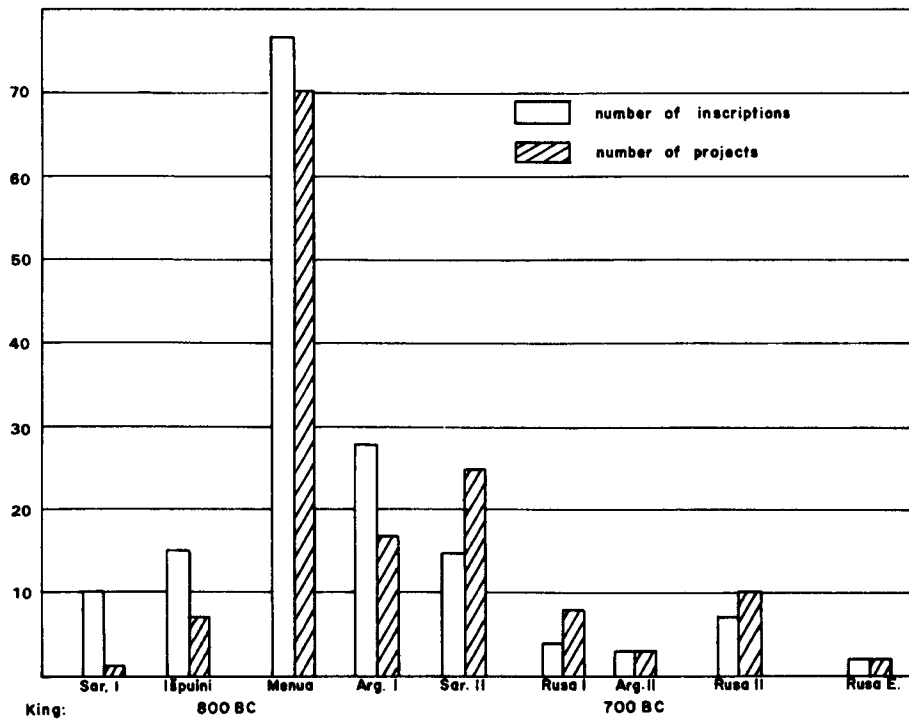
Fig. 8. Textual Evidence for Royal Building

the reigns of rulers, which were obviously of varying duration. Unfortunately, the length of these reigns is unknown. Second, the number of projects involved is quite small, and consequently the hazards of chance in the survival of evidence cannot be ignored. These problems, which produce only distortions in the curve, are minor in comparison to other factors. The scale of the projects must be taken into consideration, for it is pointless to compare the building of a small chapel with the founding of a major administrative center, which may, incidentally, have included many such chapels. In figure 8, Argišti I does not appear to be a particularly active instigator of building activities, yet his two major projects, the construction of the enormous settlements at Erebuni and Argištihinili, dwarf anything that we can assign to Menua, whose buildings are more prolifically attested. The difference in the number of eighth- and seventh-century building inscriptions may reflect changes in writing practices rather than varying amounts of royal building activity. As has been mentioned above, there is no archaeological evidence that Urartian construction diminished in the seventh century. On the contrary, some of the largest Urartian sites known belong to that period. Since all forms of writing, including military and dedicatory inscriptions, become quite rare in the seventh century, the decline in the number of royal building inscriptions preserved is unlikely to be due to other factors, such as a shift to nonroyal building projects.

In view of these drawbacks, figure 8, which simply quantifies building inscriptions and reported building activities by reign, serves only as a point of departure for the consideration of this material. Below I shall examine in detail the types of building mentioned, seeking to correlate them with structures known archaeologically, and then attempt to generalize what these tell us about the social consequence and history of Urartian building activity. In so doing, we alleviate the distortions created by lack of consideration of building scale in figure 8, but the problems of insufficiency of sample, varying time units, and changes in writing habits inevitably remain. Therefore, we cannot delineate with any quantitative certainty the amount of royal building activity over the course of Urartu's history. However, for the eighth century it is possible to suggest something of the nature of building projects undertaken by the king and pinpoint the geographical foci of their interest.

"Palace"/Fortress (É.GAL)

In Mesopotamia the logogram É.GAL and the Akkadian word *ekallu*, which it commonly represented, signified "palace" in the sense of both a physical structure and an administrative authority. In the corpus of Urartian inscriptions, more than twenty-two distinct É.GALs are mentioned (see table 9 and fig. 9), a quantity well in excess of the number of known kings, and more remarkable in view of the fact that all were built by only five Urartian rulers. Menua alone accounted for fourteen. Furthermore, many of these inscriptions refer to construction on the frontiers of the Urartian kingdom, such as the shore of Lake Sevan, the area south of Lake Urumiyeh, and the vicinity of Sarab. Consequently, the view that these were simply royal residences seems untenable. Because the Urartian kings so frequently reported destroying the É.GALs of other people, Friedrich argued that the Urartians simply meant "fortress" by the term.[116]

On the other hand, the one building inscription of an É.GAL that has been found in situ comes from an archaeological context that would suggest it belonged specifically to a palace, not simply a fortress.[117] It was discovered at Arin-berd, ancient Erebuni, carved into a building stone that formed part of the masonry of the entrance to a large complex of rooms that included courtyards, storage rooms, and a *susi* temple, identified by its own inscription.[118] Building inscriptions often mention the construction of an É.GAL and a *susi* together.[119] This evidence from Arin-berd prompted its excavator, K. L. Oganesjan, to suggest that É.GAL had a more specific meaning than "fortress," if not as specific as "palace." Citing the testimony of Assyrian campaign accounts, in which fewer É.GALs than cities (*ālāni*) or fortresses (*birāte*) were reported captured, he hypothesized that only certain fortresses contained, and therefore, by extension, could be called, an É.GAL. For him sites designated É.GAL were those that contained the residence of either a king or a provincial governor.[120]
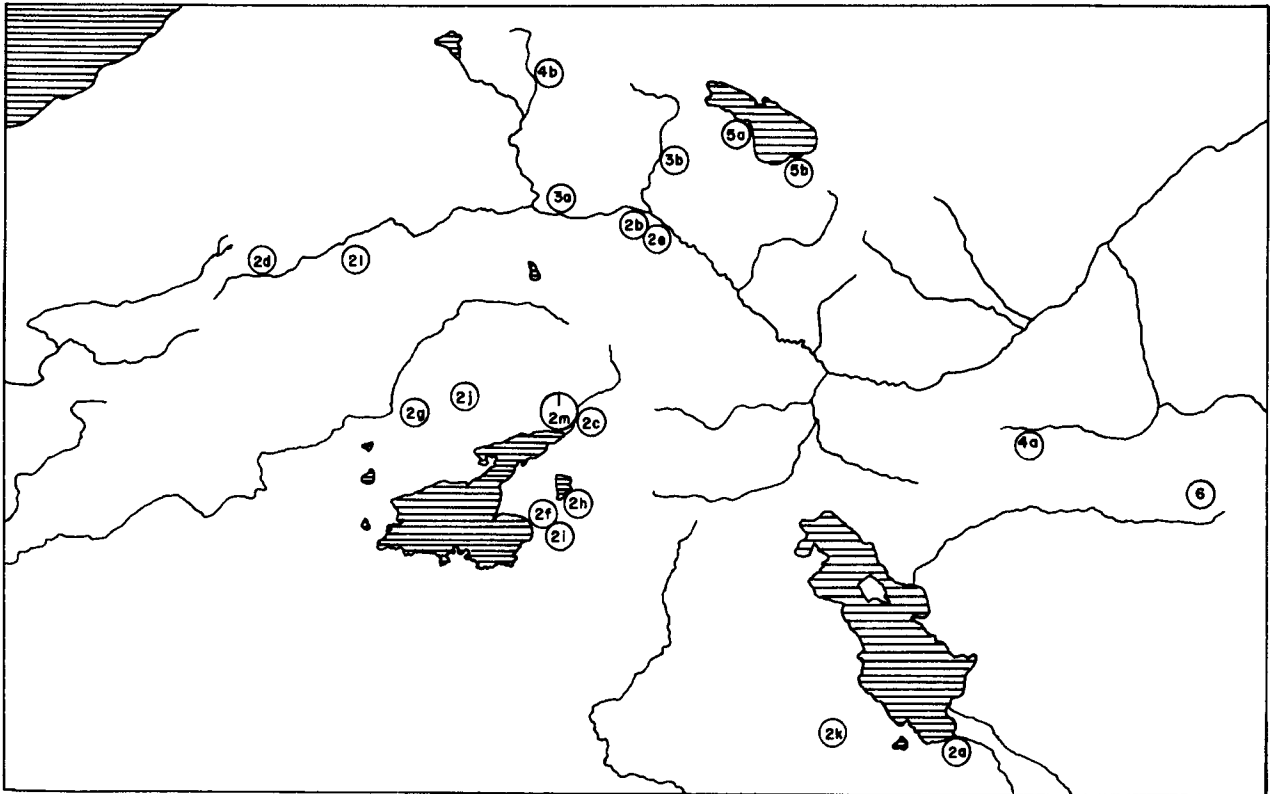
Fig. 9. Distribution of É.GALs

It is not certain, however, that the Assyrians used the term the same way the Urartians did, even when they were speaking of palaces in Urartu; to assume that they did in seeking a definition of the Urartian usage begs the question. In fact, there is some doubt as to whether the Urartians themselves were entirely consistent in their employment of the logogram. Two different phonetic complements appear with it, and Melikišvili has argued that these betray different underlying Urartian words.[121]

Only one inscription records the building of an É.GAL prior to the reign of Menua. Eleven of the fourteen that are attributed to Menua can be located roughly. They are scattered around the kingdom with a certain predilection for the frontier areas, but several are found immediately in the vicinity of Van and in areas which must have been part of the Urartian kingdom from the outset. The size of the sites associated with these installations varies considerably: Kleiss notes that Taštepe is a surprisingly small fortress, and if it contained a building that could be called a "palace," it was a minor affair.[122] On the other hand, Qalatgah, from which the Oshnovīyeh inscription almost certainly comes,[123] is quite large. Unfortunately, none of the sites where Menua built an É.GAL has been excavated, and it is not possible to associate a specific structure with the term, if indeed it was an individual building.

Although the next four kings also claim to have built É.GALs, the numbers decrease and the patterns of building seem different. After Menua, the term is consistently reserved for installations near the frontiers of the kingdom. For all his conquests, Argišti I mentions building only two, both in connection with his major projects in the Aras valley. The annals of Sarduri II refer to the building of É.GALs in three separate instances on newly conquered territory. In two cases, it is possible to determine the approximate location of this building activity through conquest inscriptions found in situ that give the names of the lands in which it took place.[124] Both of these are remote areas, and the annals make it clear that Sarduri built more than one É.GAL in each of them, so it is unlikely that these were major constructions.[125] Rusa I left inscriptions at two separate sites beside Lake Sevan, each reporting the construction of an É.GAL. Rusa's

TABLE 9
É.GAL Construction

Builder	Text(s) (*UKN* No.)	Location	Reference to Fig. 9
Išpuini	a	Karahan	1
Menua	29	Taštepe	2a
	31	Çölegert	2b
	40	?	
	65–67	Köşk, Muradiye	2c
	69	Pasinler	2d
	70, 376[b]	Bulakbaşı? (Menuahinili)	2e
	71, 378	Anzaf	2f
	72	Malazgirt	2g
	73	Kobanis	2h
	78	Kevenli	2i
	372–75	Patnos	2j
	372–73	(Quṭume)	
	379	Oshnovīyeh	2k
	68	Delibaba	2l
	c	Karahan	2m
Argišti I	137	Armavir	3a
	138, 387–90	Arin-berd (Erebuni)	3b
Sarduri II	155 E 1. 9	Seqindel (Puladi)—several	4a
	155E 1. 20	Leninakan (Eriahi)—several	4b
	155D 1. 26	(Uriani)	
Rusa I	265	Nor-Bayazet	5a
	266	Covinar	5b
Argišti II	445	Sarab	6

Note: The location given is where É.GAL was presumably built, not where the inscription was found. Where two inscriptions were found within 5 km of each other and written by the same king, they are assumed to refer to the same É.GAL.

[a]A. M. Dinçol and E. Kavaklı, *Die neuen urartaeischen Inschriften aus der Umgebung von Van*, JFK Beiheft 1 (Istanbul: Edebiyat Fakültesi Basımevi, 1978), Karahan 2; idem, "Karahan köyünde bulunan dört yeni Urartu yazıtı, *JKF* 6 (1978): Karahan 7 and Karahan 8.

[b]The location of Menuahinili is somewhat uncertain. *UKN* 70 was found at Bulakbaşı, on the north flank of Mount Ararat, and *UKN* 376 turned up, without findspot, in the Van Museum. A third inscription mentioning building at the site has now been discovered at Karahan: Dinçol and Kavaklı, *Urartaeischen Inschriften*, Karahan 3.

[c]Ibid., Karahan 1; idem, *JKF* 6 (1978): Karahan 5.

successor, Argišti II, mentions rebuilding an É.GAL in an inscription found near Sarab, far removed from any other cultural remains that may be called Urartian.[126]

In short, the logogram É.GAL appears to have been used ambiguously, sometimes for large residential and administrative buildings and sometimes for small fortresses or castles. This ambiguity may be the result of a convergence of military and administrative roles into a single concept in the Urartian mind, the reflection of two different Urartian words being represented by a single logogram, or it may be an indication that the term itself was simply quite general in its connotations. The surviving inscriptional evidence suggests that initially a large number of É.GALs were built throughout the kingdom and subsequently they were thought of as something that was constructed on the frontiers. The term was never applied to the major administrative centers erected in the seventh century—Toprakkale, Bastam, and Karmir Blur—nor to any buildings within those centers.

"City" (URU)

The logogram URU, apparently representing the Urartian word *patari*, encompasses a much wider range of human settlement sizes than the English word that is normally used as its equivalent, "city." As a determinative, it appears before names of places that cannot have been very significant, and we have noted above that, by itself, the word was used by the Assyrians for quite inconsequential habitation sites in Urartu. On the other hand, in Urartian texts it also applied to much larger sites, such as the capital at Ṭušpa and religious and administrative centers at Teišebaini (Karmir Blur) and Erebuni (Arin-berd). The rather broad connotations of this logogram, which are also apparent in cuneiform writing in other languages, make it difficult to understand what an Urartian king was claiming when he boasted of founding an URU.

It may be that the vagueness was deliberate. If URU were a nonspecific designation for any site, rather than a term for a group of people residing together, it would explain why it was so rarely used in building inscriptions. Only five separate sites are known from annals and shorter texts as places where a king built an URU, and three others are mentioned as royal constructions of another type that were given names that read "URU of X" (see table 10 and fig. 10). Of the latter, two are É.GALs and one is an É.BÁRA. All of these inscriptions can be associated with large and complex sites, which were something more than residential clusters.

Did Urartian kings actually plan and found cities as places for people to live? The paucity of building inscriptions for cities may be a reflection of the fact that settlements were not initiated at a single moment as a unified plan but rather grew up beside royal building projects of their own accord. Residential quarters have been partially excavated at Bastam and Karmir Blur, but these appear to be unplanned appendages to major planned fortresses. Much of the difficulty in assessing the role of the Urartian monarchs in planning and building cities lies in the incompleteness and uncertainty of the archaeological record for Urartian cities in general. The site which is most frequently cited as an example of comprehensive and presumably royal planning in Urartu, Zernaki Tepe, was apparently never completed or inhabited and is not even securely identified as Urartian.[127] Even if it could be proven that this regular grid of streets and large

TABLE 10
URU CONSTRUCTION

Builder	Text(s) (*UKN* No.)	Location	Reference to Fig. 10
Išpuini	Ka 2, 8	Karahan	1
Menua	58	Erciş	2a
	78	Kevenli	2b
	Ka 1, 3, 5	Karahan	2c
Argišti I	128, 409[a]	Arin-berd[a]	3
Rusa I	266[b]	Covinar[b]	5
Argišti II	276[c]	Erciş[c]	6
Rusa II	278[c]	Adilcevaz[c]	7a
	281	near Karmir Blur	7b
	280[d]	Bastam[d]	7c

NOTE: Text numbers prefixed with Ka are to be found in Dinçol and Kavaklı, *Urartaeischen Inschriften* (nos. 1–4), and idem, *JKF* 6 (1978): 17–32 (nos. 5–8).

[a]In *UKN* 388 this is called an É.GAL.
[b]The inscription states that Rusa built an É.GAL and called it "URU of [d]IM."
[c]More than one URU built.
[d]Inscription states that Rusa built an É.BÁRA and called it "Rusai-URU.TUR (Rusa's small URU)."
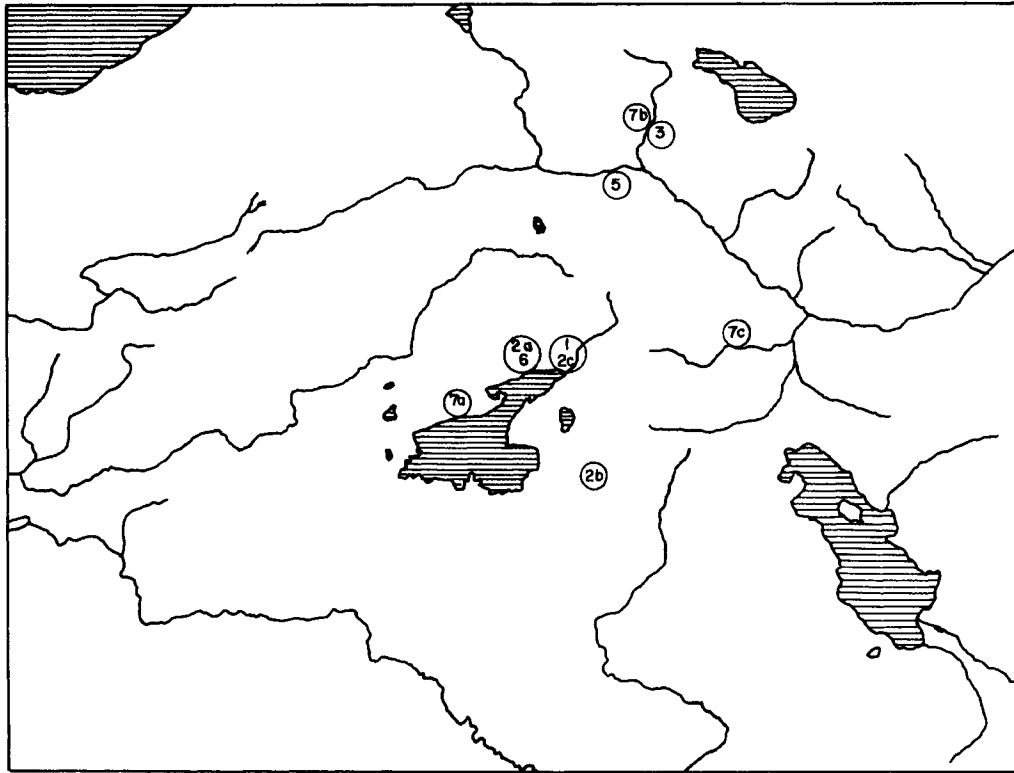
Fig. 10. Distribution of URUs

houses was laid out in the eighth or seventh century, the site remains unique. Building places for people to live was not a preoccupation of Urartian rulers.

"Canal" (PA5, *pili*)

The role of irrigation in the development and maintenance of Oriental monarchies has been a subject of scholarly debate for several decades, and although Urartu exhibits many traits characteristic of what Wittfogel has called a "hydraulic society," it has largely been ignored in the discussion. The special concern of Urartian kings for constructing facilities for artificial irrigation is manifest both in Urartian and Assyrian inscriptions. Twenty-seven Urartian texts mention the construction of canals, which is thus one of the more common themes in their record of building activities (see table 11 and fig. 11). The Neo-Assyrian letter to the god Assur that relates the history of Sargon's eighth campaign describes, in apparent awe, the irrigation works constructed by Rusa I at the city of Ulhu.[128] The description emphasizes the personal role of the Urartian king in initiating this project and the fruitfulness of its results.

It is not easy to isolate specific canals to which Urartian building inscriptions can be assigned. The inscriptions, therefore, are better treated as evidence of work in a given area rather than indicators of individual projects. The actual number of projects is not reflected by the number of inscriptions, since fully half of the latter concern a single grand undertaking—the Şamram-su, which carries fresh water along a forty-five mile channel from the Hoşap valley to Van.[129] This canal, which is still in use today, dates to the reign of Menua and, along with systems built by Menua in four other areas, represents the oldest known Urartian irrigation work. Three of the other areas developed by Menua are also in close proximity to Van: one at Muradiye at the northeast corner of the lake, another near Erciş, and a third in the plain of Malazgirt. An inscription found on the island of Akdamar, in Lake Van, also mentions canal

TABLE 11
CANAL CONSTRUCTION

Builder	Text(s) (*UKN* No.)	Location	Reference to Fig. 11
Menua	43–56	Van	2a
	57	Muradiye	2b
	58	Erciş	2c
	59–61	Malazgirt	2d
	62	Oshnovīyeh?[a]	2e
	Ka 3	Karahan	2f
Argišti I	127 iv, 136, 137	Armavir	3a
	127 v	near Erciş[b]	3b
Argišti II	275, 276	Erciş	6
Rusa II	268[c]	Van[c]	7a
	281	Erevan	7b

NOTE: The text prefixed Ka is published in Dinçol and Kavaklı, *Urartaeischen Inschriften*, pp. 59–62.

[a] This inscription was found at Akdamar, a small island in Lake Van, where it is unlikely any canals were dug. See p. 67 for the grounds on which it is associated with the Oshnovīyeh area.

[b] The location is a conjecture based on the association of the Urartian Dainalitini with the Zilan Dere.

[c] The patronymic of the Rusa that framed this inscription is broken away. See below, pp. 79–80, for the basis on which it is associated with the second king of that name.

building. The place names mentioned by this text, which is clearly not in situ, suggest that it refers to work in the area of Qalatgah.[130] Fewer irrigation projects may be attributed to the successors of Menua. Argišti I is known to have dug four canals as a part of the construction of Argištihinili. His annals also speak of canal building using the water of the Dainalitini River, which has been variously identified as the Murat Su and the Zilan Dere, near Erciş.[131] A king Rusa, probably the second of that name, constructed an artificial lake at Keşiş Göl, east of Van, to supply water to Rusahinili.[132] Argišti II is known to have promoted a project in the vicinity of Erciş, and his successor, Rusa II, dug canals near Ečmiadzin, perhaps as part of the development of the area with the founding of the administrative center at Karmir Blur.

No serious effort has yet been made to trace Urartian irrigation networks archaeologically. In the case of the Şamram-su and the canals around Argištihinili, these are visible without much effort; elsewhere the difficulty of identifying and dating canals has probably been the fundamental reason for the lack of attention shown to them. At Bastam, for example, the ancient channels lie buried under considerable deposits of soil and stones washed down from the mountains that surround the Qareh Ẓīā' od Dīn plain. At a few points along its banks the erosive force of the waters of the Āq Chāy has cut away these deposits, revealing embankment walls that must have been built around the time of Rusa II, when the Bastam citadel was built. To excavate any significant part of the canal network is neither financially nor technically feasible. Similar conditions undoubtedly prevail at a great many Urartian sites.

The importance of irrigation as a buttress of royal political and economic authority is to a large measure dependent on geographical and climatological factors. In direct contrast to the situation in southern Mesopotamia, the areas of land in Urartu that may be profitably irrigated are restricted, but groundwater is relatively abundant. The problem faced by those wishing to increase agricultural productivity through irrigation, therefore, is not regulating limited amounts of water over a wide area, as in southern Iraq, but rather moving water from inarable land where it is abundant to arable land where it is not. Once the initial construction of a major project like the Şamram-su was completed, relatively little systematic maintenance work or central regulation was required, as the fact that it is still in operation after more than twenty-seven centuries of spotty management confirms.
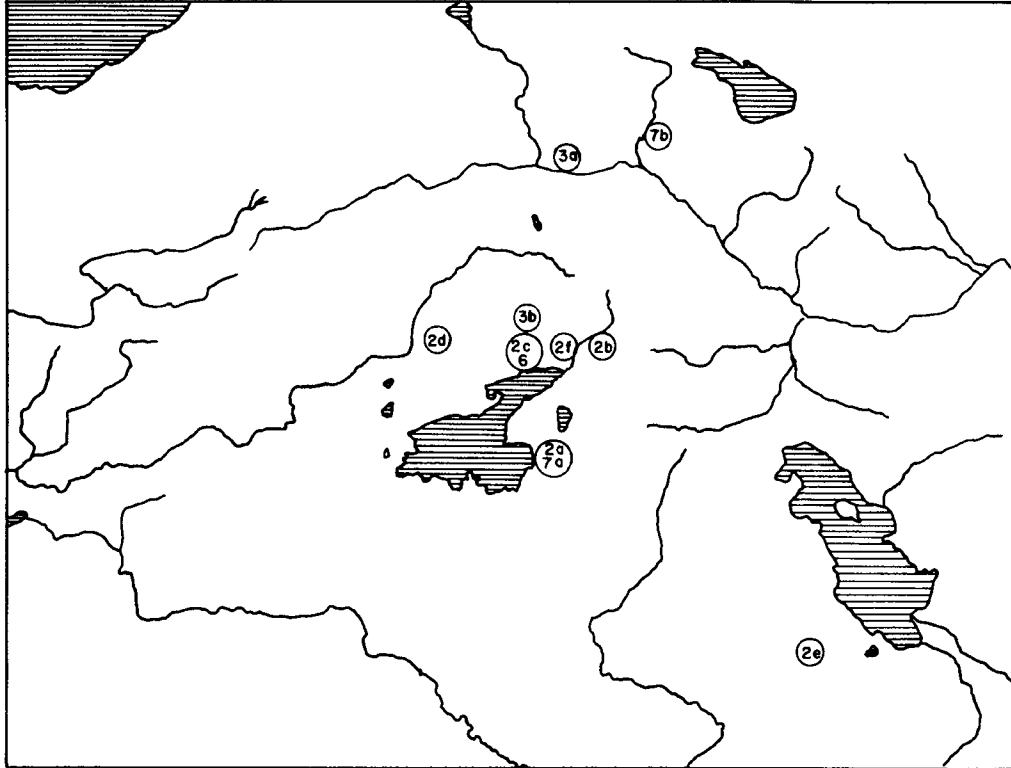
Fig. 11. Distribution of Canals

Agriculture is possible without irrigation in Urartu, and there is no evidence that earlier settled populations in this area employed it. Charles Burney has remarked:

> Supply and storage of water, presumably mainly for irrigation, was a constant concern of successive Urartian kings. At the present time climatic conditions in the Urartian homeland are such as to make it difficult to understand the necessity for such elaborate engineering works: either a lower annual precipitation or a very large population must be postulated.[133]

What archaeological evidence there is points to the latter as the more significant factor, although the former cannot be ruled out. In comparison to the third millennium, and certainly to the rather obscure second, the early first millennium shows a considerable increase in both the size and the number of sites. One factor in this rapid growth was undoubtedly the forced immigration of large numbers of conquered peoples, reported with frequency and regularity in royal annals. Even if these unwilling immigrants did not remain as permanent residents, feeding the labor force required for the construction of citadels demanded an efficient production of agricultural surpluses that would probably have been impossible on the basis of rainfall agriculture alone.

Population increase and the construction of large irrigation projects appear to follow the foundation of the state. As demonstrated above, political consolidation was taking place in Urartu throughout the ninth century, but the first datable irrigation projects do not appear until the time of Menua. Likewise, it is not until the eighth century that Urartian sites become abundant and one can begin to appreciate the vast amount of labor being expended on military adventures, construction projects, and artistic endeavors.

One further note should be added regarding the king's role in relationship to irrigation, although it comes essentially ex silentio. Only the construction of canals is mentioned by Urartian kings, and there is no inscriptional evidence, either Urartian or Assyrian, that bears on the

maintenance or further operation of these canals. If control and regulation of the water supply was one of the roots of the state's power, it was not exercised in a way that is detectable by the archaeologist or historian.

Agricultural Works

According to their building inscriptions, the Urartian kings concerned themselves with three kinds of agricultural projects: vineyards (^{giš}uldi, ^{giš}GEŠTIN), orchards (^{giš}zare, ^{giš}TIR), and grain fields (^{giš} šamŠE).[134] In all of the inscriptions where such work is mentioned, the establishment of a vineyard is recorded; and orchards and fields appear frequently in the same texts (see table 12 and fig. 12). Another correlation is noteworthy: in four of these cases the construction of a canal is also mentioned.[135]

The action taken by the king in setting up these fields, orchards, and vineyards is not specified. The verb used, teru-, is also employed for appointing provincial governors, bestowing a name on a city, establishing sacrifices, and dictating the contents of an inscription. The common ground of all these usages is something on the order of "to put in place" and does not permit us to say whether the king "planted" these fields or merely decided where they would be.

The areas in which these inscriptions were found correspond quite closely to the loci of irrigation projects known from the texts. These include the northeastern shores of Lake Van and the upper Aras valley. Despite the activities of Rusa I reported by the account of Sargon's eighth campaign for the vicinity of Ulhu, no inscriptional evidence in situ is found near Lake Urumiyeh, nor anywhere in Iran. The absence of projects in the upper Euphrates valley, Muş, and the plain of Ararat is also conspicuous. The record of royal interest in agricultural projects is thus restricted to a few of the many isolated agricultural regions of the kingdom.

There are two instances in which agricultural works are said to belong to, or be named after, someone other than the king. An inscription of Menua, found beside the Şamram-su, states, "This is the vineyard of Tariria, the daughter of Menua; Taririahinili is its name."[136] Another inscription, found at Van, claims that Argišti shot an arrow from the orchard (^{giš}TIR)

TABLE 12
AGRICULTURAL WORKS

Builder	Text(s) (UKN No.)	Project Type	Location	Reference to Fig. 12
Išpuini	27	V, O	Van	1a
	Ka 2, 7, 8	V, O	Karahan	1b
Menua	65	V, O	Köşk	2a
	372, 373	V, F	Patnos?[a]	2b
	Ka 1, 5	V, O	Karahan	2c
Argišti I	137	V, O	Armavir	3
Sarduri II	167	V	Erciş	4a
	172, 418	V, O, F	Armavir	4b
Argišti II	275, 276	V, O, F	Erciş	6
Rusa II	268[b]	V, O, F	Van[b]	7a
	281	V, O, F	Erevan	7b

NOTE: The abbreviations used for project types are as follows: V for vineyard, O for orchard, F for field. Texts with Ka numbers are as in table 10.

[a]The text is obscure—a vineyard and a field are mentioned, but it is not certain that Menua made them, or if they were planted at Patnos, where the inscriptions were found.

[b]The patronymic of the Rusa that framed this inscription is broken away. See below, pp. 79-80, for the basis on which it is associated with the second king of that name.
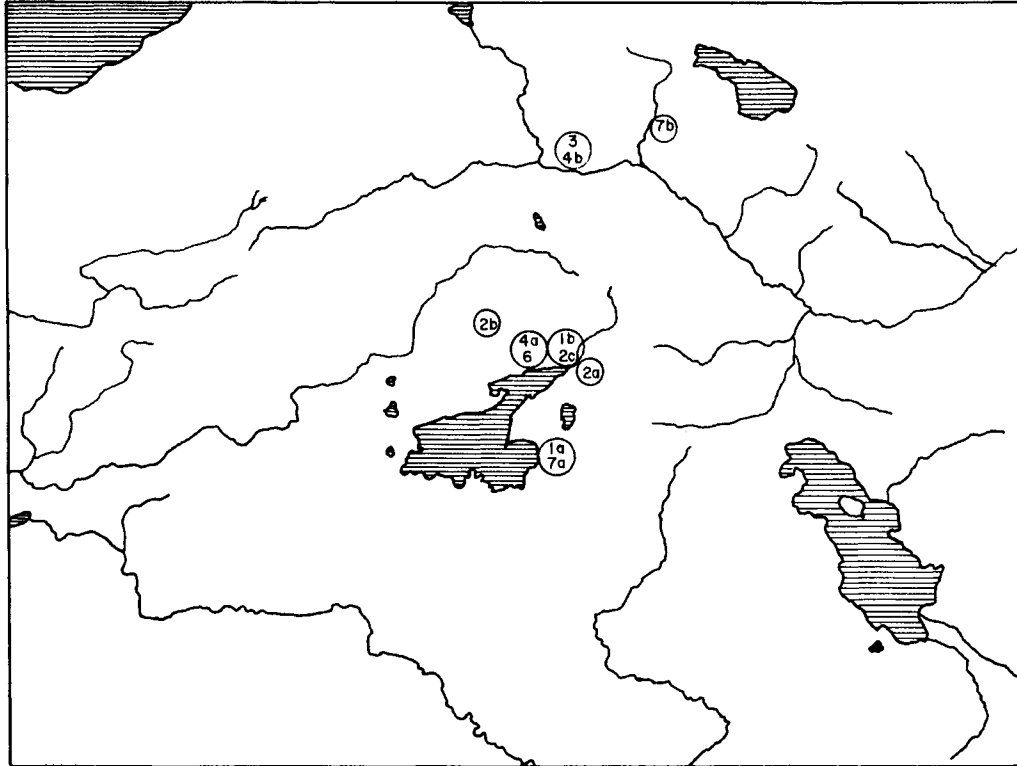
Fig. 12. Distribution of Agricultural Works

of Gilurenie to the garden (^{giš}NU.SAR) of Išpilini, son of Batu.[137] In the first instance the relationship to the royal family is still apparent, but the last two individuals may not be connected with the king at all. Melikišvili has argued that when personal names are thus connected with a piece of property, or even valleys and cities, ownership and usufruct of that property was implied.[138] If so, these two texts might be construed as indications of private property in Urartu, but the argument is extremely tenuous.

Buildings

1. É. This is a logogram of quite general application in most cuneiform writing. From its fundamental meaning, "house," it is extended to cover the houses of gods, i.e., temples, and administrative buildings as well. In Urartu, É is used both alone and in combination with other words, where it appears to function almost as a determinative, indicating to the reader that the specific term it precedes belongs to the category of buildings. Given the number of such structures found in the texts, including both cultic and secular buildings,[139] it would seem a reasonable assumption that when É was used by itself, it had a very general connotation, like "building." But archaeology speaks against this assumption.

Of the twenty-seven separate pieces of stone on which are inscribed the eleven discrete texts that mention an É (see table 13 and fig. 13), twenty-two are on round column bases—a form that is rarely used for any other kind of inscription. Four of the five inscriptions that are found on the more usual quadrate building blocks mention other structures as well as the É: in three cases it is an É.GAL and in one, Haldi gates.[140] The high correlation between the sole use of the logogram É and the round column base form would suggest that the É was some specific structure that contained one or more columns.

The evidence of archaeology is not as helpful as one might hope in deciding what this structure might be. None of the inscribed round column bases has been found in situ. Uninscribed column bases are a fairly common occurrence at major Urartian sites, found either on

TABLE 13
É CONSTRUCTION

Builder	Text(s) (*UKN* No.)	Column Base?	Location	Reference to Fig. 13
Išpuini	4–10, 13	yes	Zivistan	1a
	17, 371	yes	Anzaf	1b
Menua	66	no	Köşk	2a
	70	no	Bulakbaşı	2b
	80?, 85, 82	yes	Van	2c
	15+118, 380	yes	Patnos	2d
	81	no	?	
Argišti I	140, 141	yes	Armavir	3a
	391–95	yes	Arin-berd	3b
	388	no	Arin-berd	3c
Sarduri II	165	no	Armavir	4
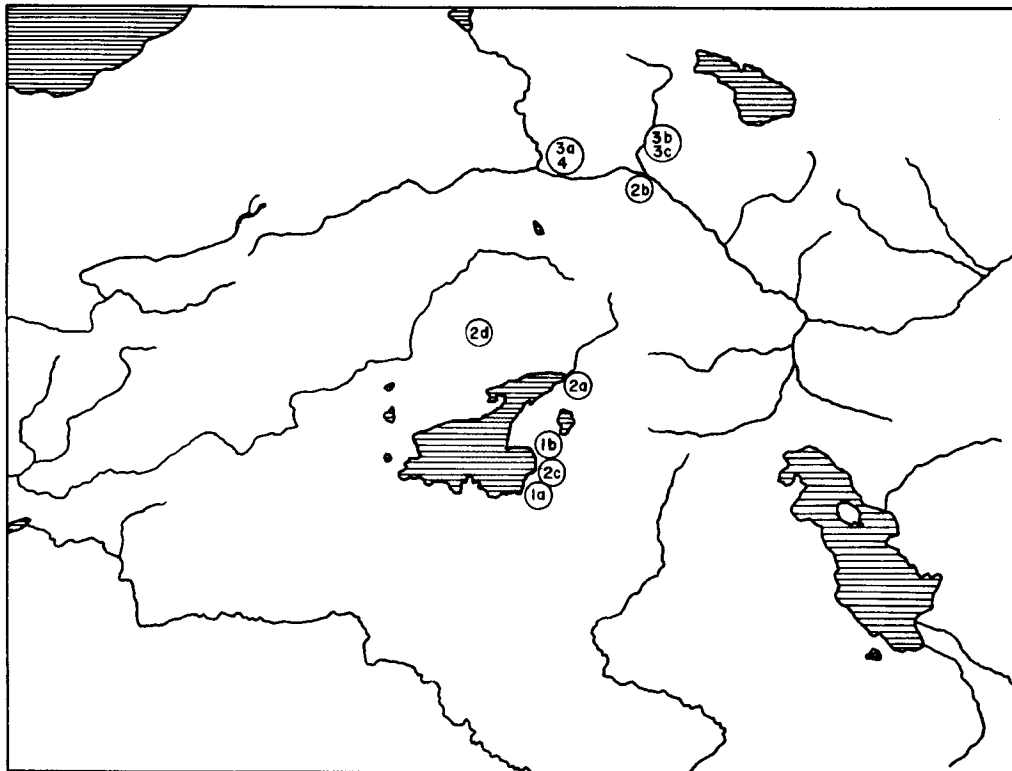
Fig. 13. Distribution of É Inscriptions

temple porticoes, as at Altıntepe,[141] or in columned halls, as at Bastam.[142] It is not established, however, that inscribed bases were used for the same purposes that uninscribed ones were. Part of the problem may be temporal: the É seems to have been a building project worthy of royal mention only in the first century of Urartu's existence. Most inscriptions date to the reigns of Išpuini and Menua, and after the single reference in the reign of Sarduri II, they do not reoccur. No archaeological sites associated with Išpuini, and very few with Menua, have been excavated.

Irrespective of the question as to whether the É was a specific structure, it can be seen that

inscriptions recording their construction are found in only a very limited part of Urartian territory.

2. Cultic buildings. Erecting structures that were dedicated to individual gods—in most instances, Haldi—was also apparently an obligation of the Urartian king. In this regard, two terms are significant: susi[143] and šeištili, the latter more often written KÁmeš ("gates"). The sacred character of the susi is indisputable, since all known examples are dedicated to a god, in two cases definitely a god other than Haldi.[144] "Gates" also had some religious significance, since Urartian kings make several references to sacrifices being performed in front of them.[145] More often than not, these gates are qualified with the adjective Haldinili—"of Haldi." We take up these two terms together since both, in separate studies, have been linked with a specific architectural plan that is believed to represent the standard Urartian temple.

This plan, with minor variations, is found at eight sites (see table 14 and fig. 14) and consists of a single, small, square cella surrounded by very thick walls with reinforced corners. The outside dimensions of the building range between ten and fourteen meters per side, and because of the stoutness of its walls, it is assumed to have been a tall building, perhaps meriting the designation "tower." David Stronach has pointed out the similarity between this plan and that of

TABLE 14
CULTIC STRUCTURES

Builder	Text(s) (*UKN* No.)	Type	Location	Reference to Fig. 14
Išpuini	18	S, HG	Van (Tabriz Gate)*	1a
	25	S	Pagan*	1b
	26	G	south shore of L. Van	1c
	27	G	Van (Meher Kapısı)*	1d
	a	S?, HG?	Qalatgah	1e
	Ka 2	HG	Karahan	1f
Menua	31	HG	Çölegert	2a
	32	G	Köşk	2b
	71, 378	S	Anzaf	2c
	72	S	Malazgirt	2d
	73–75, 96	S, HG, G	Van	2e
	76, 77	HG	south shore of L. Van	2f
	372–74	HG	Patnos	2g
	376	HG	?	
	377	HG	?	
	b	HG, S	Körzüt	2h
	c	HG	Kevenli	2i
	Ka 1, 5		Karahan	2j
Argišti I	396, 397	S	Arin-berd	3
Sarduri II	165	HG	Arin-berd	4a
	418	HG, [S]	Armavir	4b
	424	S	Çavuştepe	4c
Rusa I	265	HG	Nor-Bayazet	5
Rusa II	448, 449	S, HG	Karmir Blur[d]	7

NOTE: Abbreviations in the column marked "Type" are as follows: S for (É) susi, HG for Gates of Haldi, G for Gates (KÁmeš, šeištili). An asterisk marks those inscriptions that are carved in living rock rather than on building blocks. Texts designated Ka are as in table 10.

[a]M. van Loon, "The Inscription of Ishpuini and Meinua at Qalatgah, Iran," *JNES* 34 (1975): 205, tentatively restores susi, but notes that the text could support either susi or KÁ.

[b]A. M. Dinçol, "Die neuen urartäischen Inschriften aus Körzüt," *IM* 26 (1976): 19–31.

[c]Dinçol and Kavaklı, *Urartaeischen Inschriften*, pp. 64–69.

[d]M. Salvini, "Das susi-Heiligtum von Karmir-Blur und der urartäische Turmtempel," *AMI* 12 (1979): 249–69.
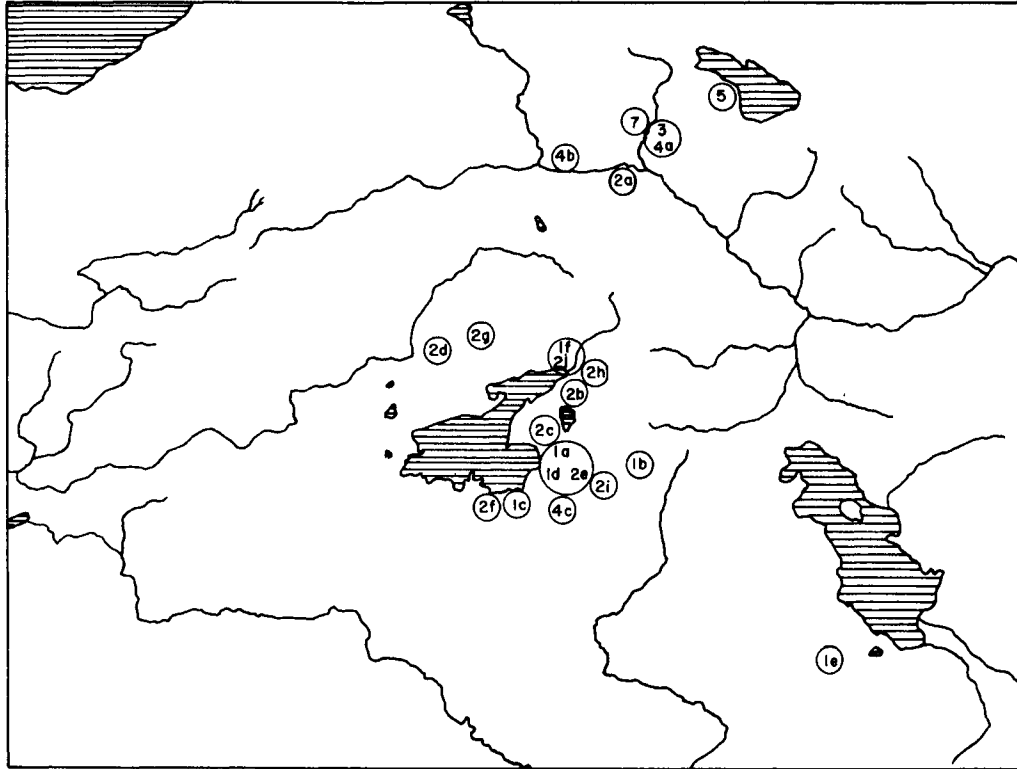
Fig. 14. Distribution of Cultic Buildings

Achaemenid towers at Pasargadae and Persepolis.[146] Structures associated with this building vary among the sites where it has been found. At Altıntepe it is surrounded by a columned portico, but similar configurations are lacking at other sites.

The connection between this temple form and the word *susi* has recently been established by a combination of archaeological and philological evidence. At Arin-berd there is a rectangular temple that building inscriptions, flanking its entrance, proclaim to be an É *susi*. The published plan is unique, but Kleiss suggests that its odd shape came about as the result of Achaemenian rebuilding of a standard Urartian temple.[147] Further confirmation comes from Mirjo Salvini's ingenious interpretation of a newly discovered inscription from Kevenli, which is written half in Akkadian and half in Urartian. Although not itself a bilingual, the text parallels other Urartian texts in such a way as to make it virtually certain that the Assyrian *isītu* ("tower") corresponds to Urartian *susi*.[148]

The "Gates of Haldi" have also been linked to this temple form. The Meher Kapısı inscription says that Išpuini and Menua made "these gates";[149] since the inscription is carved in a rock niche on elevated ground and not associated with any structures, it follows that the "gates" are the rock niche itself. Yet this cannot apply to all gates, since all inscriptions mentioning them after the reign of Išpuini are on building blocks, not living rock. Tarhan and Sevin have pointed out the similarities between the entrance of Urartian temples and the facade of rock niches.[150] The term "gates" could have been transferred to these temples, or a part of them, in much the same way that analogs to rock-cut tombs were created through the construction of masonry burial chambers at Altıntepe.

Thus the *susi*, "gates," and standard temple form are probably all the same thing. That some inscriptions mention both a *susi* and "gates" may be due to the former being a general term for tower and the latter having more specific cultic connotations, as Salvini suggests.[151]

3. *Gie* and (É) *'ari* storehouses. There is a general consensus among students of Urartu that storage of foodstuffs, particularly grain and wine, was an important concern of the state

and, consequently, of the monarch as well. This is hardly surprising in a land where the winters are prolonged and the military apparatus of the state was geared to the defense of large citadels that had to be capable of withstanding long sieges. Two kinds of storehouses are mentioned in Urartian texts—*gie* and (É) *'ari*—and their contents are given, respectively, in terms of liquid and dry measure. The archaeological manifestation of the former may credibly be associated with the large pithos rooms that are so prominent at Urartian sites. Cuneiform notations frequently inscribed on the shoulders of these pithoi give the volume in *aqarqi* and *ṭerusi*, used elsewhere as measures of wine and oil.[152] Yet, numerous and impressive as these pithos storehouses are, there is surprisingly little inscriptional evidence for their existence. Only one text, in the name of Menua, reports the construction of a *gie*.[153] This structure contained nine hundred *aqarqi*—the contents of more than one hundred pithoi.[154] Although this is more than have been found in any single room so far excavated at any Urartian site, it is about a quarter of the total number of pithoi found at Karmir Blur, so the figure is within reason.

By contrast, building inscriptions for *'aris*—storerooms with a capacity in dry measure—are quite numerous (see table 15), whereas physical evidence for their existence has generally eluded the archaeologist. No pithoi bear measures of dry capacity, and grain may well have been stored in cloth sacks or in rooms that were not particularly distinctive. The inscriptions that evidence royal concern for storage do not even speak specifically of grain. Rather, they state that the king built an (É) *'ari*, and that a given quantity of *kapi* are there.[155] The word *kapi* is used in the annals of Sarduri as a unit measure of barley,[156] so it seems likely that it is being used for grain in these texts as well.

Estimates of the size and feeding capacity of *'ari* storehouses are plagued by a lack of certainty about the size of the *kapi*. One estimate puts its value at 2.3 liters, while other considerations make a value in the range of fifty-five liters likely—neither is much more than a guess.[157] The fourteen different examples of *'ari* storehouses that can be seen in the texts range in capacity from 31,045 *kapi* to 1,432 *kapi*, with a median figure of 11,500.

The distribution of inscriptions in time and space suggests that the pattern of *'ari* building

TABLE 15
'Ari STOREHOUSES

Builder	Text(s) (*UKN* No.)	Location	Capacity (*kapi*)
Menua	[a]	Van	23,100
Argišti I	135	Van	10,000
	139, 398–401	Arin-berd	10,100
	402	Patnos	31,045 [b]
Sarduri II	162	Patnos	18,4XX
	423	Patnos	17,020
	163	Van	15,3XX
	164	Arin-berd	?5,100 [c]
	419	Arin-berd	12,600 [d]
	419	Arin-berd	11,500 [d]
	420, 422	Arin-berd	10,100
	421	Arin-berd	not given
Rusa, son of Erimena	288	Armavir	1,432
	458	Arin-berd	6,848

[a]M. Salvini, "Urartäisches epigraphisches Material aus Van und Umgebung," *Belleten* 37 (1973): 279–80, no. 1.

[b]Thus according to the text copy of K. Balkan, "Ein urartäischer Tempel auf Anzavurtepe bei Patnos und hier entdeckte Inschriften," *Anatolia* 5 (1960): 124. His transliteration reads 32,055.

[c]The beginning of the inscription is broken, and the amount of available space for additional digits is uncertain. König's restoration of 15,100 conforms well with the other figures for this king.

[d]Capacity given in BANEŠ.

was different from that of the É.GAL and *susi*. Only one *'ari* was built by Menua, who was the most active builder of virtually all other buildings. By contrast, most of the *'ari* inscriptions belong to the era of Argišti I and Sarduri II, after which they disappear completely until the time of Rusa, son of Erimena. The constructions of this late Rusa are also quite small in comparison to those of the previous century. With regard to the spatial distribution, *'ari* inscriptions are confined to the largest and most prominent Urartian sites: Van, Patnos, Armavir, and Arin-berd. Their presence, consequently, may indicate some more intimate relationship with the central monarchy than ordinary grain storage facilities, which must have been present at virtually all Urartian fortified sites.

4. Other buildings. Urartian royal inscriptions mention a number of other types of buildings which will be noted here only briefly since they are insufficiently understood or too infrequently attested to make detailed discussion productive. The earliest building inscriptions, which were written in Akkadian in the reign of Sarduri I, mention the construction of a "wall" (BÀD).[158] The structure to which they attest lies at the base of the western end of the Van citadel and survives as a simple platform of large, dressed, rectangular blocks. It has been speculated that it was a temple platform, a harbor installation, or a stronghold to guard the water supply.[159] Whatever it was, these stones mark the only known building activity of Sarduri I and tie the early monarchy firmly to Van. The inscriptions note—in pride, one suspects—that the blocks of stone were imported from another city, implying that Sarduri regarded the construction of this edifice as a conspicuous exercise of royal prowess.

Tarmanili (pl.), the concern of a building inscription of Menua cut into a rock niche on the north face of the Van citadel, may have meant "springs."[160] Three other structures are also known only from texts of Menua: É *ṭulurini*,[161] É *barzidibidu*,[162] and *siršine*.[163] All are associated with the construction of É.GALs. Of the three, only the *barzidibidu* is attested outside the immediate vicinity of Van.

Little-known structures that are mentioned at other times in the kingdom's history are the É *sirihani*,[164] É *asihuše*,[165] and *iarani*.[166] The first is mentioned only in one text of Argišti I, in connection with sacrifices as part of the general building activity of that king at Argištihinili. More widely distributed is the É *asihuše*, which apparently had columns, since its inscriptions are sometimes on column bases. One inscription mentions the building of an *asihuše* in association with two *'aris*.[167] The *iarani* appears in the Kalleh Shîn bilingual, where it corresponds to Akkadian *parakku* and is generally translated "chapel" or "sanctuary."

There remains the É.BÁRA, an important, if seldom attested entity which may be related to the *iarani*. In Mesopotamia, the logogram BÁRA was also used for *parakku*; thus there is an indirect link between the logogram and the Urartian word. However, in Mesopotamia the logogram could mean "throne" as well as "sanctuary," and by extension the person who sat on the throne, i.e., the king.[168] Most occurrences of the logogram É.BÁRA in Urartu suggest a strong connection with the crown. It is found in building inscriptions at two very large Urartian sites and is mentioned once in a tablet. At Bastam, Rusa II built an É.BÁRA and named it Rusai-URU.TUR—clearly a name that was applied to the whole site, not just a single cultic building.[169] At Çavuştepe an É.BÁRA for Haldi is mentioned in the same inscription as a *susi* for the god Irmušini. Here again, the term may refer to the whole site. The context in which the word appears in the tablet is unclear, but seems to have to do with kingship in some sense.[170] If the inscribed bulla from Bastam (Ba 78–146) refers to the same event, which is not unlikely, then a throne is actually mentioned in similar circumstances.[171] While arguments based on such limited evidence are admittedly speculative, É.BÁRA in Urartu seems to fill the role of being the seat of royal authority—a role clearly abdicated by the term É.GAL since occurrences of the latter are too numerous and generally too peripheral to have been of great significance.

The scattered evidence reviewed above indicates that royal building projects were undertaken for each of the four hypothetical motives suggested at the outset: to promote defense, to enhance production, to strengthen the official cult, and to create facilities for redistribution. Defensive works specifically associated with the royal name are first attested in the reign of

Menua, when they were built over much of the kingdom. Afterwards, they were more commonly associated with the frontiers, and the few that have been firmly identified are larger than earlier examples. Works undertaken to enhance production show a relatively even temporal distribution, insofar as it can be established by the evidence. Most were in the Urartian heartland, but major eforts were also devoted to the development of the Erevan area, including Argištihinili, which was not in Urartian possession until early in the reign of Argišti I. It was largely in the early part of Urartu's history that kings erected cultic buildings, and most are confined to the more central areas of Urartu. However, the *susi* is more evenly distributed in space and time than other structures, since examples are attested in the seventh century and are found quite near Urartu's frontiers. Buildings of redistributive function are more difficult to categorize. After the reign of Menua, most are associated with the largest sites. They appear to have been constructed at a more or less even rate throughout Urartu's history, with most of the emphasis being given to storage. The Urartian reputation for building and planning cities is an unwarranted creation of the twentieth century.

With regard to the overall role of the monarchy, this chapter has focused primarily on two types of activity, warfare and building, not only because these are the ones that the kings chose to publicize most, but also because they can be documented through time. Both served a multiplicity of functions and, in spite of their different character, were directed toward the same ends. Aggressive warfare was aimed primarily at securing manpower, and manpower was the most conspicuous requirement in the construction of Urartian defensive networks. The state seems to have concluded its formative phase in the reign of Menua and thereafter to have changed little in structure or outlook until its demise.

5

GOVERNMENTAL ADMINISTRATION
AND THE PROBLEM OF CENTRALIZATION

In any state there is a hierarchical organization through which political and economic activities are directed. To the extent that decisions are made at the top of that hierarchy, by those charged with responsibility for the more comprehensive units of geography and population rather than for more restricted and local ones, we shall speak of the state as being centralized. The two factors that we have suggested were primarily responsible for the emergence and survival of Urartu would appear, at the outset, to work in opposite directions in this regard. On the one hand, the pressure exerted by a perennial threat from an aggressive Assyria would be expected to act as a consolidating agent, since frequent warfare normally has the effect of subordinating a society more firmly under its leadership.[1] On the other, the difficulty of interaction and communication between various areas of the state and the ease with which they could be defended as isolated units seem to be forces in favor of decentralization:

> We should expect . . . that when the art of fortification is more than a match for the existing siege-craft, the size of political units will be smaller, and their number within a given locality greater, than in times when every stronghold can easily be stormed.[2]

These and other stimuli, which are either imperceptible in the historical record, or have escaped observation, undoubtedly conditioned systems of decision-making, or at least restricted the range of feasible alternatives. In any event, it can hardly suffice to discuss centralization as a simple variable: it is a composite quality stemming from the interaction of a multiplicity of institutions.

The quality and character of the available archaeological and documentary evidence severely limit modern scholarship's field of vision in the realm of Urartian decision-making. Consequently, the following discussion is confined to restricted areas rather than offering a comprehensive overview: first, an appraisal of the composition and documented activities of the central government; and second, a survey of the textual evidence, most of it from Assyria, on Urartian provincial administration. This approach, in spite of its limited focus, should suffice to lay bare the basic core of ascertainable fact about Urartian administrative practices. If other institutions existed within the state that might compete with, and supplement, governmental authority in terms of regulating the collective behavior of the populace, they are untraceable today.

THE CENTRAL GOVERNMENT

The "central government" is here taken to comprehend those officials and underlings who worked in close physical proximity to the king, without intervening regional authority in their chain of command. Inasmuch as virtually all written documentation in Urartu stems from the activities of this court, it is here that all officials mentioned in Urartian records, except provincial governors, will be discussed.

The Capital

In most studies of Urartian history and archaeology, it is either tacitly assumed or explicitly stated that Urartu was governed from a capital named Ţušpa,[3] located beside the modern city of Van. This view is at least partially justified in that the name, location, and prominence of the site are established to some degree by textual and archaeological evidence. It is less certain, however, that Ţušpa was a capital in the sense of being the primary administrative center of the kingdom as, for example, Hattuša (Boğazköy) was for the Hittite Empire.

There is no doubt that Ţušpa was a city[4] of special significance throughout most of Urartu's history as a unified state. From the latter part of the reign of Išpuini, if not earlier, to the time of the final, obscure rulers of the kingdom, stewardship of Ţušpa was the concluding element of the king's titulary.[5] An Assyrian text claims that Shalmaneser III received tribute from it at an even earlier date, about the time that the Urartian royal line was just beginning to consolidate its power.[6] Other, later Assyrian inscriptions mention Ţušpa far more often than any other Urartian city, frequently in terms that would suggest it was closely identified with leadership of the state.[7] There is one instance where it is explicitly stated that Ţušpa (as Ţurušpa) was the capital of the Urartian king Rusa I.[8]

The identification of Ţušpa with the citadel rock at Van and its immediate surroundings is plausible in view of a good deal of circumstantial evidence, although absolute proof is lacking. It was cuneiform inscriptions from Van that first brought Urartu to the attention of European scholarship,[9] and the same area continues to be the part of the kingdom's territory where epigraphic material is most abundant. While no inscription from Van states specifically that it was erected or commemorates building activity in Ţušpa,[10] there are several that clearly have a general significance for the whole kingdom and would thus appropriately be linked to a site of some pan-Urartian importance. These include the Meher Kapısı inscription (which ordains sacrifices for a formidable list of deities that is usually taken to represent the Urartian pantheon), the annals of Argišti I, and the annals of Sarduri II. Neither royal annals of similar length nor any comparable lists of sacrifices have been found elsewhere in Urartu.[11]

The somewhat piecemeal evidence of archaeology is also suggestive of a special significance for the area of Van. The rock-cut chambers carved into the faces of the citadel cliff are larger, more elaborate, and more numerous than those found near any other Urartian site.[12] If these are burial places, as is generally assumed, then it is here that the most important individuals in the kingdom were interred.[13] The placement of Argišti's annals beside the staircase and entrance to one of the most impressive of these chambers would further suggest that they served as royal tombs. The earliest demonstrably Urartian structure and the earliest inscriptions are found in the Van area, making it appear that the state spread outward from there. The latter part of Urartu's history is also well represented by archaeological finds in the district, particularly those from the fortress at Toprakkale. Among the latter are bronze objects bearing dedicatory inscriptions from some of the latest Urartian kings.[14]

In addition, there are two etymological hints that Van might have something to do with the capital: First, the Armenian word for Van, *Tosp*, seems to be descended from the Urartian *Ţušpa*.[15] Second, the name of the kingdom in Urartian was *Biainili*, a word thought to be related to "Van."[16]

In spite of the ambiguity and tenuousness of some of these arguments, it would be hard to dispute that Ţušpa was Urartu's capital in at least some sense of the word, and that it was located in the immediate vicinity of modern Van. But what kind of a capital was it? Could it have been a purely ceremonial center? Was it a permanent seat of government, or merely the foremost of a number of sites between which the king and his court were wont to move periodically? Was it the primary point from which a centralized bureaucracy controlled the entire country, or were there other large administrative centers of equal importance in which scribes acted with the king's authority? If the capital was indeed a point at which administrative functions were concentrated, it would represent a vulnerable point in Urartu's defense against Assyria. Even if its fortifications were sufficiently strong to withstand an Assyrian siege, severed lines of communi-

cation to other parts of the kingdom would deprive the state of its direction. It is our thesis that this kind of bureaucratic centralization did not take place in Urartu, and that the Van area, although an important part of the kingdom, did not in fact assume all the functions that the Hittite and Assyrian capitals did.

Two major Urartian sites are found in the Van *ova*: Van Kalesi and Toprakkale.[17] As it is customary to identify the former with Ṭušpa, the latter is normally recognized as Rusahinili—a site mentioned in association with Ṭušpa in an inscription found at Keşiş Göl.[18] This inscription commemorates the completion of an irrigation project undertaken at the time of the founding of Rusahinili. Since water from the artificial lake beside which it was discovered could only flow into the Van *ova*, and passed beside Toprakkale on its way to Van Kalesi, it follows that these are the sites to which the inscription refers.[19] Chronology is the decisive factor in deciding which name belongs with which site: Ṭušpa and Van are both prominent at an early phase of Urartu's history, whereas Rusahinili cannot have been founded before the appearance of a king Rusa, after whom it is named. The earliest candidate, Rusa I, was a contemporary of Sargon II of Assyria (722–705 B.C.). At Toprakkale no archaeological material manifestly belonging to the eighth century—in fact, none earlier than Rusa II—has been found, so nothing prevents its identification with Rusahinili.[20] In the absence of a suitable alternative candidate in the Van area, this identification may be taken as assured, although the Keşiş Göl text remains the sole basis for associating Rusahinili with the vicinity of Van at all.

What was the relationship between these two sites? Burney's assertion that the capital itself was moved from Van to Toprakkale at one point in Urartu's history,[21] however plausible, is unsupported by hard evidence. Ṭušpa apparently lived on, at least insofar as the title *alusi* uru*Ṭušpa*-URU retained its prominence in royal titulary. One cannot argue that Rusahinili is simply a fortress that served the same population group as Ṭušpa since the Keşiş Göl inscription, for all its obscurity, appears to set the citizenry of the two places in opposition.[22]

Yet two texts, the only ones besides the Keşiş Göl stele that mention Rusahinili at all, do give the impression that royal authority was established at Rusahinili during the reign of Rusa II. The first is a tablet found at Toprakkale itself. The greater part of its text is a personnel roster of some sort, consisting of numbers of people belonging to certain social categories and professions. At the head of this list, and at the beginning of the tablet, the events that took place in a certain year are described. The syntax of the text and the readings of some of the signs are not without complications:

1) *a-ku-ki* MU ᵐ*Ru-sa-a* URU ᵐ*Ar-giš-t[e-h]i-n[i]*
2) ᵐ*Šá-ga-?-tar-ra* KUR! *Iš-qu-gu-ul-hi-e*
3) *ú-la-b[i]* KUR *Ma-na-i-di* ᵐ*A-ka-'a-a*
4) *e-si-i a-še* LUGAL-*ni* ᵈ*Hal-di-ni a-šú-me*
5) ᵐ*Ru-sa-a-hi-na* KUR *Qi-il-ba-ni-ka*
6) É.BÁRA-*ni-i-ni*

Translation: The year in which Saga-x-tarra the Išqugulian went from the city of Rusa, son of Argišti, to the Mannean land in the place of Aka'a; (and) when King Haldi settled for me in Rusahinili, (coming) from the sanctuary [É.BÁRA] before the land of Qilbani.[23]

The second text is inscribed on an unsealed clay bulla, once attached to something else by a pair of strings. It was discovered in a citadel room at Bastam in the summer of 1978.

1) *[a-ku]-ki šá-li* ᵐ*Ru-sa-a-še* ᵐ*Ar-giš-te-[hi-ni-še]*
2) [giš]GU.ZA *te-ru-ú-ni* ᵐ*Ru-sa-hi-na-a*
3) [kur]*Qi-il-ba-ni-ka-i-ni* gišZUmeš
4) [lú] gišNAGARmeš
5) [X X]-*li*
6) [m]*Ru-sa*-URU.TUR
7) [kur]*A-la-a'-ni*

Translation: The same year Rusa, the son of Argišti, set up the throne in Rusahinili. From before the land of Qilbani, boards and carpenters xx-ed. Rusa(i)-URU.TUR, land of Ala'ni.[24]

Both of these inscriptions appear to have the function of dating.[25] Neither associates Rusahinili with Ṭušpa, but both mention the Qilbani land, which is conspicuously absent from other Urartian texts.[26] If Rusahinili was simply a royal residence beside Ṭušpa, these omissions are odd.

Of the two sites, it is only at Toprakkale that any administrative activity can be detected at all. The archaeological work that has been undertaken on and around Van Kalesi has been directed at clearing rock niches, searching for inscriptions, and uncovering the stone platform at its western end. The upper parts of the citadel have been repeatedly reused by later builders and are more or less denuded of topsoil, so excavation for Urartian material there is out of the question.

For these reasons, there is no archaeological evidence for public buildings or administrative documentation at that site. The amount of elevated area and the absence of substantial stone walls on the surrounding flat land make the site appear less imposing than the massive fortress and settlement complexes at such sites as Karmir Blur and Bastam.[27] Textual evidence is equally uninformative on the kinds of activities that were pursued at Ṭušpa. The Assyrians speak of it as a royal residence and, on one occasion, say that the king performed sacrifices there.[28] In short, there is no confirmation that Ṭušpa was an administrative center at all.

While Ṭušpa remains an unknown quantity, Rusahinili appears to belong to a triad of sites where royal administrative activities are attested; the other two members of this rather exclusive group are Bastam and Karmir Blur, both founded by Rusa II. At these sites, and perhaps Çavuştepe also, Urartian tablets and bullae bearing impressions of the king's seal have been found. Relationships between the sites are established by cross-references in the texts and co-occurrence of impressions of the same seals. Ṭušpa is not mentioned in any of this correspondence.

In summary, Ṭušpa was clearly a capital of some sort, but its role is difficult to assess in the absence of solid evidence. In the one period for which we have any documentation, the seventh century, Ṭušpa is particularly obscure and may have been eclipsed by the construction of the fortress at Toprakkale, which had a different name and was clearly thought of as a separate place by the Urartians. The fact that the workings of the royal administration are equally well attested at two other sites, which are of similar size and complexity to Toprakkale, speaks against any great administrative centralization, at least for the latter part of Urartu's history.

Personnel and Activities of the Royal Bureaucracy

The paucity of administrative documentation from the few sites where it has been found precludes any comprehensive overview of the Urartian bureaucratic machinery. On the other hand, the evidence does suffice to give an impression of the character of the administration and the depth to which its activities penetrated the workings of society.

It is an open question as to whether there was any writing in Urartu that did not directly involve the central government. Certainly all display inscriptions on stone were erected in the name of the king. The tablets that have been found at Bastam, Karmir Blur, and Toprakkale enjoy a degree of association with the regime in that all of these sites are of royal foundation and are places where the king's seal is in evidence. Some of the tablets are more specifically bound to the king by either the mention of his name or title in the text, or the impression of his seal on the document itself. Other writing is found on metal objects, on the sides of clay vessels such as pithoi, and in cuneiform and hieroglyphic notation on clay tags, or bullae. The inscriptions on metal objects consist of either marks of ownership—invariably royal ownership—or dedications to a god. The writing on the bullae and clay vessels is the only hint of a broader range of literacy, but it is too cryptic to give any indication of who was making use of the objects and if those individuals really stood outside the governmental bureaucracy.

Since the total number of tablets is so small, we shall list them here before discussing the information that they provide on the personnel and activities of the royal administration. Because translation of these texts is vexed by much uncertainty, only a synopsis of what may be said with assurance about their content is given.[29] Except where otherwise noted, the archaeo-

logical findspot is either unknown or felt to be insignificant in view of the tablet's having fallen from a higher story into an irrelevant context. The latter is a common phenomenon in the archaeology of Urartian citadels.

1. Karmir Blur. A well-preserved decree of Sarduri, son of Rusa (perhaps Sarduri III). The text concerns the return of a house to two individuals who are designated "^{lú}ÌR-$u+e$ qu-$ṭu$-ra-$u+e$ ($quṭura$ slaves/subjects)." Two officials, of whom the title of the first cannot be read and the second is a ^{lú}NA$_4$.DIB,[30] are to seek out a stele, presumably a boundary stone. The tablet is sealed with a seal that bears the names of Sarduri and Rusa, both in the absolute case and neither, apparently, a patronymic.[31]

2. Karmir Blur. A damaged letter of which thirteen lines are extant and several more are broken away at the bottom of the obverse and top of the reverse. The name of the sender is damaged, but what survives of it does not appear to be compatible with that of any known Urartian king. His title, if given in the text at all, cannot be made out. The letter is addressed to a ^{lú}NA$_4$.DIB and a ^{lú}NÍG.ŠID and concerns one horse, something for the army (or troops), and six head of cattle. The "city" won't send them and apparently intends to use them for sacrifice. Diakonoff's reading of the name of Sarduri, son of Rusa, on the seal impression is difficult to justify on the basis of either the photograph or his copy of the text.[32]

3. Karmir Blur. A letter of thirteen lines, all of which are at least partially preserved. The king writes to an official entitled ^{lú}KÙ^{meš} that he has given the daughter of one cook to another cook as a wife. The king has returned her from the palace. The name of Erimena, previously known only in the patronymic of one of the late kings named Rusa, can be read in Diakonoff's copy of the seal impression, but it is less clear in the photograph he publishes.[33] One cannot rule out the possibility that it is also a patronymic here.

4. Karmir Blur. A ten-line letter addressed to a ^{lú}NA$_4$.DIB concerning a shepherd. The name and/or title of the sender is broken away. The text orders the return of a girl who had been abducted by a slave (or subject). It is sealed by Rusa, son of Rusa, who bears the title ^{lú}A.NIN.[34]

5. Karmir Blur. A fragment of a tablet of uncertain length, of which the top of the obverse and bottom of the reverse are missing. Thirteen lines of text are partially preserved, but since the beginning is not extant, it is impossible to tell whether this is a letter or a decree. The content of the text is obscure, the only certainty being that it closes with a string of imperatives having to do with acting, finding, and returning. An official with the title of ^{lú}ŠE.NUMUN appears in the last line. The tablet is sealed by Sarduri, son of Sarduri, who is known to have been a king from an inscription found on a bronze shield at Karmir Blur.[35]

6. Karmir Blur. A fragment of the opening lines of a letter from one ^{m}TUR-ta-ta-a to a ^{lú}NA$_4$.DIB. The only word outside the address formula that is perserved is the logogram MÁŠ.TUR, "kid, small goat."[36]

7. Karmir Blur. A well-preserved letter of thirty-one lines, the longest Urartian inscription on clay known. The name, but not the title, of the sender is given. The addressee is a ^{lú}NAM, a logogram traditionally equated with ^{lú}EN.NAM, which is used for "provincial governor" in both Akkadian and Urartian.[37] However, Salvini has recently advanced the view that ^{lú}NAM is not the equivalent of ^{lú}EN.NAM, but rather is a general term for "functionary" that may be applied to officials of a much lower order.[38] To this individual, whatever his position, the sender appears to be relaying information supplied by two spies reporting on the movements of certain peoples, commodities, and animals. In many ways, this letter seems to be an Urartian counterpart of the numerous letters to the Assyrian court reporting on affairs in Urartu, although it is not entirely clear that this text is actually concerned with a foreign country. Diakonoff reads ^{lú}A.NIN-li on the seal impression of the letter, but only the A of the title can be made out in his photograph.[39]

8. Karmir Blur. A small fragment on which only the beginnings of six lines are preserved. The verb "build" and two personal names are present.[40]

9. Karmir Blur. A small fragment giving a few signs from the middle of the last four lines of a text. Below these lines is a seal impression. No complete words or names can be read anywhere.[41]

10. Karmir Blur. A well-preserved account of seven lines. The text begins "^{d}'A URU-*e* ^{m}'*A-za-a* ^{kur}e-*ba* (for the city of the god 'A in the land of 'Aza)." Diakonoff's suggestion that ^{d}'A is a mistake for ^{d}IM seems plausible; a city of ^{d}IM, Teišeba, in the land of 'Aza is known from a building inscription found at Karmir Blur[42] and is generally felt to be Karmir Blur itself, ancient Teišebaini.[43] The rest of the text is divided into two sections, each giving a tally of cowhides, woolen textiles, and sheepskins. The numbers involved for each entry range from 12 to 198. There is no date or seal impression on the tablet.[44]

11. Karmir Blur. A small fragment with the beginnings of five lines. No complete words can be made out.[45]

12. Toprakkale. A well-preserved tablet of twenty-seven lines, which begins with the year description we have quoted above (p. 79). The rest of the tablet is ruled into seven "paragraphs" of different length. Each of the first six paragraphs enumerates a group of people under a general heading, which is further subdivided into more specific component categories. The last paragraph is the total number of all the individuals mentioned. The subtotals for the six major categories, in the order they are given, are: (1) 1,113 ^{lú}ma-*ri-gi*,[46] (2) 3,784 ^{lú}*ŠA RÉŠI*^{meš},[47] (3) 300 ^{lú}KUR.KUR^{meš}-*e*,[48] (4) 90 ^{lú}UKÙ^{meš}-*še*,[49] (5) 168 ^{lú}e-*ši-a-te* É.GAL,[50] and (6) 52 ^{lú}un-*qa-i-ta-a-ni*.[51] The grand total of all of these is 5,507 people.[52] While this text is clearly a personnel roster of some sort, its broader significance is obscure. There is nothing in the text to suggest that it listed the palace personnel of Rusahinili, as has sometimes been claimed, since although that place name occurs in the date at the beginning, it does not occur anywhere in the body of the text.[53]

13. Toprakkale. A tablet of twenty-eight lines known only from a transcription by Sayce, who made use of a copy provided to him by Hyvernat.[54] The body of the text is divided into paragraphs in which small numbers of sheep and cattle were listed after one of two headings. The first of these headings is a personal name in the directive/allative case; the second reads "KUR-*ni gu-ni-e-i* (for the *guni*[55] of the land)." A subtotal of the number of each kind of animal is then given, and the cycle repeats. After four repetitions, a grand total of nineteen oxen, thirteen cows, and twenty "large sheep/goats (UDU.GAL)" is listed, and, in a broken context, the name of the city Šupa is given three times.[56] The significance of the document is anything but clear.

14. Toprakkale. A fragment of a tablet divided into vertical columns. No words are extant on the portion of the tablet that we have, which has five columns on the left-hand side of the tablet, obverse and reverse. Instead, there are groups of numbers, and an occasional total in the far left-hand column.[57]

15. Toprakkale. Two small fragments, both from the obverse of the same tablet according to Lehmann-Haupt.[58] The first line of the text is unclear, and the next two begin with numbers. There appear to be words in the next two (the last) preserved lines of the text, including the word ^{lú}ma-*ri-hi-e*.[59]

16. Toprakkale. A small fragment from the lower obverse of a tablet, not readable in Lehmann-Haupt's photo. A few signs, mostly numbers, form the beginning of the five lines that are preserved.[60]

17. Bastam. A small fragment of a tablet that apparently had more than one vertical column, found in debris beside the Hallenbau, near the gate between the citadel and settlement areas. No complete words can be read in the text. Some of the lines appear to begin with numbers.[61]

18. Bastam. A letter from the king concerning legal rights to an orchard or plantation of some sort ($^{giš}udue$). The king orders it restored to the man to whom he originally gave it, a LÚ É.GAL, who has lost it to a rival. The document is addressed to a ^{lú}NA$_4$.DIB and sealed by Rusa, son of Sarduri, who bears the title ^{lú}A.NIN.[62]

19. Bastam. A letter from the king addressed to an individual entitled LÚ É.GAL. It concerns the distribution of a certain unknown item among the Amereši people and the Halbi people. It, too, is sealed by Rusa, son of Sarduri, the ^{lú}A.NIN.[63]

20. Bastam. A badly damaged letter from a person whose title is not given, to a ^{lú}NAM and a ^{lú}NA$_4$.DIB concerning a ^{lú}I[G]I?.LÁ. The contents are unintelligible. Salvini suggests

that the name on the poorly preserved seal impression is Sarduri, son of Sarduri, and assumes he is the king of that name.[64]

21. Bastam. A fragment of a tablet that was found in a room beside the inner citadel wall, below a layer of thousands of broken bones. The four lines of text on the obverse each begin with the logogram for "sheep," the number 1 followed by the phonetic complement -hi, and then the name of a person. The reverse of the fragment is uninscribed.[65]

In addition to these cuneiform texts, one tablet with an inscription in a hieroglyphic script was discovered by Lehmann-Haupt at Toprakkale.[66] This tablet remains a unique object, although other hieroglyphs have been found inscribed on pottery and metal objects. Attempts at decipherment are hindered by the lack of sufficient material to work with.

There are gleanings about the Urartian bureaucracy to be had from the study of bullae— clay tags in a variety of shapes that were usually formed over a knotted cord. In most instances they are sealed; much more rarely, short notices are inscribed on them. Besides bullae impressed with royal seals,[67] there are examples sealed by a lúA.NIN,[68] and still others that are anonymously sealed.[69] Bullae from sites other than Bastam, Toprakkale, and Karmir Blur have yet to be discovered.

In the following pages we shall list the personnel known from the sources outlined above and present all of the available information about their activities. An attempt is made to discuss them in order of rank, using a principle that has been applied by Diakonoff and Salvini:[70] when officials are the collective recipients of a single letter, they are addressed in order of rank. When, for example, a letter is sent to a lúNA₄.DIB and a lúNIG.ŠID, with the names appearing in that order, the lúNA₄.DIB is assumed to be superior. Insofar as this method can be applied, it seems useful; but many individuals do not appear in such contexts and so cannot be placed. There is probably more than one hierarchy at work, and the relative social position of individuals belonging to different ones is hard to evaluate. The high-ranking TURTĀNU, for example, is known to exist from Assyrian inscriptions but does not appear in Urartian texts at all. Therefore, his position vis-à-vis officials such as the lúA.NIN cannot be determined. For these reasons the sequence in which officials are discussed here can only be taken as an approximate ranking of their relative importance.

The King as an Administrator. That the king himself was concerned with matters of administration is hardly unexpected. What is surprising, at least at first glance, is the rather trivial nature of the juridical and administrative matters with which he concerned himself. The tablets with which the king is associated are reminiscent of the correspondence between Hammurabi and his lieutenants in the energy and attention lavished on petty detail. They show him adjudicating land disputes, confirming marriage contracts, securing the return of fugitives, distributing certain commodities, and allocating small numbers of livestock. If this were, in fact, the general pattern of Urartian royal administration, then it would follow that the personality of the king would be a large factor in determining how well the system worked.

There are reasons for being skeptical that this was indeed the case, however. First of all, it is not established that the king took a direct interest in any but the largest Urartian sites. One cannot be certain that royal administrative activity was confined to the sites where the king's seal and tablets bearing his commands are known to be in evidence, since those are the only ones at which tablets of any kind have been found; the "special position" of Bastam, Toprakkale, and Karmir Blur may simply have to do with the role of chance in the survival and recovery of clay documents generally. But the negative evidence for royal administrative activity from excavations at such sites as Armavir, Arin-berd, Kayalıdere, Patnos, and Altıntepe cannot lightly be dismissed. It at least suggests that royal letters, decrees, and bullae were not particularly common, nor was their use widespread.

Second, it appears that the king's authority was often used without the king's being personally involved. Only in document no. 1 is his name actually mentioned in a royal order (see table 16). Normally, royal commands are conveyed by letters that simply employ his title, beginning "LUGAL-še ali . . . (the king speaks . . .)." In two of the three cases where this is done, moreover, the tablet is actually sealed by the lúA.NIN, not the king.[71] Even on the third,[72] at-

TABLE 16

URARTIAN LETTERS AND DECREES

Document Number	Sender		Sealed by		Title(s) of Recipient(s)	Persons Concerned
	Name Given?	Title Given?	Name	Title		
1	yes, RN	no	RN	?	ˡᵘNA₄.DIB[a]	ˡᵘÉ.TIN
2	yes	no	RN	?	ˡᵘNA₄DIB ˡᵘNIG.ŠID	personal name
3	no	king	RN	?	ˡᵘKÙ	ˡᵘMU
4	unlikely	probably king	RN	ˡᵘA.NIN	ˡᵘNA₄.DIB	ˡᵘNA.KAD
5	?	?	RN	?	?	?
6	yes	no	?	?	ˡᵘNA₄.DIB	?
7	yes	no	?	ˡᵘA.NIN	ˡᵘNAM	ˡᵘSE.NUMUN and personal name
18	no	king	RN	ˡᵘA.NIN	ˡᵘNA₄.DIB	LÚ É.GAL
19	no	probably king	RN	ˡᵘA.NIN	LÚ É.GAL	none
20	yes	no	RN	?	ˡᵘNAM ˡᵘNA₄.DIB	ˡᵘIGI.LÁ?

NOTE: RN designates names that were at one time or another borne by a king, regardless of whether or not the individual on the document is a king at the time.

[a]Not directly addressed, but presumably the person who is to take action on the instructions.

testation of the king's name on the seal impression is not entirely certain. If the instructions contained in those letters emanated directly from the king, it is hard to explain why they were sealed with someone else's seal.[73]

More than one thousand bullae recently excavated at Bastam have provided conclusive evidence that Urartian kings had more than one seal.[74] If more than one was needed, it was either because more than one person was using it or because there was a need to replace a seal that had been lost or worn out. Since the seals in question were made to resemble each other in all but the smallest details, one cannot argue that the king had different seals for different functions in this case. The alternative of multiple contemporary seals rather than a series of single seals in chronological sequence is favored by the context of the discoveries—a series of rooms packed with broken animal bones.[75]

Taken together, the tablets and bullae so far discovered give a picture of a king whose authority was exercised at quite low levels of society in legal and possibly ritual activities. It was effected either through communications in his own name, or his title, or through untitled intermediaries who made use of his seal. While there is no reason to believe that this authority was monopolized by the king in person, there is remarkably little evidence for anyone acting independently of it. Evidence for the exercise of this authority has so far been found only at three sites in spite of a fair amount of excavation in Urartu. The possibility that the king allowed more autonomy to some sites than others, and indeed may have limited his attention to a select few that enjoyed some special relationship, seems a reasonable assumption.

ˡᵘA.NIN-*li*. The title ˡᵘA.NIN-*li*[76] is known only from the cuneiform legends of cylinder seal impressions; at least three different seals are involved, all with similar iconography.[77] On two of

them, the names of the individuals who held the title can be made out: Rusa, the son of Rusa;[78] and Rusa, the son of Sarduri.[79]

As is the case with many of the other titles discussed below, this logogram is unknown outside Urartu, and so there is no comparative evidence for determining its meaning. On the basis of a literal reading of its component parts, Diakonoff has suggested the translation "czarevitch."[80] In Akkadian the logogram A can stand for the words *māru* or *aplu*, both of which signify "son." NIN can represent *bēltu*, which means "lady" in the sense of the female counterpart of "lord." Thus the [lú]A.NIN is the "son of the lady," and Diakonoff suggests that this means "legitimate prince."[81]

Philologically, this argument is not compelling. Neither the logogram A nor NIN is used with these meanings elsewhere in Urartian, and both can have other interpretations. The logogram A is particularly common in multiple-sign logograms that have nothing to do with the concept of "son." Moreover, the sign -*li* always follows the NIN and should perhaps not be dismissed as a simple phonetic complement. It is hard to see why it would be needed as such for a simple title standing alone, where there is no syntax and no reason to stress syntactic relationships. Even if it is a phonetic complement, it causes problems for Diakonoff's interpretation, since it would suggest that the word was in the plural of the absolute case. If this combination of signs does in fact represent the word for prince, why should it have the determinative lú in front of it? This never occurs before words meaning "king" and "prince" in Hittite, Akkadian, or elsewhere in Urartian. Finally, the literal meaning of a title is hardly a reliable gauge of what the person who holds it actually does; the English word "marshall," for example, has connotations quite far removed from "keeper of horses."

In spite of these objections, however, the idea that the [lú]A.NIN was a member of the royal family is plausible in the light of other considerations. The two individuals who can definitely be associated with the title clearly have royal names. There indeed was a monarch called Rusa, the son of Sarduri, although he was too early to be the same person as this [lú]A.NIN.[82] Rusa, the son of Rusa, may actually have ruled.[83] If the sealing at the end of document no. 7 refers to the man who is named in the text as the sender of the letter, and if Diakonoff is correct in his reading of the seal, we are confronted with a third [lú]A.NIN. Although his name was never given to a king, it is quite similar to that of any early Urartian prince.[84] The seals of all [lú]A.NINs are executed in the same "court style" that was used for royal seals, and a close connection with the monarch is implied by their appearance on correspondence issued in the king's name.

It is difficult to evaluate the position of the [lú]A.NIN in the Urartian administrative hierarchy because his role is so intertwined with that of the king. If royal orders were issued under his seal, it is hard to deny an elevated status. He was apparently high enough to give orders to the [lú]NA₄.DIB and the [lú]NA.KAD without invoking the king's name, and the kinds of orders he gave were similar to those given by the king himself.[85] In terms of who gave orders to whom, the [lú]A.NIN appears to be the second-highest ranking official in the realm.

On the other hand, in document no. 7, the [lú]A.[NIN] hardly appears to be superior to a [lú]NAM—at best, one of Urartu's numerous provincial governors. This lengthy text is not entirely intelligible, but the sender is providing the recipient with information that he acquired from other parties. This information included numbers of animals sent to the king and the whereabouts of certain individuals. Although the letter does close with a number of imperatives, it is not at all clear what they mean or what they have to do with the preceding part of the letter.

In short, the [lú]A.NIN figures prominently in the known Urartian correspondence, but his role is difficult to define. He is the only official besides the king who is known to have dispatched or sealed letters. There is no way of knowing whether there was more than one [lú]A.NIN in the kingdom at a given time. The philological grounds on which it has been suggested that this title means "prince" are tenuous, but the stylistic similarity of his seal to that of the king together with the complementary nature of their activities suggests a close association.

[lú]*TURTĀNU*. The title [lú]*turtānu* was used by the Assyrians to designate both the commander of their own armies and a specific and significant Urartian high official. It was never used by the Urartians themselves, however, and their equivalent term, if indeed present in any of the docu-

ments we possess, has remained unidentified. Even the Assyrian evidence for the existence of this official in Urartu is meager, consisting of two direct references to a single individual so designated.[86] A *turtānu šanû* ("second *turtānu*, deputy *turtānu*") is mentioned in a third text.[87] Consequently, an evaluation of his role must be sought with the help of the much more abundant evidence on the *turtānu* from the Assyrian Empire.[88] It was presumably because of some equivalency of function that the Assyrians applied their nomenclature to a dignitary of a hostile kingdom.

In the ninth and eighth centuries B.C. the Assyrian *turtānu* was undoubtedly an official of very high rank. In the sequence of year names that formed the basis of Assyrian dating, the *turtānu*'s year frequently followed that of the king and preceded those of all other officials.[89] Most of his known actions are of a military character; when the aging Shalmaneser III no longer took the field in his program of annual campaigning, it was to the *turtānu* that he entrusted command of his troops.[90] Under the weak kings of the early eighth century, one *turtānu* became so powerful that in addition to usurping many of the titles and perquisites of royalty, he conducted campaigns in his own name.[91] It is not without good cause, therefore, that the title is rendered "chief general," or "commander-in-chief" in modern translations.[92]

This concept seems to fit well with what is known of the activities of the *turtānu* in Urartu. After the Urartians had suffered a disastrous defeat at the hands of the Kimmerians, an Assyrian observer informed his superiors:

> Now his [the Urartian king's] land is quiet. Each of his officers has gone off to his own land. Qaqqadānu,[93] his *turtānu*, has been captured. The king of Urartu himself is in the land of Uazaun.[94]

The Urartian governors routed in the debacle are treated as a plurality, and their personal names are not given. On the other hand, the *turtānu* was important enough to be singled out and mentioned by name. A second letter mentions the same individual as *turtānu* in the context of a report on the movements of the Urartian king:

> At the beginning of the month of Nisan the king of Urartu went out of the city of Turušpa. He went to the city of Elizzadu. Qaqqadānu, his *turtānu*, went into the city of Uesi. He will direct the forces of all Urartu after the king to the city of Elizzadu.[95]

Here there is no doubt that the *turtānu* was acting as a high-ranking military commander. Clearly his whereabouts was an important concern in a report to the Assyrian king, not least when he was in Uâsi, an important stronghold near the Assyrian frontier.

An Urartian named Qaqqadānu appears in another letter in a different context: he is listed as one of five governors who have assembled in Uâsi with their forces.[96] Unfortunately the name of the sender of this tablet is broken away, so it is not possible to pinpoint its chronological relationship to the other two letters, which probably stood near to each other in time since they both contain information of the same Assyrian observer, Aššur-rēṣua. If Qaqqadānu the *turtānu* and Qaqqadānu the governor are indeed the same individual at different stages of a single career, then a fluidity of movement between positions of power in the provinces and the central government may be postulated.[97]

Little can be said of the "second" *turtānu*, beyond what is implicit in the title itself. The one letter that mentions such an official says that he was seized in Turušpa in connection with a conspiracy against the Urartian king.[98] It contains no information about his normal function in the army or the government.

The meagerness of the evidence for the *turtānu* in Urartu is instructive in itself for understanding the nature of the central government. Here is an individual who was clearly of capital importance, in all probability the commander of the armed forces, who is not perceptible in Urartian records at all. Yet the theme of those records is conquest and campaigning—the very context in which we should expect to hear of him. Urartian governors, who were apparently of lesser consequence, at least to the Assyrians, are not so ignored. The propagandistic purposes for which display inscriptions were intended, apparently dictated that the central authority be conceived of as a single man.

The relative significance of the ˡúA.NIN to the *turtānu* remains to be considered. Given that one title was used only by the Urartians, and the other only by the Assyrians for the second-highest known office in the land, it is at least possible that they refer to the same office and the same individual. What little evidence there is, however, suggests they were different. The one personal name of a *turtānu* that survives is nonroyal, whereas a case can be made that all ˡúA.NINs had names that were similar to those used by the ruling dynasty. One need not even assume that both titles were in existence at the same time, since the attestations of the two are separated from one another by several decades.

ˡúNA₄.DIB. If we accept the suggestion that the relative ranks of officials may be established by observing the order in which they are listed when several are addressed and by determining who gives orders to whom, the ˡúNA₄.DIB is inferior only to the king, the ˡúA.NIN, and the ˡúNAM.[99] Although he does not appear in public inscriptions on stone, which ignore all Urartian officials except for occasional references to governors, he is mentioned on six clay tablets—more than any other functionary.[100] In five letters he is addressed directly, and in only one case is a corecipient of the letter mentioned first.[101] In the unique decree of Sarduri, son of Rusa, there is a possibility that another person is listed before the ˡúNA₄.DIB, but unfortunately the title of that person is broken away. These documents demonstrate that the ˡúNA₄.DIB outranked people bearing the titles ˡúNIG.ŠID, LÚ É.GAL, and ˡúIGI.LÁ.

Diakonoff, again working from the meanings of the logogram's component signs, suggests the translation "seal bearer" for this title.[102] NA₄, or ZÁ, represents the word for "stone," as well as serving as a determinative before nouns representing objects made out of stone; it could, by extension, mean "seal."[103] In Akkadian and Hittite texts, the logogram DIB is used for words that have to do with "taking" or "holding."[104] It also appears to have this force in composite logograms for officials and professions.[105] Thus, the ˡúNA₄.DIB could be the "holder of the seal," or "seal bearer." This argument falls short of being conclusive for much the same reasons as in the case of the ˡúA.NIN. KIŠIB, not NA₄, is the logogram regularly used for the word "seal" in Urartian. Whatever the literal sense of the title, it is clear that the individuals so designated were not, in fact, bearers of the king's seal—that was impressed, somewhere else, on letters sent *to* them.

The documents that mention the ˡúNA₄.DIB are concerned with matters of such diversity that one must posit a rather general role for this official. Two texts deal with land disputes, one with an abduction, and two, perhaps, with livestock. All of these documents are of the type that were sealed and sent, i.e., letters and decrees. In every case that the sender can be identified, he is either the king, the ˡúA.NIN, or someone acting in the king's name. Since letters addressed to the ˡúNA₄.DIB were found at the contemporary sites of Bastam and Karmir Blur, either there were several individuals with this title, or there was one who moved about from place to place. The former is the more attractive of the two alternatives, in view of the kinds of problems treated in the correspondence. An itinerant bureaucrat would be less likely to be instructed to dabble in the kind of low-order, spur-of-the-moment personal problems seen here than a local official who had personal knowledge of the people of a specific area.

There is hardly sufficient evidence to confirm Diakonoff's contention that the ˡúNA₄.DIB was the overseer or personnel manager of the royal estate in Karmir Blur.[106] While the key factors of high rank, direct communication with the crown, and responsibility for a variety of petty matters are not incompatible with his view, there is as yet no basis on which the authority of this official may be linked to the specific institution of the "royal estate," the mere existence of which is itself controversial.

ˡúNÍG.ŠID (ˡúNÍG.KA₉). In Mesopotamian cuneiform the logogram NÍG.KA₉, more commonly cited in secondary literature under the older reading NÍG.ŠID, stands for the Akkadian word *nikkassu* and means "account."[107] There is no reason to doubt that the fundamental meaning behind the Urartian title was "accountant." Although individuals who performed this function in the Assyrian Empire were generally designed *ṭupsarru*,[108] a "chief accountant" (GAL NÍG.ŠID) is also attested.[109]

There are two references to a ᴸᵘNÍG.ŠID in Urartu: one as the second addressee of a letter found at Karmir Blur, the other on the personnel list found at Toprakkale. In the case of the first, the text discusses matters that might well have been the concern of an accountant. After the address formula, in which the ᴸᵘNÍG.ŠID appears after the ᴸᵘNA₄.DIB, the text continues:

1 horse, emmer wheat(?) for the troops,
6 head of cattled I X-ed in the vinyard(?)
I sent them out for X.
The city did not send them,
(and) for sacrifice and . . .
. . .[110]

Since the letter is sealed, it was apparently found in the place to which it was sent. Accordingly, this accountant must have been active in Karmir Blur.

The second reference may deal with an official of a different order altogether. The entry in the personnel list, in the paragraph headed ᴸᵘŠA RÉŠI, is "119 ᴸᵘNÍG.ŠID.DA-ka-i," to be understood as "119 (people) before the accountant."[111] Both the force and the reading of the extra sign in the logogram are uncertain.[112] There is no reason to assume that the ᴸᵘNÍG.ŠID himself was one of the ŠA RÉŠI, since only the people in his charge are claimed for that category. He may be included under one of the other terms in the list, or stand outside it altogether. Since the list treats him as a unique official, one may assume that in whatever context these people were enumerated, he was a fairly significant individual.

Thus the ᴸᵘNÍG.ŠID appears to be some sort of accountant, but there may have been different levels of this office, which varied in importance. At least one was active outside the capital.

ᴸᵘKÙmeš (ᴸᵘKUGmeš). This official is mentioned only once, as the sole addressee of a letter found at Karmir Blur.[113] Noting that the title does not occur elsewhere in cuneiform, Diakonoff interprets its literal sense as "man of the money."[114] This guess is as good as any, since the KÙ sign alone can stand for the word for silver, and silver was a standard medium of exchange in the ancient world.[115] The letter itself, however, concerns the return of the daughter of one cook to a second cook, with no reference to pecuniary matters. Consequently, even if this interpretation of the title is correct, there is again no demonstrable connection between its literal meaning and the role played by the one who held it.

ᴸᵘIGI.LÁ. The logogram IGI.LÁ can represent the Akkadian verbs amāru or bâru, "to see, to look at"; consequently Salvini translates the title "overseer," or "inspector."[116] It is mentioned once in a letter found at Bastam, where the context makes it clear that this individual is subordinate to the ᴸᵘNA₄.DIB.[117]

LÚ É.GAL. This title literally means "man of the palace" and was probably a general designation for a class of officials who worked in the palace. A similar term—DUMU.É.GAL—was so used in alternation with LÚ É.GAL by the Hittites.[118] LÚ É.GAL is attested three times in Urartian: once in broken context on a fragment (or perhaps several fragments) of a display inscription,[119] and on the two best-preserved letters from Bastam. That such people were addressed in Bastam gives further proof that officials of the Urartian court were not confined to a single location.

Summary. This concludes the list of officials who can be seen to have taken part directly in the enterprise of governing the realm, with the exception of provincial governors, whom we treat as a special subject below. In summarizing this rather defective portrait, a few generalizations can be made: The Urartian king probably had a large "court," but there is no reason to assume that the individuals who composed it were tied to a single location. On the contrary, officials who were direct recipients of royal orders were manifestly at work in at least three widely separated geographical points during the only phase of Urartu's history for which we have this kind of

documentation. Although there was a definite concept of a capital at Tušpa, it is hard to say what that concept represented in administrative terms. Archaeological evidence does not single the Van area out as a focal point of population, building activity, or wealth concentration to anywhere near the extent that the capitals of other ancient Near Eastern empires such as Hattuša, Nineveh, or Calah seem to have been. It is also noteworthy that many official titles, although written logographically, are not found outside Urartu in cuneiform texts, perhaps indicating a different outlook from more centralized polities such as Hatti and Assur.

PROVINCIAL ADMINISTRATION

Urartian and Assyrian records are consistent with one another in portraying Urartu as a mosaic of provinces and in designating the primary official to whom regional authority was entrusted as lúEN.NAM, i.e., "provincial governor." The correspondence between natural divisions of territory, administrative "provinces" or districts, and the territorial sphere governed by an individual lúEN.NAM is a problem that has generally been ignored in studies of Urartu. Yet the size, number, and boundaries of the administrative subdivisions of the state are of great significance in assessing the mechanisms by which its cohesion was achieved. Furthermore, the character and quality of power wielded by the lúEN.NAM are of concern in evaluating the degree of centralization, and the nature of government in general, in Urartu.

The subject of provincial administration is obviously not limited to provincial governors and their territories. Each governor undoubtedly had subordinates, and it would be interesting to compare their activities with those of members of the bureaucracy who worked directly for the king. Unfortunately, only the most meager evidence is available on these lower levels of administration. The bulk of the evidence for Urartian provincial administration and the actions of Urartian governors comes from Assyrian documents that were written by people concerned with only those territories in close proximity to their own sphere of influence. The interests of the Assyrians also produced a strong military bias in the nature of the information they imparted. Yet, in spite of all these limitations, defects, and distortions, the available evidence is at least sufficient to limit the variety of plausible political forms that we have to take into consideration.

The Provincial Governor (lúEN.NAM)

In the late eighth century Assyrian royal letters referred to governors on both sides of the Urartian-Assyrian frontier as lúEN.NAMs. It has generally been assumed that they were equivalent in function as well as title, and, by extrapolation, it has even been suggested that Assyrian and Urartian systems of administration were similar.[120] Unlike the word turtānu, however, the Urartians actually used the title lúEN.NAM themselves, and the possibility that its meaning evolved separately in Assyria and Urartu cannot be dismissed lightly. It is worth taking a closer look at the evolution of the term in Mesopotamia, and considering both how and when it came to be used in Assyria and Urartu.

The Akkadian title bēl pīhati,[121] frequently written logographically as lúEN.NAM, is first attested in Babylonia in the second millennium B.C. Brinkman, in tracing its evolution there, notes that for the most part it was only applied to relatively minor officials until the mid-eighth century B.C. Although provinces were indeed designated pīhatu in the second millennium, the man who governed them was normally called a šaknu. It was not until after the eighth century that the bēl pīhati can be seen to have adopted this role. Subsequently, in the period of Persian domination, the title was occasionally used as the Babylonian equivalent of Satrap.[122]

In Assyria, the use of the term bēl pīhati for governor also appears to be a development of the first millennium, although there is some disagreement as to exactly when it came into use. Diakonoff has argued that it was not used in first-millennium Assyria until the administrative reforms of Tiglath-Pileser III, in the middle of the eighth century. He also suggests that its introduction was inspired by Urartian influence.[123] Texts from Nimrud attesting to the existence of

lúEN.NAMs in Assyria well before the reign of Tiglath-Pileser, if not before the emergence of the Urartian state as well, greatly weaken this argument, however.[124] Whether or not they served as provincial governors at that early time, or occupied a more subordinate position as in contemporary Babylonia, remains to be established. In this regard, the vexed question of the relationship between the titles *šaknu* and *bēl pīhati* becomes significant. For Henshaw and Kinnier-Wilson these are two separate titles and offices in Assyria.[125] The latter suggests that the *šaknu* should be regarded as a military governor recruited from the class of "emirs," while the junior *bēl pīhati* was taken from the court eunuchs and was therefore a "eunuch governor."[126] More convincing, however, is Postgate's argument that the *šaknu* was a general title which could be applied to a number of posts, including that served by the *bēl pīhati*. The latter came to be favored in the later periods of the Assyrian Empire because of its greater specificity.[127] If this is indeed the case, then there are no grounds for assuming that the Assyrian *bēl pīhati* was necessarily a petty official in the early Neo-Assyrian Empire, which would be the time that the Urartians brought this term into their own language.

In short, our uncertainty about the range of concepts implicit in the title lúEN.NAM and its Akkadian equivalent in the late ninth and early eighth centuries prevents us from being very specific about the significance of such an individual in Urartu. The Assyrians may later have modified their view of what the office entailed, perhaps with an Urartian model in mind, but this says nothing of what the role of an Urartian lúEN.NAM was when the title was originally borrowed.

The earliest Urartian reference to a lúEN.NAM dates to the reign of Menua, the third ruler in the royal line.[128] It appears on a stele that was found in two pieces near Bağın, well to the west of the central area of Urartu, where it may have been erected as part of the early expansion of the kingdom to the west. Its primary purpose seems to be to record the installation of a certain Titia as lúEN.NAM. The name and extent of his jurisdiction are not specified; the stele says simply that he was installed "here." The statement that Menua erected the stele is repeated twice, before and after the reference to the appointment of Titia. But even this does not mask the fact that the lúEN.NAM is a more significant figure here than in any later Urartian inscription: this is the only public document in which an Urartian king bothered to record the personal name of an individual so designated. Does this reflect an elevated status that was a general rule for early lúEN.NAMs, or is it an exceptional case because the individual concerned, being in a newly conquered area near the frontier, retained a certain amount of prestige and power? One stele is not enough to provide an answer.

Most subsequent references to the Urartian lúEN.NAM pertain directly and exclusively to his military role. This is not surprising from the Assyrian side, since it was primarily as a military problem that their letters were concerned with Urartu. On the Urartian side, the paucity of information on nonmilitary functions connected with the office is more problematic but cannot be taken to indicate proof of their absence. Before considering various possible reasons for this failure to make a broader impact on the textual record, it is necessary to examine the military activities of the governors in an effort to determine how numerous, powerful, and autonomous they were.

The lúEN.NAMs and their contingents were the basic units out of which Urartian striking forces were composed. The number called up apparently varied according to the objective of the campaign: Sarduri II summoned three governors for action against the land of Uiţeruhi;[129] and on another occasion the Assyrians reported a concentration of five governors in the city of Uâsi.[130] In overwhelming the kingdom of Uelikuni, on the shore of Lake Sevan, Sarduri II notes that he did not call up even one of his governors.[131] The responsibility of the governors apparently did not end with providing troops; they accompanied them into battle as well. In reporting reverses that the Urartians suffered, the Assyrians along the frontier seem to have used the number of governors defeated or killed as an index of the defeat's magnitude.

It is difficult to ascertain whether or not Urartian lúEN.NAMs initiated, or participated in, military actions which did not involve the king. In one letter the Urartian governor of Uâsi appears to be ordering someone, probably Urzana of Muṣaṣir, to assemble troops, but this appears to be as part of a broader mobilization of the whole kingdom:

The messenger of the governor of Uesi has come to Urzani concerning X X X X, saying "Let your troops come!" Concerning the city of Buliaia and the city of Surinaia, all of Urartu is very much afraid. They are assembling troops.[132]

In another letter, an Assyrian official seems to be engaged in direct negotiations with an Urartian governor who is attacking the Assyrian fortress at Meşi.[133] Although the Urartian king is not mentioned, there is no proof that the governor was in fact operating independently.

We are in the same position of ignorance with regard to the size, origin, and composition of the forces commanded by the ˡúEN.NAM. In only one instance is any number given: Sētini, described as the governor opposite Aššur-rēşua, set out for Muşaşir with three thousand foot soldiers, officials, and a commander of couriers.[134] However, the number may have been recorded because it was atypical; the usual practice of the Assyrians, seen a few lines farther on in the same letter, is to mention the forces of a governor without enumerating them. This letter is also a bit problematic because it is not clear that Sētini was proceeding for military action. Another letter, which also has governors congregating in Muşaşir, and may even refer to the same incident, says that they were there to perform rituals.[135]

There are only two references to subordinates of the ˡúEN.NAM, and neither is specific about the role they played in the general picture of Urartian governmental administration. One is the allusion to the followers of Sētini, quoted above. The ˡúGAR-nu-tu and the ˡúGAL kal-lab mentioned there may simply be military officers of different levels. The second instance is a unique case where an Assyrian found it worth noting that an Urartian governor was in the city of Harda with his deputy (ˡúEN.NAM 2-u).[136] The absence of any additional mention of such officials in the Assyrian records suggests they were relatively inconsequential, at least insofar as they affected Assyrian interests.

In regard to the problem of centralization, it would be useful to know how many Urartian governors held office at a given time. An Assyrian letter which records the defeat of an Urartian expedition by the Kimmerians has been collated to establish that eleven governors were "removed" (i.e., eliminated?).[137] This must be taken as the absolute minimum. Other considerations make it likely that the actual number was a good deal higher. According to another Assyrian report, perhaps concerning the same campaign, nine governors were killed in a single defeat.[138] If they had represented a high percentage of the total number of governors, it is hard to see how the kingdom of Urartu could have survived such a debacle. The lack of repetition in the names and posts of Urartian governors cited in the corpus of Assyrian texts is a further indication that they were quite numerous. These citations are presented in table 17. The Assyrians made specific reference to Urartian governors in three different ways: (1) They could describe one as the governor who was opposite a province or a named official of their own.[139] (2) They could give the city or land name of the place in Urartu over which he was governor. (3) They could give the personal name of the governor. This last alternative was never used by itself, but rather in combination with one of the other two; apparently the Urartian governors were not well enough known at the Assyrian court that their names would be immediately recognized. Table 17 lists seventeen designations of Urartian governorates, many of which may refer to the same office. Furthermore, the names of the provinces may well have changed in the course of time; the sources quoted, which are difficult to pin down chronologically, range over several decades in the late eighth and early seventh centuries. Therefore, the list cannot be used to prove that there were more than eleven governors at a given time, but it does at least point in that direction by showing the range of designations and the infrequency with which references are repeated. With the exception of Uâsi, none of the provinces appears as a large, stable administrative unit that commanded much attention from the Assyrians in its own right.

More hints that provincial governors were quite abundant are provided by Urartian inscriptions. In a single campaign against three rather minor kingdoms on Urartu's northwestern frontier, Argišti I replaced four petty kings with four governors.[140] It is very unlikely that references to the governors of these remote and obscure areas lie hidden behind other designations in the letters of the Assyrians. To the list of known provinces may be added one established by Rusa I on the west shore of Lake Sevan. This area, called Uelikuni, had been subdued by his predeces-

TABLE 17
URARTIAN GOVERNORS IN ASSYRIAN SOURCES

Personal Name	Urartian Location	Opposite . . .	Source
. . .	ᵘʳᵘHarda	Nashur-bēl	*ABL* 424
Ṭunnanun[a]	ᵘʳᵘKar-sipar	. . .	*ABL* 381
Uquna[a]	X-pa	. . .	*CT* 53, no. 7
. . .	ᵘʳᵘUâsi	. . .	*ABL* 409
. . .	ᵘʳᵘUâsi	. . .	*ABL* 1079
. . .	ᵘʳᵘUe[si][b]	. . .	*ABL* 112
. . .	ᵘʳᵘUajais	. . .	*Huit. camp.* 298–306
. . .	KUR Uâsi	. . .	*ABL* 1083
. . .	KUR Uazaun[c]	. . .	*ABL* 646
Analukunu[a]	ᵘʳᵘMuṣaṣir	. . .	*ABL* 381
Sētini	. . .	Aššur-rēṣua	*ABL* 380
Setinu	KUR X-teni	. . .	*ABL* 444
. . .	KUR Šip-X-ur	. . .	*ABL* 646
. . .	KUR Šattera	. . .	*ABL* 646
Sakuatā	KUR Qaniun	. . .	*ABL* 444
Siplia	KUR Alzi	. . .	*ABL* 444
Ṭuki	KUR Armiraliu	. . .	*ABL* 444
. . .	. . .	ˡúRab-BI.LUL	*ABL* 646
. . .	. . .	"us" (name lost)	*ABL* 646
. . .	. . .	ᵘʳᵘMuṣaṣir	*ABL* 646
Qaqqadanu, Sunaja	. . .	KUR Ukaja	*ABL* 444
	. . .	KUR Ukaja	*ABL* 380
	. . .	KUR Ukaja	*ABL* 409
(two governors)	. . .	KUR Kar-sipar	*ABL* 646

[a]Possibly not Urartian.

[b]The city is *ú-mar* in Harper's copy, but emended to *ú-e!-[si]* by Waterman. Simo Parpola, *Neo-Assyrian Toponyms*, Alter Orient and Altes Testament, vol. 6 (Neukirchen: Butzon & Bercker Kevelaer, 1970), p. 363, accepts the emendation.

[c]Harper's copy reads KUR *u-a-za-e*, but Parpola, *Neo-Assyrian Toponyms*, p. 362, reads KUR *u-a-za-un!* Both are acceptable variants of the name Uâsi, however, since a suffixed *-ni* is a common occurrence in Urartian place-names.

sor, but a stele found at Nor-Bayazet relates that it was Rusa who conquered and enslaved its king, replacing him with a governor.[141]

A large number of governors, all owing their appointment to the king and communicating with him, argues for a relatively "low pyramid" of authority in matters of provincial administration. The independent units were thus unable to draw sufficient amounts of power unto themselves to threaten the control of the king in any way.

In sum, provincial governors in Urartu were considered worthy of observation by the Assyrians, but they have a relatively minor role in Urartian documentation. Their only attested concerns are military actions and participation in rituals, and it seems unlikely that they were

capable of wielding significant amounts of political power. Even within their realms any autonomy they might have enjoyed must surely have been undercut by the direct meddling of royal officials. There may, in fact, have been two separate pyramids of authority operative in a given area: one, primarily military, connected to the king through the ^{lú}EN.NAM; and the other, more juridical and administrative in character, working through such officials as the ^{lú}NA$_4$.DIB and the ^{lú}NÍG.ŠID. Alternatively, there may have been different types of administrative centers linked in different ways to the crown: some, such as Bastam and Karmir Blur, were administered directly, hence the nature of the documentation found there; and others were under the control of a ^{lú}EN.NAM. In either case, the regional authority of the ^{lú}EN.NAM was not unbridled, and overlapping administrative hierarchies, all with relatively direct ties to the court, checked any tendencies toward regional separation that might have developed in an ambitious subordinate.

Administrative Divisions within the State

The tablet which describes Sargon's march through Urartu on his eighth campaign portrays a countryside subdivided into major areas, for which the rather vague Assyrian term *nagû* ("district") is consistently used. Five such *nagûs* are encountered within the boundaries of Urartu proper, and a sixth is said to be a Mannean land which Rusa I had recently seized. Two questions are fundamental to the present inquiry: (1) Were these *nagûs* administrative districts or some other kind of geographical division? (2) What was the size of the individual *nagû*, and how many of them were there in the kingdom?[142]

The second question would be much easier to answer if the route of Sargon's campaign were known.[143] The lengthiest possible march, proposed by Thureau-Dangin, takes the army north of both Lake Urumiyeh and Lake Van. This would mean that the six districts accounted for a considerable expanse of Urartu's territory. Those who argue for a more limited scope, such as Rigg and Levine, would compress the districts into a small area along the shore of Lake Urumiyeh.

A clue to understanding the composition of the *nagû* and, thus, a basis for choosing between the long and short routes for the campaign are found on the tablet describing Sargon's campaign. As Sargon moved from one district to another, topographic features that marked the dividing line were often noted. Between Uišdiš and Zaranda there was a mountain pass guarded by a fortress,[144] and another mountain separated Armarīlî and Ajadi.[145] The march between Ajadi and Uajais took Sargon across three rivers.[146] Such natural barriers were not encountered by the Assyrian army as it moved within a *nagû*, although nearby mountains were frequently alluded to as sites of fortresses, places of refuge for the frightened populace, and the loci of watchtowers from which the ravages of nearby districts were observed. Thus the individual districts cannot have been larger than a single valley, or one of the expanses of flat, arable land sealed off by mountains. Not only does this rule out the lengthier routes that have been proposed for the eighth campaign, it also points in the same direction as our discussion of provincial governors. The districts of Urartu were numerous and, because of their very numbers, were probably not very significant individually.

The account of Sargon's eighth campaign offers no direct information on how an Urartian *nagû* was governed, nor any suggestion as to how it was delimited in political terms. That it was, in fact, the territory over which a ^{lú}EN.NAM held sway is implied by other Assyrian documents. One letter from Nineveh mentions an Urartian governor of the land of Armiraliu, which is almost certainly the same place as the province (*nagû*) of Armarīlî.[147] Uâsi (Uajais), which appears with the determinants for both "land" and "city" in Assyrian letters, was also a *nagû* according to the account of the eighth campaign. No less than five letters specify that it was also the seat of a governor.[148]

In Urartian texts there appears to be no specific word that denotes a province as an administrative district. Names of territories associated with large administrative complexes are normally preceded with the rather vague determinative KUR ("land"), which is also used before virtually all proper names for expanses of territory. That the Urartians conceived of their state as

composed of a number of "lands" is clear from both display inscriptions and tablets. Several of the bullae found at Bastam are inscribed with the names of lands, presumably indicating the place from which they were sent.[149] The dated bulla mentioned above in connection with Rusahinili suggests that the name of the territory of Bastam itself was the land of Ala'ni.[150] Both Teišebaini (Karmir Blur) and Argištihinili (Armavir) were built in the land of 'Aza, apparently the ancient name of the broad plain that runs from the Aras to modern Erevan.[151] Rusahinili's association with the land of Qilbani, albeit possibly indirect, has already been noted.[152] These were all huge fortresses, whose names must certainly have been known to any denizen of Urartu, so the inclusion of land names on these documents suggests administrative divisions, not simply means of locating the sites. If the Urartians had an equivalent term for *nagû*, it was clearly less favored than "land."

Weaving together these individual and incomplete strands of geographical, philological, and archaeological evidence, the following pattern of governmental administration emerges: Urartu was ruled by a hereditary monarch who had traditional ties with the city of Ṭušpa. The state he controlled was a mosaic of "lands," or provinces, each of which was no larger than an individual plain surrounded by natural barriers to communication and movement. Each province was the jurisdiction of a governor, whose primary known responsibility was to provide a detachment of troops, which he himself led, when the Urartian king summoned him for a military expedition. Two factors which prevented these governors from accumulating power that might threaten the dominance of the central authority can be identified. The first is the very number of provincial governors, which must have been so high that no single individual commanded more than a minimal percentage of Urartu's manpower or resources. The second is a bureaucratic apparatus controlled directly by the king that bypassed the provincial governors to meddle directly in minor affairs at widely separated centers. Since documentation for this has come from only three sites, it is not known whether this bureaucracy functioned in every province or only at selected points. In any event, it would be a check against the development of regional power by rebellious governors, either singly or in alliance.

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APOLOGIA AND CONCLUSIONS

The decisive elements of causation that created the Urartian state in what had previously been a political backwater are too profuse, too intricately interwoven, and too imperfectly reflected in historical and archaeological sources to be understood completely. The thesis elaborated in the preceding pages is thus only a partial and tentative explanation for Urartu's sudden emergence and obvious success in dealing with problems of its violent epoch and disjunctive environment. The decision to seek a solution in the realm of political and economic organization of the Urartian state is itself but one of a number of potential approaches to the problem. Our conclusions, therefore, are provisional and offered in the hope that they may broaden, rather than restrict, the range of inquiry in this neglected field.

The Urartian state was created by force, with warfare as both a stimulus and response at its inception. What is known of its political and economic structure reflects an overwhelming concern for offensive and defensive military activity. When the Neo-Assyrian Empire began expanding in the ninth century B.C., its campaigns to the north were undertaken with increasing regularity. While these actions undoubtedly caused hardships for the people of the highlands and cut down many of their petty potentates, they did not establish Assyrian control of the area. Instead, a local dynasty took control of the Van basin, presumably offering protection to those who submitted and conquering those who did not. The expansion of their power over eastern Anatolia, northwest Iran, and southern Transcaucasia was facilitated by the ravages of the Assyrians, who may have had a superior army but lacked easy access to the plateau. Once the Urartian kingdom was established, it created a system of artificial defenses to strengthen those that nature had provided. But the threat of enemy penetration remained; Assyrian armies could enter Urartu by a number of passes through the Taurus and Zagros chains and exert pressure at many separate points in the kingdom.

This pressure, however, was not a threat to the state as a whole in any given year, but only to individual parts of it. All of the routes between Assyria and Urartu were seasonal to a certain extent, and some were only open for a few months in the summer. The best passes were the ones on the extreme western and southeastern sides of Urartu, from which Van could be approached only by circuitous routes. Once inside the kingdom, movement was difficult at best, and practically impossible in winter. For large Assyrian armies carrying siege equipment, there was thus a firm limit to the amount of damage they could do; although they might cover a considerable distance inside the Urartian frontiers with their cavalry and infantry, they had to reduce fortresses in order to secure their conquests.

The Urartian area is composed of depressions separated by highland areas. The latter have traditionally served as summer pastures for the livestock of transhumant peoples, and there is no reason for assuming that the situation was different in the Urartian period. Masses of animal bones discovered in citadels, inscriptions listing animals to be sacrificed, and compulsive recording of animals taken as booty, attest to the importance of stock-rearing in the Urartian kingdom. Livestock was a relatively secure form of rural production since it could be dispersed and moved to safety at the approach of a hostile army. Yet the severity of the winter prevented these pastoralists from being very independent of governmental authority by forcing them to take refuge in the warmer, more sheltered depressions; natural barriers and the distances involved in travel to open winter pastures made full nomadism impossible.

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The depressions are irregularly shaped and isolated areas of sedentary agriculture, where evidence of collective human activity in the Urartian period is most conspicuous. Although they are scattered across different climatic zones, in most there is a severe water deficit in the summer. Dry farming could be practiced, but it was done at risk; irrigation greatly improved the productivity and reliability of harvests in areas where topography permitted it. Urartian kings recorded their construction of major canals, but the role of the state in this regard should not be equated with that in Mesopotamia. In Urartu water sources were comparatively numerous and not subject to monopolization by any authority. Thus, while the central government was responsible for a few spectacular projects, most irrigation was practiced on a small, local scale and not particularly vulnerable to central regulation, or complete destruction at enemy hands.

While demographic changes are poorly reflected by the available evidence, it is at least clear that the character of settlement changed at the beginning of the Urartian period. In Iran, where Urartian and pre-Urartian sites have been observed in the greatest detail, there was a shift from a pattern of village settlements on tepes to an overwhelming predominance of fortress sites along the edges of the valleys. It is probable that the agricultural population was to a large extent dispersed under the Urartians and used the fortresses as places of refuge in times of emergency. In general, the focal points of Urartian building activity were military strongpoints rather than centers of habitation or economic redistribution; royal building inscriptions suggest that the king was less interested in creating places for people to live than in constructing edifices to watch over them. There was no systematic imposition of a rigid scheme of centers and lesser sites, although some areas were clearly dominated by complex fortress/settlement conglomerations that were the creation of the central government. Difficulties of movement from one agricultural oasis to another made each dependent on its own resources for subsistence, and this diffusion of productivity also lent a degree of invulnerability to the productive capacities of the state as a whole.

This is not to say, however, that the individual areas could collectively have resisted the Assyrian threat in the absence of a strong central government, or that the state was decentralized in its political structure. In Urartian inscriptions, the king is practically the only actor on stage, and the foremost of his roles is to be military commander. To judge by royal annals, the chief goal of offensive warfare was to secure manpower and the wherewithal to feed it on a temporary basis—livestock. Other forms of booty and tribute are so rarely mentioned that they were probably of little strategic consequence. Personal control over this manpower gave the king the power to undertake building projects that were beyond the means of the population in any given agricultural area. In direct confrontations with the Assyrians, the Urartian army appears to have been ineffective; but the real defensive system was that of the fortresses, which were created by the central government even if they were to be defended independently.

In order to prevent too much power from falling into the hands of local authorities, a civil bureaucracy operated in the king's name from a few major centers placed in various parts of the kingdom. There was a traditional capital at Ţušpa, but it does not appear to have been a place at which bureaucratic activity, military power, wealth, or population were concentrated to any extreme. By having more than one seat of royal authority, vulnerability of the kingdom to direct attack was reduced, and the behavior of provincial officials in outlying regions could be kept under scrutiny at close range.

Assyrian accounts reveal that Urartu was divided into provinces, each with a provincial governor. More than a dozen of these provinces are named in Assyrian tablets, but it is probable that the total number was much higher. The provincial governors were thus too many to present any kind of a threat to the central government individually. What evidence there is suggests that the provinces were coterminous with the agricultural areas that formed the oases of settlement in the Urartian kingdom. Provincial governors had armed forces at their disposal, with whom they served on royal expeditions. It is possible that the governors were primarily military officers and unconcerned with civil administration, since neither Assyrian nor Urartian documentation would suggest otherwise.

Urartu's cultural adaptation to its political and physical environment is obviously a complicated subject and deserves further investigation. Particularly in the area of the economy, the

problems have at best been identified, not solved. With even the form of habitation sites of the majority of the Urartian population unstudied and hence the material evidence associated with the primary producers of the society unknown, it is pointless to speculate on the distribution of goods and services in anything but the grossest terms. This deficiency could easily be corrected by relatively inexpensive excavations at some of the smaller tells which have yielded Urartian pottery. With a better understanding of rural settlement land and the relationship between these smaller sites and the fortresses, the problem of social structure could fruitfully be explored. A few hints in cuneiform texts, a group of house plans, and a sketchy awareness of Urartian mortuary practices may already be applied to this question, but more and better data are needed from the ground.

A further area of immediate concern is the applicability of paradigms based on Iranian evidence to the state as a whole. Most of the known sites in Turkey and the Soviet Union stand in isolation, quite unlike the sites in Iran. It is assumed that this is simply a problem of inadequate investigation, but the assumption should not remained untested. If a completely different pattern of fortresses and site relationships were to emerge, it would suggest that the organization of the state was even less uniform, and the reasons for its existence even more complicated, than we have argued.

With more data from excavation, more factors may be brought into the discussion. For example, we have neglected the role of technology simply because so much about its significance is guesswork at the present stage of research. It seems likely that Urartu could only have come into existence in the Iron Age, when strong and durable picks for working the bedrock of the mountains into platforms for fortresses were readily available. The Hittites had been able to do similar things in the Bronze Age at Boğazköy, but this was a special effort. To employ such building techniques on a wider scale with the more limited manpower available to the Urartians would probably have been impossible without iron. But this remains only a theory until more work is done on the quality and abundance of Urartian iron tools, and the military significance of this style of construction is established.

Although too often and too casually called upon to serve as a prime mover in secondary state formation, trade also deserves more attention than it has been given here. The appearance of foreign luxury goods in Urartian contexts and the distribution of objects of Urartian manufacture abroad are indisputable indications of Urartu's participation in a broader Near Eastern economic matrix. The intellectual baggage that went with this transfer of goods was probably not inconsiderable and doubtless helped determine the way Urartians delineated and reinforced social divisions.

There is some justification, however, for relegating these matters to the background. It is not the historian's task to give equal consideration to all factors that shaped the course of events, but rather to discover those which were, in his judgment, paramount. If, as E. H. Carr has claimed, every historical argument centers around the question of priority of causes, we hold that in the case of Urartu pride of place should be given to the ecological factors we have focused upon. Trade and technology did not trigger Urartu's emergence or mold its character to the same extent.

The ultimate goal of our inquiry is an understanding of how one particular state functioned, both internally and in relation to other political entities around it. If the study of ancient empires is to escape from the realm of esoterica, it must establish analytic categories and employ them in formulating broadly applicable generalizations. But in the case of Urartu this has frequently been done with too much haste and too little scholarship. Urartu may be called an empire inasmuch as it was an autonomous polity governing a wide territory from a central establishment. But further classification should be undertaken with an awareness of the significant peculiar features of this state rather than reliance on simplistic or traditional notation. If Urartu was "feudalistic"; if it was a "slave state," a "class society," or an "oriental despotism"; if it dominated trade or controlled vital resources—it was and did these things unlike most of the other states that have been so categorized. It was a unique adaptation and should be explained in terms of cultural ecology, rather than equated in form and function with its principal antagonist, the Neo-Assyrian Empire.

APPENDIX

URARTIAN KINGS AND CHRONOLOGY

Urartian King	Synchronism	Assyrian King
Sarduri (I) son of Lutipri	831	Shalmaneser III (858–824 B.C.)
Išpuini son of Sarduri	ca. 818	Šamši-Adad V (823–811)
Menua son of Išpuini		Adad-nirari III (810–783)
Argišti (I) son of Menua		Shalmaneser IV (782–773)
		Aššur-dan III (772–755)
Sarduri (II) son of Argišti	743	Aššur-nirari V (754–745)
		Tiglath-Pileser III (744–727)
		Shalmaneser V (726–722)
Rusa (I) son of Sarduri	714	
Argišti (II) son of Rusa	708	Sargon II (721–705)
		Sennacherib (704–681)
Rusa (II) son of Argišti	673	Esarhaddon (680–669)
Sarduri (III) son of Rusa *or* Erimena	a Rusa 655	Assurbanipal (668–627)
Sarduri (IV) son of Sarduri	Rusa (III) son of Erimena	
Erimena	Sarduri (III) son of Rusa	a Sarduri ca. 639
Rusa (III) son of Erimena	Sarduri (IV) son of Sarduri	

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Although no ancient source offers an Urartian king list comparable to those available for Mesopotamia, the sequence of kings is reasonably clear for all but the last decades of the kingdom's existence. Virtually every Urartian display inscription gives both the name of the king who commissioned it and the name of his father, and these may be strung together to form an unbroken chain for nine generations. Assyrian synchronisms at various points anchor this sequence in absolute chronology, but in no case is the duration of an individual king's reign precisely known. After Rusa II, the chain breaks, largely as the result of the paucity of display inscriptions. Among these putative later kings, only Rusa, son of Erimena, has left dedicatory and building inscriptions, and only he adopts royal titulary. The others are largely known through inscriptions on clay tablets and sealings, most frequently bearing the title ^lúA.NIN-*li*, so some question remains as to whether they did, in fact, rule as monarchs.

For a detailed discussion of the problems involved in seventh-century Urartian chronology see Mirjo Salvini, "Die urartäischen Tontafeln," in *Bastam I*, ed. W. Kleiss, Teheraner Forschungen, vol. 4 (Berlin: Gebr. Mann Verlag, 1979), pp. 129–31. Eighth-century schemata developed by various Soviet scholars—and largely followed in secondary Western literature— are reviewed by Guitty Azarpay, *Urartian Art and Artifacts* (Berkeley and Los Angeles: University of California Press, 1968), n. 47, pp. 85–87. The attempt to give precise dates to the reign of Argišti I rests on the assumption that the campaigns against Assyria recorded in his annals can be coordinated with Assyrian campaigns against Urartu listed in the Eponym Canon. Given the tendency of ancient historical sources to gloss over or ignore defeats, such an assumption is unwarranted. Beyond the synchronisms listed above, there is no justification for assigning approximate regnal dates to Urartian rulers.

ABBREVIATIONS

ABL	R. F. Harper. *Assyrian and Babylonian Letters*. 14 vols. Chicago: University of Chicago Press, 1892–1914. (Texts cited by number.)
AfO	*Archiv für Orientforschung*.
AfV	*Archiv für Volkerkunden*.
AHw	Wolfram von Soden. *Akkadisches Handwörterbuch*. 3 vols. Wiesbaden: Otto Harrassowitz, 1959–81.
AJA	*American Journal of Archaeology*.
AMI	*Archäologische Mitteilungen aus Iran*. (All volumes cited are Neue Folge.)
AnSt	*Anatolian Studies*.
ARAB	Daniel David Luckenbill. *Ancient Records of Assyria and Babylonia*. 2 vols. Chicago: University of Chicago Press, 1926–27.
CAD	*The Chicago Assyrian Dictionary*. 14 vols. to date. Chicago/Glückstadt: J. J. Augustin, 1956–.
CT 53	Simo Parpola. *Cuneiform Texts from Babylonian Tablets in the British Museum*. Part 53. *Neo-Assyrian Letters from the Kuyunjik Collection*. London: British Museum, 1979.
HCI	F. W. König. *Handbuch der chaldischen Inschriften*. Archiv für Orientforschung, Beiheft 8. 2 vols. Graz, 1955–57. (Texts cited by number.*)
IFŽ	*Istoriko-Filologičeskij Žurnal*.
IM	*Istanbuler Mitteilungen*.
JAOS	*American Oriental Society. Journal*.
JCS	*Journal of Cuneiform Studies*.
JKF	*Jahrbuch für Kleinasiatische Forschung*. (*Anadolu Araştırmaları*.)
JNES	*Journal of Near Eastern Studies*.
JRAS	*Journal of the Royal Asiatic Society*.
JRGS	*Journal of the Royal Geographical Society*.
KUFI	Stephan Kroll. *Keramik urartäischer Festungen in Iran*. Archäologische Mitteilungen aus Iran, Ergänzungsband 2. Berlin: Dietrich Reimer Verlag, 1976.
MVAG	Mitteilungen der Vorderasiatisch-aegyptischen Gesellschaft.

102 *ABBREVIATIONS*

RLA	*Reallexikon der Assyriologie.*
TTKY	Türk Tarih Kurumu Yayınlar.

UKN   G. A. Melikišvili. *Urartskie klinoobraznye nadpisi.* Moscow: Izdatel'stvo Akademii Nauk SSSR, 1960. Supplemented by idem, "Urartskie klinoobraznye nadpisi, II," *VDI*, 1971, no. 3:229–55, and no. 4:267–94. (Texts are cited by number, with nos. 1–370 in the original publication and nos. 371–533, together with revisions on some of the earlier work, in the supplement.*)

"UKN II"   Revisions in G. A. Melikišvili, "Urartskie klinoobraznye nadpisi, II," *VDI*, 1971, no. 3:229–55, and no. 4:267–94, of texts that appeared in the earlier publication.

UPD   I. M. Diakonoff. *Urartskie pis'ma i dokumenty.* Moscow and Leningrad: Izdatel'stvo Akademii Nauk SSSR, 1963.

VDI	*Vestnik Drevnej Istorii.*
VON	*Vestnik Obščestvennych Nauk.*
ZA	*Zeitschrift für Assyriologie.*

*In notes where a text which appears in both the Melikišvili and König collections is cited, the text number in *UKN* is given first, followed by the *HCI* number in parentheses. The abbreviations *UKN* and *HCI* are omitted.

NOTES

CHAPTER 1: Problem, Hypothesis, and Sources

1. A possible exception is Armenia under the Artaxiad dynasty. However, its glories were brief—virtually confined to the reign of Tigranes the Great (95–56 B.C.)—and thus there is some doubt as to its success as a political system. Toumanoff claims that its social and political organization was to some extent a replica of the Urartian monarchy, but his view of the latter stresses the feudalistic and federative features of the kingdom. See Cyril Toumanoff, *Studies in Christian Caucasian History* (Washington: Georgetown University Press, 1963), pp. 50–52, 74–78.

2. Richard D. Barnett, "Ancient Oriental Influences on Archaic Greece," in *The Aegean and the Near East: Studies Presented to Hetty Goldman*, ed. Saul Weinberg (Locust Valley, N.Y.: J. J. Augustin, 1956), pp. 212–38.

3. Louis D. Levine, "East-West Trade in the Late Iron Age: A View from the Zagros," in *Le plateau Iranien et l'Asie centrale des origines à la conquête islamique*, Colloques internationaux du Centre national de la recherche scientifique, no. 567 (Paris, 1976), p. 178.

4. Ibid., pp. 178, 179.

5. H. F. W. Saggs, *The Greatness That Was Babylon* (New York: Mentor Books, 1962), p. 114. See also Robert Dyson, "Problems of Protohistoric Iran as Seen from Hasanlu," *JNES* 24 (1965): 203.

6. S. M. Bacieva, "Bor'ba meždu Assiriej i Urartu za Siriju," *VDI*, 1953, no. 2:17–36. Also relevant, but unavailable to me, is A. A. Baramidze, "K voprosu o značenii severnoj Sirii dlja Urartu," *Vestnik Muzeja Gruzii*, 1959, pp. 299–305.

7. G. A. Melikišvili, "Nekotorye voprosy social'no-èkonomičeskoj istorii Nairi-Urartu," *VDI*, 1951, no. 4:22–40. The article was later reprinted, verbatim, as chap. 5, pp. 322–64, of Melikišvili's book *Nairi-Urartu* (Tiflis: Akademija Nauk Gruziiskoj SSR, 1954).

8. I. M. Diakonoff (D'jakonov), "K voprosu o sud'be plennych v Assirii i Urartu," *VDI*, 1952, no. 1:90–100; V. S. Sorokin, "Archeologičeskie dannye dlja karakteristiki social'no-èkonomičeskogo stroja Urartu," *VDI*, 1952, no. 2:127–32.

9. Ibid. and, more recently, I. M. Diakonoff, "Nekotorye dannye o social'nom ustrojstve Urartu," in *Problemy social'no-èkonomičeskoj istorii drevnego mira*, Akademija Nauk SSSR, Institut Narodov Azii (Moscow: Izdatel'stvo Akademii Nauk SSSR, 1963), pp. 55–65.

10. G. A. Melikišvili, "Nekotorye aspekty voprosa o social'no-èkonomičeskom stroe drevnich bliž-nevostočnych obščestv," *VDI*, 1975, no. 2:18–45; for which an English translation is now available as "Some Aspects of the Question of the Socioeconomic Structure of Ancient Near Eastern Societies," *Soviet Anthropology and Archaeology* 17 (1978):25–72.

11. Nicolas Adontz, *Histoire d'Arménie: Les origines du Xⁱ siècle au VIⁱ (Av. J. C.)* (Paris: L'Union Général Arménienne de Bienfaisance, 1946), p. 208.

12. Ibid., p. 215.

13. Toumanoff, *Christian Caucasian History*, p. 52.

14. F. W. König, "Gesellschaftliche Verhältnisse Armeniens zur Zeit der Chalder-Dynastie (9.–7. Jahrhundert v. Chr.)," *AfV* 9 (1954): 60–61.

15. For example, the indexes of two of the most comprehensive works on ancient empires fail to make a reference to Urartu. Karl Wittfogel, *Oriental Despotism* (New Haven: Yale University Press, 1957), is the most detailed treatment of what its author calls "hydraulic" societies, and Urartu fits the definition he advances perhaps better than the Mesopotamian polities that are more often discussed under that rubric. Urartu also seems relevant to the discussion of "historical bureaucratic empires" in S. N. Eisenstadt, *The Political Systems of Empires* (New York: Free Press of Glencoe, 1963).

16. For a list of all Assyrian inscriptions relevant to the study of Urartu, see I. M. Diakonoff, "Assiro-vavilonskie istočniki po istorii Urartu," *VDI*, 1951, no. 2: 257–356; no. 3:206–52.

17. See the chronological tables of J. A. Brinkman in A. Leo Oppenheim, *Ancient Mesopotamia*, 2d ed. rev. (Chicago: University of Chicago Press, 1977), pp. 335–48.

18. For a review of the various dates that have been proposed for Urartian rulers on this basis, and the rather flimsy grounds on which more precise dates are sometimes assigned to the reign of Argišti I, see G. Azarpay, *Urartian Art and Artifacts: A Chronological Study* (Berkeley and Los Angeles: University of California Press, 1968), pp. 85–87, n. 47.

19. F. Thureau-Dangin, *Une relation de la huitième campagne de Sargon*, Textes cunéiforms du Louvre, vol. 3 (Paris: Paul Geuthner, 1912), supplemented by B. Meissner, "Die Eroberung der Stadt Ulhu auf Sargons 8. Feldzug," *ZA* 34 (1922):113–22.

20. Muṣaṣir's ambivalent political status is best reflected in *ABL* 409, where Urzana, its ruler, writes to an official of Sargon reporting on the movements of the Urartian king and his governors. His concluding statement is obviously a claim of neutrality in the conflict between the two powers:

(rev. 3) *ša taš-pur-an-ni* (4) *ma-a : ša la pi-i* (5) *ša* LUGAL *me-me-ni* (6) *Á-šú ina dul₆-li* (7) *lu la ú-ba-la* (8) *ki-i* LUGAL KUR *Aššur*ᵏⁱ (9) *i-lik-an-ni : ak-tal-šú-u* (10) *šá e-pu-šú-ni : e-tap-šá* (11) *ú an-ni-u : a-ki-e* (12) *lak-la-šú*

"Concerning what you wrote saying: 'Without the word of the king let no one put his hand to a ritual.' When the king of Assyria came, did I oppose him? What he [the Urartian king] did he did, and how am I supposed to stop him?"

21. Thureau-Dangin, *Huitième campagne*, lines 336–42, supplemented by Otto Schroeder, *Keilschrifttexte aus Assur historischen Inhalts II*, Wissenschaftliche Veröffentlichung der Deutschen Orient-Gesellschaft, vol. 37 (Leipzig: J. C. Hinrichs Verlag, 1922), no. 141. The ritual described is certainly the presentation of a crown and badges of suzerainty over Urartu to the king, but the broken passage does not permit certainty that this is the original investiture.

22. For an interesting view of Assyrian attitudes toward Urartu, see A. Leo Oppenheim, "The City of Assur in 714 B.C.," *JNES* 19 (1960):133–47.

23. The list of relevant letters published by Diakonoff, "Assiro-vavilonskie istočniki" is in need of revision in view of new discoveries. The following letters in *ABL* are sources, or possibly sources, for the study of Urartu: nos. 101, 104, 112, 123, 139, 144, 145, 146, 148, 197, 198, 205, 251, 252, 306, 380, 381, 409, 424, 434, 441, 444, 448, 492, 515, 544, 548, 590(?), 596, 646, 705, 768, 891, 1048, 1079, 1083, 1196, 1240, 1242, 1295, 1298, and 1414(?). To these should be added the letters in H. F. W. Saggs, "The Nimrud Letters, 1952—Part IV: The Urartian Frontier," *Iraq* 20 (1958):182–212; J. N. Postgate, "Assyrian Texts and Fragments," *Iraq* 35 (1973):21–34, for a collation and retranslation of Nimrud letter no. 39; H. F. W. Saggs, "The Nimrud Letters, 1952—Part IX," *Iraq* 36 (1974):206–9; G. Contenau, *Contrats et lettres d'Assyrie et de Babylonie*, Textes cunéiforms du Louvre, vol. 9 (Paris: Paul Geuthner, 1926), no. 67; and S. Parpola, *Neo-Assyrian Letters from the Kuyunjik Collection*, Cuneiform Texts from Babylonian Tablets in the British Museum, pt. 53 (London: British Museum Publications, 1979), nos. 7, 57, 74, 95, 99, 114, 122, 124, 133, 160, 163, 194, 210, 257, 340, 365, 370, 445, 454, 462, 469, 478, 519, 583, 584, 586, 615, 677, 731, 789, 858, 885, 918.

24. For a comprehensive collection of Urartian texts in transliteration and Russian translation, see *UKN*. Another collection of texts, with German translations and cuneiform copies, is *HCI*.

25. As of 1981, the known Urartian tablets and tablet fragments (some of which are quite inconsequential) are

A. eleven from Karmir Blur, published in *UPD*, nos. 1–11;

B. five from Toprakkale, published in *UPD*, nos. 12–16;

C. five from Bastam, of which

1. one is published by Einar von Schuler, "Urartäische Inschriften aus Bastam II," *AMI* 5 (1972):121–22, 133, Tf. 29;

2. three are published by M. Salvini, "Die urartäische Tontafeln," in W. Kleiss, ed., *Bastam I*, Teheraner Forschungen, vol. 4 (Berlin: Gebr. Mann Verlag, 1979), pp. 115–31;

3. one is unpublished (Field no. Ba 78-1287);

D. others, unpublished, from Çavuştepe, the discovery of which is reported by Machteld J. Mellink, "Archaeology in Asia Minor: Addenda," *AJA* 70 (1966):281.

26. Argišti's annals, more than 370 lines long, are *UKN* 127 and 128 (*HCI* 80, 81, and 82); Sarduri's are *UKN* 155 and 156 (*HCI* 103 and 102, respectively).

27. E.g., *UKN* 193–259, in which the logogram NÍG may be an abbreviation for NÍG.BA or NÍG.GA, both of which appear elsewhere in Urartian.

28. See below, p. 84.

29. J. N. Postgate, *Taxation and Conscription in the Assyrian Empire*, Studia Pohl, Series Maior, vol. 3 (Rome: Biblical Institute Press, 1974), pp. 19–28.

30. For Urartian hieroglyphs, see L. A. Barsegjan, "Ob odnoj urartskoj ieroglifičeskoj nadpisi," *IFŽ*, 1961, nos. 3–4: 238–44; idem, "Ob urartskoj ieroglifičeskoj pis'mennosti," *VON*, 1967, no. 2:85–89; and Richard D. Barnett, "The Hieroglyphic Writing of Urartu," in *Anatolian Studies Presented to Hans Gustav Güterbock on the Occasion of His 65th Birthday*, ed. K. Bittel et al. (Istanbul: Nederlands Historisch-Archaeologisch Instituut, 1974), pp. 43–55. For the use of "Hittite" hieroglyphs by the Urartians, see E. Laroche, "Les hiéroglyphes d'Altıntepe," *Anadolu* 15 (1971):55–61; J. J. Klein, "Urartian Hieroglyphic Inscriptions from Altıntepe," *AnSt* 24 (1974):77–94; and I. M. Diakonoff, "Zamečanija k urartskim ieroglifičeskim nadpisjam iz Altyntepe," *Drevnej Vostok* 3 (1978):150–52.

31. David Hawkins, "Building Inscriptions of Carchemish," *AnSt* 22 (1972):105; "The Negatives in Hieroglyphic Luwian," *AnSt* 25 (1975):149–50; "Some Historical Problems of the Hieroglyphic Luwian Inscriptions," *AnSt* 29 (1979):160–62.

32. For Babylonian and Biblical references to Urartu, see I. M. Diakonoff, "Assiro-vavilonskie isto-čniki," *VDI*, 1951, no. 3:214–16, 244–52.

33. Xenophon, *Anabasis* 4.4–6.

34. A thorough bibliography for archaeological publications on Urartian sites is to be found in W. Kleiss et al., *Topographische Karte von Urartu*, Archäologische Mitteilungen aus Iran Ergänzungsband 3 (Berlin: Dietrich Reimer Verlag, 1976).

35. For bibliography on these sites, see n. 34, above, and Afif Erzen, *Çavuştepe I*, TTKY, ser. 5, no. 37 (Ankara: Türk Tarih Kurumu, 1978).

36. Stephan Kroll, *Keramik urartäischer Festungen in Iran*, Archäologische Mitteilungen aus Iran Ergänzungsband 2 (Berlin: Dietrich Reimer Verlag, 1976).

37. Wolfram Kleiss, "Urartäische Plätze in Iranisch-Azerbaidjan," *IM* 18 (1968):1–44; idem, "Bericht über zwei Erkundungsfahrten in Nordwest-Iran," *AMI* 2 (1969):20–27; idem, "Bericht über Erkundungsfahrten in Nordwest-Iran im Jahre 1969," *AMI* 3 (1970):112–20; idem, "Bericht über Erkundungsfahrten in Iran im Jahre 1970," *AMI* 4 (1971):56–72; idem, "Ausgrabungen in der urartäischen Festung Bastam (Rusahinili) 1970," *AMI* 5 (1972):60–68; idem, "Bericht über Erkundungsfahrten in Iran im Jahre 1971," ibid., pp. 144–59; idem, "Bericht über Erkundungsfahrten in Iran im Jahre 1972," *AMI* 6 (1973):7–41; idem, "Planaufnahmen urartäischer Burgen in Iranisch-Azerbaidjan im Jahre 1972," ibid., pp. 81–89; idem, "Planaufnahmen urartäischer Burgen und Neufunde urartäischer Anlagen in Iranisch-Azerbaidjan im Jahre 1973," *AMI* 7 (1974):79–106; idem, "Planaufnahmen urartäischer Burgen und urartäische Neufunde in Iranisch-Azerbaidjan im Jahre 1974," *AMI* 8 (1975):51–70; idem, "Urartäische Plätze im Iran (Stand der Forschung Herbst 1975)," *AMI* 9 (1976):19–43; W. Kleiss and Stephan Kroll, "Urartäische Plätze in Iran," *AMI* 10 (1977):53–118; idem, "Urartäische Plätze und Anlagen des 2.–1. Jahrtausends v. Chr. in Iran," *AMI* 11 (1978):27–71; idem, "Vermessene urartäische Plätze in Iran (West-Azerbaidjan) und Neufunde (Stand der Forschung 1978)," *AMI* 12 (1979):183–243; W. Kleiss, "Vorgeschichtliche, urartäische und mittelalterliche Burgen in Ostazerbaidjan (Ein Nachtrag zu den Ergebnissen 1978)," *AMI* 14 (1981):9–19.

38. Kent V. Flannery, "The Cultural Evolution of Civilizations," *Annual Review of Ecology and Systematics* 3 (1972):412.

CHAPTER 2: The Land of Urartu

1. M. Wäfler, "Urartu and Assyrien," in *Urartu: Ein wiederentdeckter Rivale Assyriens*, ed. H.-J. Kellner, Katalog der Ausstellung. Prähistorische Staatssammlung München (Munich: 1976), p. 17.

2. Cf. the map of G. Azarpay, *Urartian Art and Artifacts: A Chronological Study* (Berkeley and Los Angeles: University of California Press, 1968), p. 9.

3. For Verachram, see W. Kleiss, "Bericht über Erkundungsfahrten in Iran im Jahre 1970," *AMI* 4 (1971):60–62; idem, "Planaufnahmen urartäischer Burgen und Neufunde urartäischer Anlagen in Iranisch-Azerbaidjan im Jahre 1973," *AMI* 7 (1974):82–93. For Qal'eh Ismael Ağa, see idem, "Urartäische Plätze im Iran (Stand der Forschung Herbst 1975)," *AMI* 9 (1976):26–30; W. Kleiss and S. Kroll, "Urartäische Plätze in Iran," *AMI* 10 (1977):64–68, 98–109. For Livar, see Kleiss, *AMI* 4 (1971): 56–58; Kleiss and Kroll, *AMI* 10 (1977):84–89. The criteria used by Kleiss for identifying and dating Urartian sites are most succinctly summarized in W. Kleiss, "Urartäische Architektur," in *Urartu: Ein wiederentdeckter Rivale Assyriens*, ed. H.-J. Kellner, pp. 28–44.

4. Tahsin Özgüç, *Altıntepe*, TTKY, ser. 5, no. 24 (Ankara: Türk Tarih Kurumu, 1966), pp. 39–44.

5. Tahsin Özgüç, *Altıntepe II*, TTKY, ser. 5, no. 27 (Ankara: Türk Tarih Kurumu, 1969), p. 71.

6. Ibid., p. 70.

7. J. J. Klein, "Urartian Hieroglyphic Inscriptions from Altıntepe," *AnSt* 24 (1974): 77–94; E. Laroche, "Les hiéroglyphes d'Altıntepe," *Anadolu* 15 (1971):55–61.

8. Özgüç speaks confidently of Urartu's government as a "feudal system" and of Altıntepe as "the capital of a feudal unit at the Western boundary of Urartu . . ." (*Altıntepe II*, pp. 59, 64) but offers no specific grounds on which this opinion is based.

9. This figure is derived as follows:

Turkey (Ağrı, 11,488; Bingöl, 8,911; Bitlis, 8,551; Elâzığ, 9,951; Erzincan, 12,165;

Erzurum, 26,582; Hakkâri, 9,885; Kars, 19,407; Muş, 8,713; Tunceli, 8,676;	
Van, 21,823	146,152
Iran (West Azerbaijan Ostan)	43,660
Armenian SSR	29,740
Total square kilometers	219,552

This is only a rough approximation, since the modern divisions include some areas not in Urartu (e.g., much of Hakkâri) and exclude some that probably should be considered (e.g., the Aras valley near Nachičevan). The statistics were taken from Turkey, Devlet İstatistik Enstitüsü, *Türkiye istatistik yıllığı*

1981 (Ankara: 1981), p. 3; *Iran Yearbook 1977* (Teheran: Kayhan Research Associates, 1977), p. 459; and A. A. Aslanjan et al., *Armenija* (Moscow: Izdatel'stvo "Mysl'," 1966), p. 314.

10. Extensive use of artificial terraces might actually have made more land available to the Urartians for intensive agriculture than is present today, but no research has been done on this subject. X. de Planhol regards the terrace as an index of intensity of soil utilization and commitment to sedentary agriculture. He notes that terraces are almost unknown in Anatolia today but are used in Azerbaijan. See X. de Planhol, "Aspects of Mountain Life in Anatolia and Iran," in *Geography as Human Ecology*, ed. S. R. Eyre and G. R. J. Jones (London: Edward Arnold, 1966), p. 304.

11. The channel linking Lake Sevan with the Razdan, which flows into the Aras, is generally agreed to be artificial. Lehmann-Haupt has suggested that it is, in fact, an Urartian construction. See C. F. Lehmann-Haupt, *Armenien einst und jetzt*, 2 vols. (Berlin and Leipzig: B. Behr/Friedrich Feddersen, 1910–31), 1:164.

12. The most notable product of these lakes is the fish known as *tarekh* (*Chalcaburnus tarichi*), which is abundant where rivers flow into Lake Van. They are caught in the spring and salted to serve as winter food. P. H. Davis, "Lake Van and Turkish Kurdistan: A Botanical Journey," *Geographical Journal* 122 (1956): 156–57.

13. Apparently it is not absolutely impossible to move sheep across the Taurus in winter. Lynch, writing at the turn of the century, describes a system in which sheep from Hınıs were moved to Diyarbakır and thence sold in cities in Syria. The trade was at its height in the early winter. He was told that it was "no easy matter" to get the sheep through the snow, and adds, "To me it seems a most remarkable feat." H. F. B. Lynch, *Armenia: Travels and Studies*, 2 vols. (London: Longmans, Green & Co., 1901), 2:187.

14. F. R. Maunsell, "Kurdistan," *Geographical Journal* 3 (1894):82.

15. Xenophon, *Anabasis* 4.5. Translation by Carleton L. Brownson in *Xenophon III Anabasis*, Loeb Classical Library (Cambridge: Harvard University Press, 1922), pp. 306–9.

16. W. Kleiss et al., *Topographische Karte von Urartu*, Archäologische Mitteilungen aus Iran Ergänzungsband 3 (Berlin: Dietrich Reimer Verlag, 1976).

17. Sırrı Erinç and Necdet Tunçdilek, "The Agricultural Regions of Turkey," *Geographical Review* 42 (1952):188.

18. Ibid., pp. 188–91.

19. H. Bowen-Jones, "Agriculture," in *The Cambridge History of Iran*, vol. 1, ed. W. B. Fisher (Cambridge: Cambridge University Press, 1968), pp. 571, 595–96.

20. For the limited amount of pollen data available and the caution with which the data must be used, see W. van Zeist, "Reflections on Prehistoric Environments in the Near East," in *The Domestication and Exploitation of Plants and Animals*, ed. P. Ucko and G. Dimbleby (Chicago: Aldine, 1969), pp. 35–46. I can find no support for Burney's statement: "Existing pollen analyses can tell little of the conditions after c. 400 B.C., before which annual precipitation, though probably no less than today, was more concentrated in the winter months, with longer, hotter and drier summers than thereafter . . ." (C. A. Burney, "Urartian Irrigation Works," *AnSt* 22 [1972]:185).

21. M. G. Tumanjan and V. O. Gulkanjan both argue for increasing desiccation after the Bronze Age. "Round-grain wheat" (*Triticum vulgare antiquorum Heer*), found at Bronze Age sites in Soviet Armenia, was an adaptation to the damper soil of that period and gradually gave way to wheats that were more suitable to the drier climate of the Urartian period. Gulkanjan attributes the desiccation to human action in clearing forests. See V. O. Gulkanjan, "O nekotorych sel'skochozjajstvennych kul'turach iz Argištichinili," *IFŽ*, 1966, no. 4:104–5. Boessneck and Krauss, on the basis of faunal evidence from Bastam, note that the climate has been pretty much the same for the last four thousand years, and that the area of Bastam can never have been heavily wooded, although summer and fall cannot have been quite so dry. See J. Boessneck and R. Krauss, "Die Tierwelt um Bastam/Nordwest-Azerbaidjan," *AMI* 6 (1973):130.

22. All elevations given in this chapter are taken from the *Operational Navigational Charts* distributed by the U.S. Department of Commerce, National Ocean Survey. For the sake of convenience, I have converted the figures to metric units. Elevations given in the literature on eastern Anatolia and neighboring areas vary considerably, and to a degree that cannot be explained by shifts in the water level of the lakes, which do in fact take place. The *ONC*s have the advantage of giving a consistent picture for the whole area of Urartu.

23. Ali Tanoğlu, Sırrı Erinç, and Erol Tümertekin, *Türkiye Atlası* (Istanbul: Milli Eğitim Basimievi, 1961), maps 25 and 49.

24. Ibid., maps 33 and 34.

25. Lynch, *Armenia*, 2:468–69.

26. James Brant, "Notes of a Journey through a Part of Kurdistan, in the Summer of 1838," *JRGS* 10 (1840):391.

27. Personal observation, July 5–10, 1975.

28. Maunsell, *Geographical Journal* 3 (1894):84.

29. Lynch, *Armenia*, 2:59.

30. Major-General Sir Charles Wilson, ed., *Murray's Handbook for Travellers in Asia Minor, Transcaucasia, Persia, etc.* (London: John Murray, 1895). This work is particularly useful for outlining routes potentially available to the Urartians because of its thoroughness, and because it was written before

mechanization and dynamite made the construction of modern roads and railroad beds possible. Wilson was primarily concerned with travel on horseback, although he did note that there were a few roads in eastern Anatolia which were passable for *arabas* (p. 198).

31. Ibid., route 82, p. 232, and route 81, p. 230.

32. Ibid., route 83, p. 237.

33. Ibid., route 86, pp. 240–41.

34. Ibid., route 84, pp. 237–38.

35. *Landsat* image no. 8249607000500, band 7, June 1, 1976.

36. Wilson, *Handbook for Travellers*, route 81, p. 230, and route 82, p. 232.

37. Ibid., route 82, p. 232.

38. Ibid., p. 230.

39. The primary findspots are Köşk (Güzak), Karahan, and Körzüt on the one hand—all closely grouped together—and the town of Muradiye on the other. For the sake of economy, here and elsewhere in this chapter Urartian texts published in both the major collections will be cited by their number in *UKN*, with the *HCI* number following in parentheses. The texts found in the Muradiye *ova* are thus:

A. from Köşk: 32 (19a), 33 (19b), 65 (41), 66 (58), and 306a–b (Inc. 6, 7a);

B. from Körzüt: 67 (42); and a campaign inscription on several blocks, published in A. M. Dinçol, "Die neuen urartäischen Inschriften aus Körzüt," *IM* 26 (1976):19–30;

C. from Karahan: 95 (15), 107 (69), 120 (70), 124 (62b), 304a–f (Inc. 4a–f); four inscriptions published in A. M. Dinçol and E. Kavaklı, *Die neuen urartaeischen Inschriften aus der Umgebung von Van*, JKF Beiheft 1 (Istanbul: Edebiyat Fakültesi Basımevi, 1978); and four in A. M. Dinçol and E. Kavaklı, "Karahan köyünde bulunan dört yeni Urartu yazıtı," *JKF* 6 (1978):17–32;

D. from Muradiye: 34 (18b), 57 (32), 99 (74); and two in Dinçol and Kavaklı, *Urartaeischen Inschriften*;

E. from Tharr, near Muradiye: 38 (20);

F. from one hour northwest of Muradiye: 35 (18a).

40. *Landsat* image no. 8249607000500, band 7, June 1, 1976.

41. Brant, *JRGS* 10 (1840):402.

42. Kleiss et al., *Topographische Karte*, p. 20, site no. 134.

43. Brant, *JRGS* 10 (1840):404–5.

44. Wilson, *Handbook for Travellers*, route 82, pp. 231–32; route 83, p. 235.

45. Lynch, *Armenia*, 2:30–36.

46. The inscriptions have been found in three groups of two:

A. two of Menua, found 9–11 km north of Erciş—58 (33), 104 (66);

B. two of Sarduri II, located 8 km northeast of Erciş—167 (110), 168 (109);

C. two of Argišti II, from "near" Erciş—275 (125), 276 (124).

47. See below, chap. 4, p. 65 and n. 127.

48. G. Le Strange, *Lands of the Eastern Caliphate* (Cambridge: Cambridge University Press, 1905), p. 183.

49. C. A. Burney, "Urartian Fortresses and Towns in the Van Region," *AnSt* 7 (1957):39.

50. Brant, *JRGS* 10 (1840):405–6.

51. Afif Erzen, *Çavuştepe I*, TTKY, ser. 5, no. 37 (Ankara: Türk Tarih Kurumu, 1978), p. 7.

52. H. Bobek, "Beiträge zur klima-ökologischen Gliederung Irans," *Erdkunde* 6 (1952):65–84.

53. Great Britain, Naval Staff, Naval Intelligence Division, *Persia*, Geographical Handbook Series (1945), pp. 50–51.

54. Hans E. Wulff, *The Traditional Crafts of Persia* (Cambridge: MIT Press, 1966), p. 242.

55. Naval Int. Div., *Persia*, p. 53.

56. Ibid., p. 50.

57. Ibid., pp. 51–52.

58. W. Kleiss, "Bericht über Erkundungsfahrten in Nordwest-Iran im Jahre 1969," *AMI* 3 (1970):119–20.

59. W. Kleiss, "Bericht über Erkundungsfahrten in Iran im Jahre 1972," *AMI* 6 (1973):28. A small amount of Urartian pottery found there may testify to its reuse by Urartians, according to *KUFI*, p. 99.

60. *KUFI*, p. 100.

61. Kleiss and Kroll, *AMI* 10 (1977):116–17.

62. H. C. Rawlinson, "Notes on a Journey from Tabriz, through Persian Kurdistan, . . ." *JRGS* 10 (1840):13–14.

63. Ibid., p. 14.

64. Le Strange, *Lands of the Eastern Caliphate*, p. 165.

65. C. F. Lehmann-Haupt, "Muşaşir und der achte Feldzug Sargons II. (714 v. Chr.)," *MVAG* 21 (1916):126.

66. Rawlinson, *JRGS* 10 (1840):20–21.

67. Wilson, *Handbook for Travellers*, pp. 321–22.

68. The most readable of the three inscriptions is the stele at Kalleh Shīn itself (19 [9]), for which the definitive publication is now Warren C. Benedict, "The Urartian-Assyrian Inscription of Kelishin," *JAOS*

81 (1961):359–85. It commemorates offerings made by Išpuini and Menua to the god Haldi at Muṣaṣir. The Topzawa bilingual (264 [122]), composed by Rusa I, is so badly damaged that little trustworthy information can be derived from it. The third bilingual, only a fragment, was discovered a few kilometers northeast of the pass in 1976 and has not yet been published. For the announcement of its discovery, see Kleiss and Kroll, *AMI* 10 (1977):82–3.

69. W. Kleiss, "Bericht über Erkundungsfahrten in Iran im Jahre 1971," *AMI* 5 (1972):149–51.

70. M. van Loon, "The Inscription of Ishpuini and Meinua at Qalatgah, Iran," *JNES* 34 (1975): 201–7.

71. R. H. Dyson, "Survey of Excavations. Hasanlu," *Iran* 13 (1975):185.

72. Kleiss et al., *Topographische Karte*, site nos. 75 and 51, pp. 31–33.

73. This is particularly apparent in *Landsat* image no. 8213406550500, false-color composite, June 5, 1975.

74. Again, the mountains are not completely impenetrable. There is a modern road via Sero to the Turkish border which reaches the upper valley of the Great Zab. Wilson (*Handbook for Travellers*, p. 238) also mentions a route from Yüksekova (Diza) across the Delası pass (7000 ft. [=2134 m]) to Urumiyeh. None of these routes have enjoyed much favor, however, and Lehmann-Haupt, listing the routes between Lake Van and Lake Urumiyeh, ignores them entirely (*MVAG* 21 [1916]:127).

75. Wilson, *Handbook for Travellers*, p. 320.

76. M. Salvini, "Eine neue urartäische Inschrift aus Mahmud Abad (West Azerbaidjan)," *AMI* 10 (1977):125–36.

77. For bibliography on this site, see above, p. 10 and n. 3. I have computed the area from measurements of Kleiss's plan.

78. H. Filmer, *The Pageant of Persia* (New York and Indianapolis: Bobbs-Merrill, 1936), p. 246.

79. Le Strange, *Lands of the Eastern Caliphate*, p. 166.

80. Naval Int. Div., *Persia*, p. 52.

81. Wilson, *Handbook for Travellers*, p. 238.

82. Kleiss et al., *Topographische Karte*, site nos. 30, 31, 32, 33, 34, 36, 37, and 38 in Iran, pp. 30–31.

83. E.g., *Landsat* image no. 8213406550500, false-color composite, June 5, 1975.

84. Rawlinson, *JRGS* 10 (1840):2–3.

85. *Landsat* image no. 8287306394500, false-color composite, June 13, 1977.

86. Wilson, *Handbook for Travellers*, p. 229.

87. E.g., Charles E. Stewart, *Through Persia in Disguise* (London: George Routledge & Sons, 1911), p. 197; and Edward G. Browne, *A Year amongst the Persians* (Cambridge: Cambridge University Press, 1926), p. 62. Although their accounts were published later, both journeys took place in the 1880s.

88. Kleiss et al., *Topographische Karte*, site nos. 22–24 in Iran, pp. 29–30.

89. E.g., J. Morier, *A Journey through Persia, Armenia, and Asia Minor, to Constantinople . . .* (Philadelphia: Carey, Wells & Lilly, 1816), pp. 195–99.

90. Ibid., where it is stated that the crops were well ahead of those of Tabriz and would be mature in early July.

91. Wilson, *Handbook for Travellers*, p. 235.

92. Ibid., p. 226.

93. Kleiss et al., *Topographische Karte*, site nos. 17, 28, and 72 in Iran, pp. 29, 30, and 33.

94. Kleiss, *AMI* 9 (1976):38–39.

95. If the place is identical to the Kara Zeneh mentioned by Stewart, its control in the 1880s was in the hands of a Kurdish chief who only used it for winter quarters. Stewart, *Through Persia in Disguise*, pp. 186–87.

96. Kleiss et al., *Topographische Karte*, site no. 20 in Iran, p. 29.

97. Not to be confused with the Turkish Arpa (Russian Achurjan), a tributary that forms the Turkish-Soviet border west of Oktemberjan.

98. The existence of the bridge is not entirely certain, but it is highly probable in the light of traces of building on the Iranian bank. See Kleiss, *AMI* 7 (1974):84. Out of reverence for the Vergilian epithet "pontem indignatus Araxes" (*Aeneid* 8.728), one might alternatively argue that these are docking points for a ferry.

99. Kleiss, *AMI* 7 (1974):82–93.

100. Kleiss, *AMI* 9 (1976):41.

101. Aslanjan et al., *Armenija*, pp. 38–39.

102. E.g., Anon., "De la ville d'Erivan, capitale de l'Arménie russe," *Journal Asiatique*, 2d ser., 12 (1833):255–57; A. von Haxthausen, *Transcaucasia: Sketches of the Nations and Races between the Black Sea and the Caspian* (London: Chapman and Hall, 1854):195–99.

103. Aslanjan et al., *Armenija*, pp. 150–51.

104. The modern names of these sites are Amavir and Arin-berd (in Erevan), respectively. For bibliography, see Kleiss et al., *Topographische Karte*, site nos. 5 and 9 in the Soviet Union, pp. 25–26.

105. The routes listed below and the elevations are taken from *Operational Navigational Charts* G-4 and F-4, *Tactical Pilotage Chart* G-4B, and the map appended to Lynch, *Armenia*, 1.

106. While it is not essential, irrigation is still practiced here, and a major canal carries water from the Arpa to the north and east of the modern city of Leninakan (Aslanjan et al., *Armenija*, p. 150).

107. Two inscriptions, both carved on living rock in the name of Argišti I, are known from this area. One (132 [87]) is at Gunlidžan, 21 km southeast of Leninakan on the slopes of Mount Aragac, and the other (133 [88]) is at Ganlidža, on a cliff on the left bank of the Achurjan (Arpa Çay), 8.5 km northwest of Leninakan. Neither mentions any Urartian building activity.

108. Aslanjan et al., *Armenija*, pp. 317–18.

109. Ibid.

110. Ibid., pp. 284–85.

111. The five inscriptions found on the shores of the lake are 134 (86), 160 (106), 161 (105), 265 (119), and 266 (118). All are from different sites, and only the last two, dated to Rusa I, mention building.

112. Morier, *Journey through Persia*, p. 309.

113. *Landsat* image no. 822707101500, false-color composite, September 6, 1975.

114. Vital Cuinet, *La Turquie d'Asie*, 4 vols. (Paris: Ernest Leroux, 1890–94), 1:208.

115. Lynch, *Armenia*, 2:196–97.

116. 36 (23), 37 (24), 68 (43), 69 (44), 426 (not in *HCI*).

117. 130 (89) from Sarıkamış. Inscriptions from Zidikân (23 [6b]) and Velibaba (68 [43]) show that both sides of the pass were in Urartian hands. C. A. Burney, "A First Season of Excavation on the Urartian Citadel of Kayalıdere," *AnSt* 16 (1966):62, mentions an Urartian fortress standing in the pass itself.

118. For bibliography, see Kleiss et al., *Topographische Karte*, site no. 64 in Turkey, p. 15. The village name also frequently appears as Pasinler.

119. Cuinet, *Turquie d'Asie*, 1:231.

120. For bibliography see Kleiss et al., *Topographische Karte*, site no. 115 in Turkey, p. 19.

121. Lynch, *Armenia*, 2:2–3.

122. Tanoğlu, Erinç, and Tümertekin, *Türkiye Atlası*, map no. 18.

123. Ibid., map no. 40.

124. Stewart reports that when he crossed the plain in May of 1880, the swamps created by melting snow considerably slowed his progress. However, the year before the crops had failed because of drought (*Through Persia in Disguise*, pp. 168–69).

125. Only one inscription, 23 (6b), and no Urartian sites have been found on this plain.

126. Lynch, *Armenia*, 2:89; Wilson, *Handbook for Travellers*, pp. 230–31.

127. Personal observation of July 10, 1975.

128. Cuinet, *Turquie d'Asie*, 2:591 adds rye, millet, lentils, and chick peas to these crops.

129. Burney, *AnSt* 22 (1972):182.

130. *Landsat* image no. 822707104500, false-color composite, September 6, 1975.

131. For bibliography on the sites, see Kleiss et al., *Topographische Karte*, nos. 45, 117, and 44, respectively, in Turkey, pp. 13, 19. The inscriptions are 14/16 (5b), 15/118 (53c), 87 (53d), 105 (67), 106 (68), 162 (111a), 372 (–), 373 (–), 374 (–), 375 (–), 384 (140), 403 (–), 423 (–).

132. 59 (34), 60 (35), 61 (37/38), 72 (47), 79 (39), 125 (36).

133. C. A. Burney and G. R. J. Lawson, "Measured Plans of Urartian Fortresses," *AnSt* 10 (1960): 194–96.

134. 40 (27/28) and 41 (26). Both deal with conquests of Menua.

135. Burney, *AnSt* 22 (1972):179, states, "twenty-five sites of some significance were found" in the vilayet of Muş (which includes the *kazas* of Varto, Bulanık, and Malazgirt), but apparently none of these were on the Muş plain itself. See Kleiss et al., *Topographische Karte*, Blatt 1.

136. Lynch, *Armenia*, 2:174.

137. Wilson, *Handbook for Travellers*, pp. 244–46.

138. Lynch, *Armenia*, 2:175.

139. Brant, *JRGS* 10 (1840):352; Cuinet, *Turquie d'Asie*, 2:577–78.

140. Erinç and Tunçdilek, *Geographical Review* 42 (1952):185.

141. Tanoğlu, Erinç, and Tümertekin, *Türkiye Atlası*, maps 20–22.

142. Malcolm Wagstaff, "Aşvan 1968–1972: Physical Geography and Settlements," *AnSt* 23 (1973): 201–3.

143. Ellsworth Huntington, "The Valley of the Upper Euphrates River and Its People," *Bulletin of the American Geographical Society* 34 (1902):305.

144. Cf. Kleiss et al., *Topographische Karte*, Blatt 1.

145. Cf. Harald Hauptmann, "Norşun-Tepe," *IM* 19/20 (1968/70):25. I know of no evidence for a reconquest of the area by Argišti II.

146. Ibid., p. 73.

147. Ibid., p. 72.

148. Tanoğlu, Erinç, and Tümertekin, *Türkiye Atlası*, map no. 68.

149. Erinç and Tunçdilek, *Geographical Review* 42 (1952):188–89.

150. Ibid., p. 189.

151. J. M. Kinneir, *Journey through Asia Minor, Armenia, and Koordistan in the years 1813 and 1814* (London: J. Murray, 1818), p. 367.

152. Ibid.
153. Lynch, *Armenia*, 2:221–22.
154. Kleiss et al., *Topographische Karte*, p. 23, sub no. 175, says that the inscription is of Argišti I.
155. Cuinet, *Turquie d'Asie*, 1:199.
156. James Brant, "Journey through a Part of Armenia and Asia Minor, in the Year 1835," *JRGS* 6 (1836):201.
157. Tanoğlu, Erinç, and Tümertekin, *Türkiye Atlası*, maps 18, 49.
158. Erinç and Tunçdilek, *Geographical Review* 42 (1952):185.
159. Wilson, *Handbook for Travellers*, p. 198.
160. Xenophon, *Anabasis* 4.5.
161. Plutarch, *Lucullus* 32.
162. Plutarch, *Antonius* 51.
163. Tacitus, *Annales* 12.50.
164. Cf. Lehmann-Haupt, *MVAG* 21 (1916):136, where it is stated that an important road which had connected Van with Topzāwa was largely destroyed by erosion and neglect.
165. G. Buccellati, review of *Nairi e Ur(u)aṭri*, by Mirjo Salvini, in *JAOS* 92 (1972):297.
166. According to Lynch, the best "natural passage" between the Lake Van district and Mesopotamia was via Bitlis and Siirt. It was "well adapted to caravans," but had "not as yet been rendered passable to wheeled traffic" (*Armenia*, 2:148). No modern road follows this track, although there is of course now a political frontier to be crossed that did not exist in the Ottoman Empire. The road from Başkale to Çölemerik (Hakkâri) is difficult and closed by snow five months of the year according to Davis, *Geographical Journal* 122 (1956):162. Wilson describes the routes from Başkale farther south as "rough and difficult" (*Handbook for Travellers*, p. 240). He also describes the route via Bitlis as the most convenient approach to Cizre from Van and lists three other alternatives as somewhat exotic summer trips for those who appreciate mountains, hunting, and the wonders of nature (ibid., pp. 240–41).
167. European travelers of the late nineteenth century averaged between six and eight of Wilson's riding hours per day. For example, Stewart, *Through Persia in Disguise*, pp. 156–97, and Browne, *A Year amongst the Persians*, pp. 40–56, show an average of 6.3 and 7.6 hours per day, respectively, between Erzurum and Khvoy. Lynch, *Armenia*, 2:116, claims that the journey from Van to Bitlis via the south side of the lake takes four days, i.e., 7.1 of Wilson's hours per day.
168. David Oates, *Studies in the Ancient History of Northern Iraq* (London: Oxford University Press, 1968), p. 49.

CHAPTER 3: Settlement and Defensive Networks

1. For Qal'eh Sarandj, see W. Kleiss, "Planaufnahmen urartäischer Burgen und urartäische Neufunde in Iranisch-Azerbaidjan im Jahre 1974," *AMI* 8 (1975):54–58. For bibliography on Tepe Kasyan, Qahramanlu, Tepe Marand, and Haftavan Tepe, see W. Kleiss et al., *Topographische Karte von Urarṭu*, Archäologische Mitteilungen aus Iran Ergänzungsband 3 (Berlin: Dietrich Reimer Verlag, 1976), site nos. 71, 68, 24, and 32, respectively, in Iran, pp. 30, 33.
2. For the names and archaeological literature on these sites, see Kleiss et al., *Topographische Karte*, pp. 28–33; W. Kleiss and S. Kroll, "Urartäische Plätze in Iran," *AMI* 10 (1977):53–118; and idem, "Urartäische Plätze und Anlagen des 2.–1. Jahrtausends v. Chr. in Iran," *AMI* 11 (1978):27–71.
3. In addition to the sites covered by n. 2, above, Professor Kleiss has also informed me of the existence of the following, which are tentatively identified as Urartian:
   a. a tepe on a hill above Agrab Tepe;
   b. Qal'eh Gerde Qalat, 3 km southeast of Tepe Dozokh, with early Iron Age and seventh-century Urartian remains;
   c. a small castle 3 km east of Qoṭūr dated to the middle Iron Age;
   d. Qal'eh Havaš, 9 km east of Qoṭūr, a medium-sized castle of the early to middle Iron Age;
   e. Qal'eh Said Tach-edin, 27 km southeast of Khvoy, a small seventh-century Urartian castle and a large settlement;
   f. a tepe with Urartian pottery and strong stone walls, 16 km northwest of Mahābād;
   g. a watchtower, 10 km due west of Verachram, with no pottery.
4. Excavations have been made at Bastam, Hasanlu, Haftavan, Agrab Tepe, Qal'eh Ismael Ağa, Sangar, and Geoy Tepe. Kleiss and Kroll, *AMI* 10 (1977):116, express doubt that the last is Urartian and suggest that it may have been destroyed by the Urartians when they entered the area. Sangar and Qal'eh Ismael Ağa have been probed only with small soundings. At Haftavan and Hasanlu the Urartian remains are less significant than those of earlier periods and, in the latter instance, are for the most part unpublished.
5. W. Kleiss, "Urartäische Plätze in Iran (Stand der Forschung Herbst 1975)," *AMI* 9 (1976):41. The same thoughts are expressed again by Kleiss, "Urartäische Architektur," in *Urartu: Ein wiederentdeckter Rivale Assyriens*, ed. H.-J. Kellner, Katalog der Ausstellung, Prähistorische Staatssammlung München (Munich: 1976), p. 28, where it is stated that a *Hauptort* may be distinguished from other sites "durch Lage, Grösse und Bedeutung der Funde."

6. Kleiss, *AMI* 9 (1976):41–43.

7. W. Kleiss, "Urartäische Plätze in Iranisch-Azerbaidjan," *IM* 18 (1968):3–13.

8. Kleiss, *AMI* 9 (1976):41.

9. *Landsat* image no. 8287306394500, false-color composite, June 13, 1977.

10. Kleiss, *AMI* 8 (1975):60–62.

11. Kleiss, *AMI* 9 (1976):20–24.

12. Kleiss and Kroll, *AMI* 10 (1977):62–64.

13. The idea that this building might have been erected by besiegers rather than the inhabitants of Bastam (W. Kleiss, "Ausgrabungen in der urartäischen Festung Bastam (Rusahinili) 1969," *AMI* 3 [1970]:42) has been given up in the light of ceramic finds and evidence for internal structures discovered in recent excavations.

14. Kleiss and Kroll, *AMI* 10 (1977):60.

15. Ibid., p. 90.

16. Ibid., p. 93.

17. Ibid., p. 61.

18. Ibid.

19. W. Kleiss, "Ausgrabungen in der Festung Bastam 1970," *AMI* 5 (1972):64–67.

20. There is an area below the hill on which Ašaghi Qorul stands where pottery has been found, and consequently it has been called a "settlement," but no structural remains are in evidence.

21. *KUFI*, p. 110.

22. Ibid.

23. For the most recent discussion of the settlement, see W. Kleiss, *Bastam I*, Teheraner Forschungen, vol. 4 (Berlin: Gebr. Mann Verlag, 1979), pp. 26–37. The Hallenbau, Nordgebäude, Hangbebauung (Siedlunghangmauer) are all clearly public buildings rather than houses.

24. Kleiss, *AMI* 9 (1976):42.

25. W. Kleiss, "Planaufnahmen urartäischer Burgen in Iranisch-Azerbaidjan im Jahre 1972," *AMI* 6 (1973):87.

26. Viz., Qal'eh Gavur. For a scale plan, see Kleiss and Kroll, *AMI* 11 (1978):34–38.

27. Ibid., pp. 52, 70.

28. Kleiss and Kroll, *AMI* 10 (1977), Abb. 4, following p. 56.

29. Approximately 285 sq. km. of green foliage are visible in *Landsat* image no. 82873606394500, false-color composite, June 13, 1977. This foliage is much less dense than that around Bastam and Verachram, however, reflecting the effects of the present salinization of the plain.

30. Kleiss et al., *Topographische Karte*, site nos. 18, 23, and 24 in Iran, pp. 29–30; *KUFI*, p. 110.

31. Kleiss, *AMI* 5 (1972):147.

32. *Landsat* image no. 8251206481500, false-color composite, June 17, 1976.

33. Charles Burney, "Excavations at Haftavan Tepe 1969: Second Preliminary Report," *Iran* 10 (1972):139.

34. Ibid.

35. Ibid.

36. Kleiss et al., *Topographische Karte*, no. 38 in Iran, p. 31; *KUFI*, pp. 110, 171. Kleiss, "Bericht über zwei Erkundungsfahrten in Nordwest-Iran," *AMI* 2 (1969):15, makes no reference to Urartian remains in his brief description of the site, but rather notes "prehistoric" and Islamic remains.

37. Kleiss et al., *Topographische Karte*, site nos. 31, 33, 34, 35, 36, and 37 in Iran, on p. 30. Also of possible relevance is site no. 67 on p. 33, but I have not been able to find any mention or description of it in the place cited, *AMI* 9. *KUFI*, p. 110, lists it among the tepes.

38. Kleiss, *IM* 18 (1968):33, 36.

39. Kleiss and Kroll, *AMI* 10 (1977):64–68.

40. W. Kleiss, "Bericht über Erkundungsfahrten in Iran im Jahre 1970," *AMI* 4 (1971): 67.

41. W. Kleiss, "Planaufnahmen urartäischer Burgen und Neufunde urartäischer Anlagen in Iranisch-Azerbaidjan im Jahre 1973," *AMI* 7 (1974):101.

42. Kleiss, *AMI* 8 (1975):52.

43. Kleiss et al., *Topographische Karte*, site nos. 70 and 76 in Iran, on p. 33.

44. Kleiss and Kroll, *AMI* 10 (1977):116.

45. Ibid., pp. 70–72.

46. Ibid.

47. Kleiss, *AMI* 6 (1973):29. Cf. O. W. Muscarella, "Excavations at Agrab Tepe, Iran," *Metropolitan Museum Journal* 8 (1973):69, for alternative functions.

48. Kleiss et al., *Topographische Karte*, site no. 77, p. 33; Kleiss, *AMI* 9 (1976):33–34.

49. Kleiss and Kroll, *AMI* 10 (1977):78.

50. Kleiss, *AMI* 9 (1976):24–26.

51. Kleiss, *AMI* 8 (1975):58.

52. Kleiss, *AMI* 6 (1973):83 and Abb. 4 on p. 84.

53. Kleiss, *AMI* 11 (1978):36–41.

54. The site is dated to the second half of the ninth century B.C. by *KUFI*, p. 167.

55. The major publications on the route of the campaign are: F. Thureau-Dangin, *Une relation de la huitième campagne de Sargon*, Textes cunéiforms du Louvre, vol. 3 (Paris: Paul Geuthner, 1912), pp. i–xx; C. F. Lehmann-Haupt, "Muṣaṣir und der achte Feldzug Sargons II. (714 v. Chr.)," *MVAG* 21 (1916):119–51; H. A. Rigg, "Sargon's 'Eighth Military Campaign,'" *JAOS* 62 (1942):130–38; E. M. Wright, "The Eighth Campaign of Sargon II of Assyria (714 B.C.)," *JNES* 2 (1943):173–86; L. D. Levine, "Sargon's Eighth Campaign," in *Mountains and Lowlands: Essays in the Archaeology of Greater Mesopotamia*, ed. L. D. Levine and T. C. Young, Bibliotheca Mesopotamica, vol. 7 (Malibu: Undena Publications, 1977), pp. 135–51; Altan A. Çilingiroğlu, "The Eighth Campaign of Sargon II," *JKF* 4/5 (1976/77):252–71; W. Kleiss, "Alte Wege in West-Iran," *AMI* 10 (1977):137–51, esp. 137–41; Walter Mayer, "Sargons Feldzug gegen Urartu—714 v. Chr.: Eine militärhistorische Würdigung," *Mitteilungen der Deutschen Orientgesellschaft* 112 (1980):13–33.

56. Thureau-Dangin, *Huitième campagne*, lines 182, 185, 198, 231, 268, 272, 293, and 305.

57. The lines in Thureau-Dangin, *Huitième campagne* devoted to each cycle are as follows: in Zaranda: (1) 167–83, (2) 184–87; in Sangibutu: (1) 188–98, (2) 199–232, (3) 233–68; in Armarīlî: 269–79; in Ajadi: 280–96; in Uajais: 298–305.

58. None of these terms is specific to Urartu, and Assyrian campaigns in other areas, such as Babylonia, also focus on named cities associated with a much larger number of unnamed "cities of the neighborhood." But in no other campaign is this pattern so regular, extended, and formalized; nowhere else is the progress of the army traced through a series of provinces and cycles in this way.

59. *CAD*, D, p. 100a, favors "fortress" in the translations it gives for *āl dannūti*, but the passages cited imply no such connotation.

60. E.g., *ARAB*, 2:86: "The city of Ulhu, a stronghold at the [foot of Mount Kishpal]. . . ."

61. B. Meissner, "Die Eroberung der Stadt Ulhu auf Sargons 8. Feldzug," *ZA* 34 (1922):114–17, lines 200 and 214; Thureau-Dangin, *Huitième campagne*, lines 233, 235–39, 270–72, 299.

62. See below, table 17.

63. Thureau-Dangin, *Huitième campagne*, line 299.

64. Ibid., lines 298–305. The description of the site fits well with Qalatgah, which can be approached from higher ground to the north, while it is close to agricultural land and groves of trees watered by a powerful spring on the south. Line 302, "*ša* ᵘʳᵘ *bir-ti šu-a-ti ku-tal-la-šá ak-šu-ud*," is construed by Thureau-Dangin and *CAD*, K, p. 604b, to mean that the rear of the fortress was taken, while *ARAB*, 2:92 translates, "I took that fortress from the rear." Although grammatically the former is more compelling, either interpretation would work well for Qalatgah, which has a definite "back," and where there are outlying areas that could be taken without controlling the citadel itself.

There are other grounds for identifying Qalatgah with Uajais. The damaged Urartian inscription found there mentions a place called Uiše in a broken context, and this is an acceptable Urartian form of the variants Uâsi, Uajais, Uesi, etc., that are found in Assyrian texts. Cf. M. van Loon, "The Inscription of Ishpuini and Meinua at Qalatgah, Iran," *JNES* 34 (1975):205–7, who accepts the identity of the name but argues for a different location. But Qalatgah also fits the requirement of being on the "lower" border of Urartu, and it stands in the correct relationship to the passes at Kalleh Shīn and Khānehshan for it to be on Sargon's return march to Assyria. Sargon says that Urzana of Muṣaṣir blocked his path, forcing him to take a wild and dangerous route through the mountains to sack Muṣaṣir itself. The normal route for an army would be via Khāneh. The Kalleh Shīn pass, which inscriptions clearly relate to Muṣaṣir, would fit the description of the difficult mountain wanderings Sargon claims to have undertaken. Finally, Qalatgah is the only large site in this region south of the plain of Urumiyeh, and thus would have the best claim to be the strongest of Rusa's fortresses.

65. Thureau-Dangin, *Huitième campagne*, lines 199–232, supplemented by Meissner, *ZA* 34 (1922):113–22, and Otto Schroeder, *Keilschrifttexte aus Assur historischen Inhalts, II*, Wissenschaftliche Veröffentlichung der Deutschen Orient-Gesellschaft, vol. 37 (Leipzig: J. C. Hinrichs Verlag, 1922), no. 141. Unfortunately, much of the text is unclear because it is damaged at this point. For an English translation, see *ARAB*, 2:86–88. Carlo Zaccagnini, "An Urartean Royal Inscription in the Report of Sargon's Eighth Campaign," in *Assyrian Royal Inscriptions: New Horizons*, ed. F. M. Fales, Orientis Antiqui Collectio, vol. 17 (Rome: Istituto per l'Oriente, 1981), pp. 259–92, argues that the Ulhu episode is a literary excursus based on an Urartian inscription—a thesis which, if accepted, casts some doubt on the validity of the description.

66. *ARAB*, 2:8.

67. Cf. J. Laessøe, "The Irrigation System at Ulhu," *JCS* 5 (1951):21–32.

68. Meissner, *ZA* 34 (1922):116–17, lines 211, 216.

69. Ibid., pp. 116–19, lines 220–26.

70. Ibid., line 211; *CAD*, M, pt. 2, p. 192a.

71. Meissner, *ZA* 34 (1922):line 217.

72. The word is apparently a compound composed of the Urartian royal name plus the word *hurādi*, "soldier." The text states that this fortress was built on Mount *Kiš-te-ir*, which Meissner, *ZA* 34 (1922):120, suggests is the same as Mount Kišpal, at the foot of which Sargon's annals say Ulhu was located. Meissner cannot account for the discrepancy in names.

73. Ibid., pp. 216–17, line 212. See also *CAD*, K, p. 34a.

74. Thureau-Dangin, *Huitième campagne*, line 239.
75. Ibid., lines 240–42.
76. Ibid., lines 245, 261–62.
77. Ibid., line 260.
78. Ibid., lines 270–72; *CAD*, H, p. 201a.
79. Thureau-Dangin, *Huitième campagne*, lines 274–76.
80. The text actually names only twenty-nine, but gives their total as thirty.
81. There are two candidates for this "sea": Lake Van and Lake Urumiyeh. Thureau-Dangin favored the former, while Lehmann-Haupt, Rigg, Levine, Çilingiroğlu, and Kleiss have all argued for the latter. For bibliography, see n. 55, above. As it stands, the reference in the text, which has cities on the shore with mountains rising sharply behind them, sounds more like Lake Van than Lake Urumiyeh, where fluctuations in the water level make settlement directly on the shore difficult in most areas. However, the description may simply be poetic, or apply to the northwest corner of the lake, where mountains, and Urartian sites, do approach the lake closely, so it cannot be used to resolve the problem of the route.
82. See the passage quoted on p. 43. Presumably Argištiuna is the missing thirtieth member of the list, since the other *birtu*, Qallania, is included.
83. *CAD*, B, p. 261a.
84. Thureau-Dangin, *Huitième campagne*, lines 167, 287, 270, and 299, respectively, for Ušqaja, Argištiuna and Qallania, Bubzi, and Uajais. For Sardurihurda see Meissner, *ZA* 34 (1922):116–17, line 212.
85. In cuneiform writing, the same determinative, KUR, is used before the names of both mountains and lands. The names of Urartian provinces are consistently designated KUR, and it is more likely that geographical features within them would be "mountains" than subordinate "lands." In all cases except Bubzi, descriptions make it clear that the sites either stood on mountains or projected above the plain in some way. Uajais is not connected with any mountain, but when Rusa stationed people there, he sent them "up" (*ušēlima*).
86. Thureau-Dangin, *Huitième campagne*, line 167.
87. Ibid., line 298.
88. Ibid., lines 280–91. Translation is from *ARAB*, 2:91.
89. *CAD*, D, p. 197a–b.
90. Thureau-Dangin, *Huitième campagne*, line 189.
91. Ibid., lines 304–5.
92. Ibid., lines 189–91. Translation is from *ARAB*, 2:85–86.
93. Thureau-Dangin, *Huitième campagne*, line 194. Cf. *CAD*, B, p. 251a, which suggests there were more than two cities involved and hence the presence of other, unnamed *ālāni dannūti*.
94. Thureau-Dangin, *Huitième campagne*, lines 277–79. Translation is from *ARAB*, 2:91.
95. Cf. G. A. Melikišvili, "Nekotorye voprosy social'no-èconomičeskoj istorii Nairi-Urartu," *VDI*, 1951, no. 4:35.
96. The word translated "defenses" in *ARAB* is *maṣṣartu*. The definition is given as "*Bewachung, Wache*," in *AHw*, p. 620b, and always indicates a human "guard" or "watch," rather than physical defences. *CAD*, M. pt. 1, p. 337a, does cite a passage where *maṣṣartu* is paralleled by *halṣu*, clearly a word implying fortifications, but in almost all other cases the word is best defined as "garrison."
97. Thureau-Dangin, *Huitième campagne*, line 184.
98. Kleiss and Kroll, *AMI* 10 (1977):70–72.
99. See n. 3, *g*, above.
100. Although many Urartian sites remain undiscovered, it is unlikely that a major center the size of Livar could exist in these well-studied areas without having been noticed.
101. H. F. B. Lynch, *Armenia: Travels and Studies*, 2 vols. (London: Longmans, Green & Co., 1901), 2:123–24.
102. *KUFI*, pp. 170–72.
103. Ibid., p. 174.
104. At Karmir Blur two different kinds of housing have been discovered. The better houses, with rectilinear plans and carefully laid stone foundations, are comparable to the houses excavated at Bastam. The other category is smaller, with more use of mud brick, and is found farther away from the citadel. An entire book devoted to this settlement is A. A. Martirosjan, *Gorod Tejšebaini* (Erevan: Izdatel'stvo Akademii Nauk Armjanskoj SSR, 1961).

CHAPTER 4: The Monarch and His Role in the Development of the Urartian State

1. The definitions of the term *state* used by such social anthropologists as Robert L. Carneiro are difficult to apply to societies that are known only through archaeological data and meager textual materials. As a conceptual framework, we adopt here the definition used in Gregory A. Johnson, *Local Exchange and Early State Development in Southwestern Iran*, Anthropological Papers, Museum of Anthropology, University of Michigan, no. 51 (Ann Arbor: University of Michigan, 1973), p. 2:

A state, for the purposes of the present discussion, will be defined as a *society* which is primarily regulated through a differentiated and internally specialized decision making organization which is structured in minimally three hierarchical levels, with institutionalized provision for the operation and maintenance of this organization and implementation of its decisions.

The inscriptions of Išpuini and Menua, probably dating before the year 800 B.C., show an institutionalized army which would qualify Urartu for statehood.

2. Herbert Spencer, *The Evolution of Society*, ed. Robert L. Carneiro (Chicago: University of Chicago Press, 1967), p. 77.

3. One duplicate of this text, published as L. Messerschmidt, *Keilschrifttexte aus Assur historischen Inhalts, I,* Wissenschaftliche Veröffentlichung der Deutschen Orient-Gesellschaft, vol. 16 (Leipzig: J. C. Hinrichs, 1911), no. 13, gives the name as *u-raṭ-ri* (column 1, line 27, note 6). Uraṭri served as a standard form of the name after the reign of Shalmaneser until it was replaced by Urarṭu in the time of Aššurnaṣirpal II (883–859 B.C.). See n. 5, below.

4. E. Ebeling, B. Meissner, and E. Weidner, *Die Inschriften der altassyrischen Könige* (Leipzig: Quelle and Meyer, 1926), pp. 112–15. For an up-to-date English translation of this passage, see Albert K. Grayson, *Assyrian Royal Inscriptions* (Wiesbaden: Otto Harrassowitz, 1972–), 1:81.

5. For a history of the evolution of this name from Uruaṭri to Urarṭu and a discussion of the problems of its etymology, see Mirjo Salvini, *Nairi e Ur(u)aṭri,* Incunabula Graeca, vol. 16 (Rome: Centro di Studi Micenei, 1967), p. 24, n. 31. Although the metathesis of the final consonants is puzzling, no one has challenged the view that these are essentially the same name since it was first proposed by Ebeling, Meissner, and Weidner in *Inschriften der altassyrischen Könige,* pp. 113–14, n. 9. For the further evolution of the word into Urašṭu, see Salvini, *Nairi e Ur(u)aṭri,* p. 27, n. 42.

6. E. Weidner, "Die Annalen des Königs Aššurbêlkala von Assyrien," *AfO* 6 (1930/31):82–83.

7. Salvini, *Nairi e Ur(u)aṭri.*

8. E.g., Sarduri 1 in 1–2, 319–25 (1a–b) and Išpuini at Kalleh Shîn, 19 (9). As elsewhere in this work, Urartian inscriptions will be cited by their *UKN* number, with the *HCI* number following in parentheses.

9. *ARAB,* 1:276.

10. Ernst Weidner, *Die Inschriften Tukulti-Ninurtas I. und seiner Nachfolger,* Archiv für Orientforschung, Beiheft 12 (Graz: Selbstverlag Ernst Weidner, 1959), no. 4, p. 10; no. 5, p. 12; no. 6, p. 14; no. 14, p. 23; no. 16, p. 27; no. 17, p. 30; no. 19, p. 32.

11. *ARAB,* 1:98.

12. Ibid., p. 81.

13. Ibid.

14. Ibid., pp. 148, 155–56, 168–69, 179.

15. Maximilian Streck, "Das Gebiet der heutigen Landschaften Armenien, Kurdistân un Westpersien nach den babylonisch-assyrischen Keilschriften," *ZA* 13 (1898):82–87.

16. *ARAB,* 1:213–14.

17. Ibid., pp. 219–20.

18. Ibid., p. 241.

19. Ibid., pp. 228–29.

20. Ibid., p. 241.

21. Ibid., p. 208.

22. Cf. C. F. Lehmann-Haupt, *Armenien einst und jetzt,* 2 vols. (Berlin and Leipzig: B. Behr/Friedrich Feddersen, 1910–31), 2:21–24. Lehmann-Haupt argued that the claim of Sarduri, son of Lutipri, to be king of the universe could not have been made when Assyria was so powerful. Therefore, he believed the Seduri (Sarduri) mentioned by Shalmaneser III was the second king of that name, and that Sarduri son of Lutipri belonged to an earlier dynasty. This argument, calling for a Sarduri who left no native inscriptions, has not found favor in more recent treatments of Urartian chronology, which put less stock in the honesty of titulary claims.

23. *ARAB,* 1:210.

24. Ibid., p. 255.

25. The expansion of the state outward from the eastern shore of Lake Van is revealed by the findspots of each ruler's inscriptions. Inscribed stones of the founder Sarduri and his successor Išpuini are found only in the immediate vicinity of Van. Penetration of Iran can be seen for the first time in texts written in the names of both Išpuini and his successor Menua. Argišti I, who ruled a generation later, is the first king whose inscriptions are found on Soviet soil.

26. It was under Shalmaneser III, for example, that the Assyrians adopted the practice of recording an annual campaign in their eponym canon.

27. This is true only for display inscriptions. In contrast, nonpublic documents such as letters and edicts on clay rarely mention the name of the king, even when they convey his words and are impressed with his seal. The difference in purpose for which the two categories of documents were intended is no doubt responsible for this. Public inscriptions were written for the glorification of the ruling monarch, while tablets were simply meant to effect the smooth functioning of the royal administration.

28. A king list is given in the Appendix.

29. There is one intriguing but, unfortunately, damaged passage that has been taken to suggest a divinity was associated with at least one royal name. In ordaining sacrifices, Sarduri II states that he prescribed, "1 UDU ᵐᵈ[. . .]-*i-na-ú-e* DINGIR-*i-e*" (156 A2+A1, line 13, [102, para. III, p. 115]). The last word is a dative singular, and the word that precedes it is a genitive plural. Melikišvili restores the break with ᵐᵈ*[Sarₛ-du-ri]-i-na-ú-e*, since only a theophoric name would begin with both a personal and a divine determinative, and Sarduri is by far the most common Urartian theophoric name. Thus the passage would be translated "one sheep for the divinity of the Sarduris." There are problems with this interpretation, however. One would expect the genitive plural of Sarduri to be *Sarduraue*, since the *-na* plural indicator is usually assimilated by a stem ending in *-ri*, with the result that both the *i* and the *n* disappear. Cf. *šuri*—*šuraue*. See G. Wilhelm, "Zur urartäischen Nominalflexion," *ZA* 66 (1976):117. One would expect the name of a god here, as divine names exist in exactly this construction in the Meher Kapısı inscription (27 [10]). Perhaps the best solution is to follow König, *HCI*, p. 115, n. 2, in regarding the personal determinative as a stonecutter's error. In any event, this passage is no proof for the existence of a deified Sarduri.

30. *šarru dan-nu šar₄ kiššati šar₄ māt Na-i-ri šárru šá-nin-šú lâ išûᵘ* ˡᵘ*rē'ū tab-ra-te la-di-ru tú-qu-un-te šárru mu-šak-niš lâ kan-šu-te-šú.*

31. D. J. Wiseman, "A New Stele of Assur-naṣir-pal II," *Iraq* 14 (1952):29–30.

32. Richard Frye, *The Heritage of Persia* (Cleveland and New York: World Publishing Co., 1963), p. 101, claims that the Assyrians did not know this title. This claim has been picked up in other literature and is further elaborated in Frye's "The Charisma of Kingship in Ancient Iran," *Iranica Antiqua* 4 (1964):36–38. There is little justification for assuming that the title did not come to Urartu from Assyria, however. Aššurnaṣirpal II used it in his annals, which predate any Urartian texts. See E. W. Budge and L. W. King, *Annals of the Kings of Assyria*, vol. 1 (London: British Museum, 1902), p. 261. Frye, in acknowledging that Tiglath-Pileser I also called himself "king of kings," argues "The rare occurrences of the title are exceptional and only show that almost anything may be found in cuneiform literature of the ancient Near East if one searches long enough" (*Iranica Antiqua* 4 [1964]:36–37). But in the face of so much other Urartian titulary borrowing from Aššurnaṣirpal II, the independent invention of this particular epithet seems improbable.

33. *UKN*, p. 376; *HCI*, p. 181.

34. 19 (9). The word appears in lines 3 and 16 of the Assyrian version, corresponding to lines 4 and 19 of the Urartian version.

35. See below, pp. 78–80.

36. F. W. König, "Gesellschaftliche Verhältnisse Armeniens zur Zeit der Chalder-Dynastie (9.–7. Jahrhundert v. Chr.)," *AfV* 9 (1954):25–26.

37. König contends that the words LÚ-*sie muṣi* in line 25 of the Urartian version of the Topzawa bilingual (264 [122]) correspond to ˡᵘ*RĒ'Ū KĒNU* ("true shepherd") in the Assyrian version; consequently, LÚ is a logogram for *alusi*. Even if LÚ is a logogram here, König's reading is only a guess suggested by the phonetic complement. Melikišvili, however, reads the LÚ as a determinative, making the word for shepherd ˡᵘ*sie*, which of course has nothing to do with the title *alusi*.

38. E.g., 1 (1a).

39. The title is written *ŠAR₄* KUR *šuraue*, where the last word is generally agreed to be the regular genitive plural of a root *šuri*- (*UKN*, p. 408; *HCI*, p. 203). Explanations for the disappearance of the final-*i* of the stem differ in various studies of Urartian grammar. Melikišvili, *Die urartäische Sprache*, Studia Pohl, vol. 7 (Rome: Biblical Institute Press, 1971), p. 25, notes a tendency for one vowel to fall away when dissimilar vowels come in contact. He specifically sites the change *ia>a* in the addition of plural suffixes to nouns ending in *i*. Another explanation is given by Wilhelm, *ZA* 66 (1976):117. He regards the plural indicator as a suffix *na* (rather than the *a* of Melikišvili and Friedrich) which assimilates to a preceding *l* or *r* in spite of an intervening *i*: *rin>r(r)*. Goetze's rendering of the word as an *a*-stem (*Kleinasien*, Handbuch der Altertumswissenschaft, sec. 3, pt. 1, vol. 3, div. 3, subdiv. 1, 2d ed. [Munich: C. H. Beck, 1957], p. 191) is certainly incorrect in view of its plural, absolute form of *šureli* (128 A4, line 4 [81, sec. 13, para. I, p. 102]).

40. 19 (9) Assyrian version, line 16, corresponding to Urartian version, lines 18–19. Cf. Warren C. Benedict, "The Urartian-Assyrian Inscription of Kelishin," *JAOS* 81 (1961):376.

41. 264 (122), line 29 of the Urartian version, corresponding to line 27 (line 26 in *HCI*) of the Assyrian. The name for Urartu is here written logographically as KUR TILLA.

42. Goetze, *Kleinasien*, p. 191, suggests that the last corresponds to the Assyrian and Babylonian term *Subarū*.

43. König, *AfV* 9 (1954):36.

44. Ibid., p. 35.

45. Ibid., pp. 36–37.

46. Cf. I. M. Diakonoff, "Materialy k fonetike urartskogo jazyka," in *Voprosy grammatiki i istorii vostočnych jazykov*, Akademija Nauk SSSR, Institut Vostokovedenija (Moscow/Leningrad: Izdatel'stvo Akademii Nauk SSSR, 1958), p. 37, where the word *šuri* is said to be a cognate of Armenian *sur*, "spike, sword." In a later publication (*Hurrisch und Urartäisch*, trans. K. Sdrembek, Münchner Studien zur

Sprachwissenschaft, Beiheft 6 N.F. [Munich: Kitzinger, 1971], p. 85) Diakonoff admits that this is not entirely certain, and that the word (the Armenian, presumably) may actually come from an Indo-European root *k'ōr-.

47. P. Calmeyer, "Zur Genese altiranischer Motive II. Der leere Wagen," *AMI* 7 (1974): 54–58. The same idea is presented, with some ambivalence, by M. van Loon, "The Euphrates Mentioned by Sarduri II of Urartu," in *Anatolian Studies Presented to Hans Gustav Güterbock on the Occasion of His 65th Birthday*, ed. K. Bittel et al. (Istanbul: Nederlands Historisch-Archaeologisch Instituut, 1974), pp. 190–91. It is difficult to credit the evidence of the horse frontlet that he introduces, since a reading of É *šur-ru-hi* contradicts the general principle that consonants are not geminated in Urartian. If one accepts this reading, then the word is very peculiar Urartian and not necessarily the same word as *šuri*; if one takes the more generally accepted reading of É *šur-iš-hi*, then it is definitely a different word. The suggestion that "perhaps *shuri* stands for the four-wheeled wagon that carries the symbol of Haldi on several Urartian seal impressions" is a pure guess, since symbols of specific gods in Urartian are not certainly known.

In short, Calmeyer starts with the idea that the *šuri* is a chariot rather than proving it, and van Loon offers no proof while expressing some doubts.

48. See van Loon, *Anatolian Studies . . . Güterbock*, p. 190.

49. The case for separate descent from a common ancestor is argued by Warren C. Benedict, "Urartians and Hurrians," *JAOS* 80 (1960): 100–104. Many of his points are countered by Diakonoff, who points out that the types of texts which have survived for each language differ so significantly that lexical evidence is insufficient for untangling their genetic relationship. See Diakonoff, *Hurrisch und Urartäisch*, pp. 22–23.

50. It could be argued that the Hurrians developed their terminology at a time when they were living in mountainous areas in close proximity to the Urartians, before moving into Syria and northern Mesopotamia. If so, the common political language would have been in use before the emergence of any Hurrian or Urartian state and would be quite inapplicable to later Urartian institutions.

51. Elman R. Service, *Origins of the State and Civilization* (New York: W. W. Norton & Co., 1975), p. 75.

52. The god Haldi is mentioned in every moderately well-preserved inscription speaking of military conquest, which suggests that he had some specific association with war.

53. *ABL* 146, 197, 646.

54. The first instance was in Tiglath-Pileser III's victory over Sarduri II in the west, for which see *ARAB* 1: 273, 281, 292. In the last two passages, Tiglath-Pileser states that after the battle, he shut Sarduri up in Ṭurušpa. He makes no claim to having captured the city; only that he fought outside it and moved with ease, unopposed, through the Urartian countryside. The second instance is Sargon II's victory over Rusa I at the battle of Mount Uauš in Iran, for which see F. Thureau-Dangin, *Une relation de la huitième campagne de Sargon*, Textes cunéiforms du Louvre, vol. 3 (Paris: Paul Geuthner, 1912), lines 91–140. Although Rusa survives the battle, he does not reappear to counter Sargon as the latter enters Urartu's territory and ravages five provinces.

55. *ABL* 197, 380, 444.

56. 155F, line 16 (103, sec. 15, para. X, p. 127).

57. H. F. W. Saggs, "The Nimrud Letters, 1952—Part IX," *Iraq* 36 (1974), no. 99, pp. 206–9.

58. At issue is the verb *kedanu*, which is translated "*zusammenziehen*" by König and "*posylat'*, *otpravljat'*' (to send, dispatch)" by Melikišvili. It is used on three occasions, and in each instance the object of the verb is a component of the king's army:

A. lú*huradinili*meš *kedanuli haitu* [GN] KUR-*nini* ("I *k*—ed the troops, they conquered the land of GN"): 28, lines 4–5, face (16, para. IX, p. 59);

B. lú*au[e]rašili kidanubi* KUR *Aššur sui[du]bi* ("I *k*—ed the *auerаši*-men, I knocked over the land of Assur"): 127, col. III, lines 30–31 (80, sec. 6, para. V, p. 92);

C. ⌈*k*⌉*eidanuli* lú*huradiniel[i]* [KU]R *Eriahiniedi* [K]UR *ebani hai[tu]* ("I *k*—ed the troops to the land of Eriahi, they conquered the land"): 155B, lines 28–31 (103, sec. 14, para. V, p. 126).

In the last instance particularly, Melikišvili's definition seems to fit better than König's; but in the second instance, where the narrative continues in the first person, it appears that the king went along himself. Perhaps "lead out" or "call out" is closer to the actual meaning. Although the first and third passages continue in the third person plural, there is no solid proof that the king did not go along on these expeditions.

59. For a reconstruction of this text, see *UKN*, pp. 242–56.

60. E.g., "*i-ku-ka-ni* MU *uš-ta-di* . . ." (127, col. 3, line 33 [80, sec. 6, para. VI, p. 92]).

61. Piotrovsky remarks that the Urartians seem to have conducted two campaigns a year, one in the spring and one in the fall. This is to be explained not by climatic conditions, but by the seminomadic character of Near Eastern stock-rearing. The army, whose primary goal was securing livestock and horses, appeared either before the livestock went up to the mountain pastures, or after it had returned. Boris B. Piotrovsky (Piotrovskij), *Vanskoe carstvo* (Moscow: Izdatel'stvo Vostočnoj Literatury, 1959), p. 149, translated into Italian as *Il regno di Van*, trans. Mirjo Salvini, Incunabula Graeca, vol. 12 (Rome: Centro di Studi Micenei, 1966), p. 218. He cites no evidence to support these statements.

62. A. 20–23 (6, 6a, 6b)

   B. 24 (7)

C. M. van Loon, "The Inscription of Ishpuini and Meinua at Qalatgah, Iran," *JNES* 34 (1975): 201–7

63. A. 28 (16)
 B. 29 (17)
 C. 30–35, 38 (18–22)
 D. Ali M. Dinçol, "Die neuen urartäischen Inschriften aus Körzüt," *IM* 26 (1976): 19–31
 E. 36–37 (23–24)
 F. 39 (25)
 G. 40–41 (26–28)
 H. *UKN* 372–73; Kemal Balkan, "Ein urartäischer Tempel auf Aznavurtepe bei Patnos und hier entdeckte Inschriften," *Anatolia* 5 (1960): 99–131, nos. 1–2

64. 264 (122). Assyrian sources add two more for Rusa I: one against the Kimmerians; and one against Sargon II, which resulted in the debacle at Mount Uauš. See nn. 53 and 54, above, for the texts.

65. *UKN* 445, 446. See also Warren C. Benedict, "Two Urartian Inscriptions from Azerbaijan," *JCS* 19 (1965): 35–40.

66. E.g., Thureau-Dangin, *Huitième campagne*, lines 249–52.

67. *ABL* 646, 197.

68. W. E. D. Allen and P. Muratov, *Caucasian Battlefields* (Cambridge: Cambridge University Press, 1953), p. 7.

69. 155G (103*A*). See also C. F. Lehmann-Haupt et al., *Corpus Inscriptionum Chaldicarum*, 2 vols. (Berlin and Leipzig: Walter de Gruyter, 1928–35), vol. 1, pl. 37, for an excellent photograph of the text.

70. *HCI*, p. 119.

71. *UKN*, p. 288 (my translation from Russian).

72. I. M. Diakonoff, "Nekotorye dannye o social'nom ustrojstve Urartu," in *Problemy social'no-èkonomičeskoj istorii drevnego mira*, Akademija Nauk SSSR, Institut Narodov Azii (Moscow: Izdatel'stvo Akademija Nauk SSSR, 1963), pp. 56–57 (my translation from Russian).

73. It is difficult to translate the Urartian words for bovines here without adding unsubstantiated specificity to the English. Following the number 12,321 is the logogram GUD, which in turn is followed by a crack in the stone. Melikišvili, accepting M. Tsereteli's reading, restores an ÁB in this break. In the line above, however, the scribe seems to have compensated for this flaw in the surface, so König may well be correct in regarding the text as complete with GUD alone. In either case, one is left with a very general word for bovine. The word following 9036 is gudpahini, the same term used in the total that appears after it, suggesting that this, too, is a nonspecific term.

74. König's reading of 35,417 is simply an error.

75. The sign for the number of hundreds is broken away, but the amount of space is limited. Melikišvili reads the number 111, and König, 211. Either is possible.

76. Melikišvili reads 7079 minas, and König, 7077. I see nothing in the photograph to indicate what the final digit is.

77. Melikišvili, without noting any emendation of the text, reads "336 slaves" (ERUMmeš), and Diakonoff follows this, also without comment. Lehmann-Haupt's photo (see n. 69), however, clearly shows that the inscription has the sign for "month" (⟨𒌗⟩), not the sign for "slave" (� or 𒂝).

78. *HCI*, p. 119, n. 3.

79. See *UKN*, p. 410, for the forms that Melikišvili lists with this root. The disappearance of the *r* of the stem is not unexpected; cf. J. Friedrich, "Urartäisch," in *Handbuch der Orientalistik*, ed. B. Spuler, div. I, vol. 2, sec. 1–2, no. 2, *Altkleinasiatische Sprachen* (Leiden: E. J. Brill, 1969), p. 37, para. 12e. Although the hypothetical correlation of this verb with Akkadian *hepû* at Kalleh Shîn is based on a restoration (Benedict, *JAOS* 81 [1961]: 382), something on the general order of "to destroy" is called for by its use in curse formulae elsewhere.

80. Cf. König, *AfV* 9 (1954): 38.

81. König, ibid., argues that the 336 months represent 28 years that the king had reigned, and that the inscription is devoted to a kind of jubilee. This contradicts the opening line of the inscription, which says Sarduri did these things when he ascended the throne. Furthermore, if an Urartian scribe wanted to say "28 years," representing it as 336 months would be a rather peculiar way to go about it.

82. Diakonoff, "Nekotorye dannye . . . ," pp. 56–57, argues that the number represents the total of free, armed citizenry obligated to provide military service, but that they did not all serve at once.

83. Gold, silver, and copper are mentioned as tribute on only three occasions:
 A. 36, line 17 (23, para. IV, p. 62);
 B. 128 B1, lines 23–24 (82, rev. para. IV, p. 105);
 C. 155E, lines 54–56 (103, sec. 9, para. V, p. 124).

84. 158, line 25 (104, para. VIII, p. 131). A new translation of this text is offered by van Loon, *Anatolian Studies . . . Güterbock*, pp. 187–94.

85. Urartu's disinterest in the metals of Transcaucasia has been noted by a number of investigators. See F. Hančar, "Aus der Problematik Urartus," *Archiv Orientalní* 17 (1949): 307–8; and R. Rolle, "Urartu and die Reiternomaden," *Saeculum* 28 (1977): 303. But their conclusions hold true for *all* of the areas attacked by Urartu, not just Transcaucasia.

86. 28, top, line 15, with a variant of the same thing on the face, line 9 (16, paras. VI and X, p. 59).

87. lúA.SImeš are generally felt to be the same thing as lú*huradi*, since they appear in very much the same contexts, and there is no evidence for any contrast in meaning. Yet the possibility that they are some special contingent of troops, such as a royal bodyguard, cannot be ruled out. Occasionally the logogram appears with a phonetic complement of -*ṣi/e*, so it cannot represent the word *huradi*. In Akkadian texts from other areas, *HURĀDU* itself appears to signify a special kind of soldier. See *CAD*, H, p. 244.

88. A. 155A, lines 12–13 (103, sec. 16, para. VI, p. 128)

   B. 155C, lines 45–46 (103, sec. 4, para. IX, p. 121)

   C. 156C, lines 28–30 (102, left side, para. III, p. 118)

See also Dinçol, *IM* 26 (1976):25–26, line 4, for a similar expression in a text of Menua. For the word *šeri*, meaning "separately," i.e., independently of what was totalled up for the king. see J. Friedrich, "Beiträge zu Grammatik und Lexikon des Chaldischen," *Caucasica* 7 (1931):82–83.

89. 155F, line 28 (103, sec. 15, para. XV, p. 128).

90. Of possible relevance in this regard are passages in the annals of the Hittite king Muršili II, where it is stated that a certain amount of booty went to the estate of the king, but what the armies of Hatti took was beyond counting. See A. Götze, *Die Annalen des Mursilis*, MVAG 38 (Leipzig: J. C. Hinrichs, 1933), pp. 56–57, 76–77, passim.

91. The relevant texts are

   A. 20, obv. lines 40–43, rev. lines 17–20 (6, para. IX, p. 39);

   B. 24, rev. lines 36–38 (7, para. VI, p. 41);

   C. 35, line 6 (18a, para. VIII, p. 60);

   D. 38, line 6 (20, para. VIII, p. 60).

König argues, rather unconvincingly, that the prisoners in question are actually "ephebes." See König, *AfV* 9 (1954):46–61.

92. G. A. Melikišvili, "Nekotorye voprosy social'no-économičeskoj istorii Nairi-Urartu, *VDI*, 1951, no. 1:28.

93. I. M. Diakonoff, "K voprosu o sud'be plennych v Assirii i Urartu, *VDI*, 1952, no. 1:90–100.

94. 128 A2, lines 21–22 (81, rev. sec. 4, para. IV, p. 101).

95. 278, line 4 (128, para. II, p. 158). Captives are mentioned in the preceding line, but the break in the text makes it impossible to see how these captives relate to the land names mentioned. For different interpretations, cf. *UKN*, p. 158, n. 13, and *HCI*, p. 343, n. 3.

96. For references, see n. 83, above.

97. 128 B1, lines 15–17 (82, rev. para. III, p. 105).

98. E.g., Charles Burney and David Marshall Lang, *The Peoples of the Hills: Ancient Ararat and Caucasus* (London: Weidenfeld and Nicolson, 1971), pp. 127–73; N. V. Arutjunjan, *Biainili (Urartu)* (Erevan: Izdatel'stvo Akademii Nauk Armjanskoj SSR, 1970).

99. 4–14, 16–17 (2–5).

100. Van Loon, *JNES* 34 (1975):201–7.

101. Menua's inscription is 29 (17). Although the text states that Menua built a palace (É.GAL) there, Kleiss regards the remains at Taštepe as primarily pre-Urartian. See W. Kleiss et al., *Topographische Karte von Urartu*, Archäologische Mitteilungen aus Iran Ergänzungsband 3 (Berlin: Dietrich Reimer Verlag, 1976), p. 32, no. 52 in Iran.

102. Both sites are on the northern flanks of Mount Ararat, near Taşburun. One at Çölegert is attested by inscriptions 30–31 (21–22). The second site, named Menuahinili, appears in the building inscription 70 (45). For further bibliography on the sites see W. Kleiss et al., *Topographische Karte*, p. 15, site nos. 58 and 59. For the latter, Lehmann-Haupt, *Armenien einst und jetzt*, 1:171, is also of interest.

103. 69 (44) from the site of Pasinler, where parts of the Urartian fortress are built into one that is still in use.

104. 39 (25). The inscription is essentially a record of conquest. Although it mentions the construction of a building for Haldi, that building was "in Šebeteria," not necessarily the site of the inscription.

105. For Erebuni: 138 (91A); for Argištihinili: 137 (91).

106. 134 (86).

107. 133 (88).

108. The inscription itself is unpublished, but its discovery is noted by Machteld Mellink, "Archaeology in Asia Minor," *AJA* 65 (1961):44. The excavator of Altıntepe states that his inscriptional evidence is late, but is not explicit about what it says. See Tahsin Özgüç, *Altıntepe II*, TTKY, ser. 5, no. 27 (Ankara: Türk Tarih Kurumu, 1969), p. 70.

109. 159 (108).

110. *UKN* 417. Although the inscription mentions only conquests, a city and a land name tie this text to a passage in Sarduri's annals, where he states not only that he conquered these places, but that he also built palaces and set up an inscription there. This is clearly the inscription to which he refers. For the annals, see 155E, lines 3–18 (103, sec. 8, paras. II–V, pp. 122–23).

111. Van Loon, *Anatolian Studies . . . Güterbock*, pp. 187–94.

112. *ARAB*, 1:292.

113. 265 (119), 266 (118).

114. For the inscriptions, see Benedict, *JCS* 19 (1965):35–40. Kleiss, in *Topographische Karte*, p. 32, rules "keine urartäischen Besiedlung" for both sites 56 and 57, where the inscriptions were found. In "Bericht über Erkundungsfahrten in Iran im Jahre 1971," *AMI* 5 (1972):144, he allows that there may have been some Urartian rebuilding of these pre-Urartian sites.

115. At Arin-berd: *UKN* 458; at Armavir (Argištihinili): 288 (132); at Toprakkale: 287 (133e), 289 (133b), 290 (133a), 292 (133d), 293 (133 Var. 1), 294 (133 Var. 2).

116. Friedrich, *Caucasica* 7 (1931):84, n. 1.

117. *UKN* 387. For a photo of the inscription in situ, see K. L. Oganesjan, *Arin-berd I*, Archeologičeskie raskopki v Armenii, no. 9 (Erevan: Izdatel'stvo Akademii Nauk Armjanskoj SSR, 1961), p. 26.

118. K. L. Oganesjan, "Raskopki urartskogo goroda Ėrebuni," *Sovetskaja Archeologija*, 1960, no. 3:290, pl. 3.

119. E.g., 71–73 (46–48).

120. Oganesjan, *Arin-berd I*, pp. 26–27.

121. *UKN*, p. 376. The plural forms É.GAL^{meš}-*aši* and É.GAL^{mes}-*ria* cannot be from the same stem.

122. Cf. n. 101, above.

123. Van Loon, *JNES* 34 (1975):201, commenting on the circumstances of the discovery of the inscription published by J. Friedrich, "Urartäische Inschriften aus Iran," *AMI* 2 (1969):121–22, and republished as *UKN* 379.

124. The land of Eriahi is located in the vicinity of Leninakan in Soviet Armenia in view of the inscription 133 (88), which is chiseled into an immovable boulder. A victory over the king of Puladi is attested in the Seqindel inscription, *UKN* 417.

125. At Seqindel a large Urartian fortress was built near the pre-Urartian citadel where Sarduri's inscription is located. But since the annals speak of more than one É.GAL being built in Puladi, this Urartian site can only account for a part of Sarduri's construction in the vicinity.

126. Našteban and Razliq are almost 100 km (as the crow flies) from the nearest fortress that is architecturally Urartian. Cf. n. 114, above.

127. Cf. Charles A. Burney, "Urartian Fortresses and Towns in the Van Region," *AnSt* 7 (1957): 49–50; C. A. Burney and G. R. J. Lawson, "Measured Plans of Urartian Fortresses," *AnSt* 10 (1960): 185–88; and Carl Nylander, "Remarks on the Urartian Acropolis at Zernaki Tepe," *Orientalia Suecana* 15 (1966):141–54. The evidence for an Urartian date is hardly compelling. None of the sherds described sounds particularly distinctive, and the wall construction techniques that Burney emphasizes is also quite ordinary in eastern Anatolia. The reconstructed standard-house plan in Burney's own drawing appears to be based on very little evidence. The primary reason for skepticism, however, is that Zernaki Tepe remains unique, despite all of the survey work done on Urartu since Burney published his pioneering studies.

128. See Jørgen Laessøe, "The Irrigation System at Ulhu," *JCS* 5 (1951):21–32. Laessøe's argument that the Assyrian text describes *qanats*—tunnels running horizontally from places where the water table is high to areas in need of irrigation—would be stronger if *qanats* were more common today in the parts of Iran that Urartu once controlled.

129. Charles Burney, "Urartian Irrigation Works," *AnSt* 22 (1972):181–82; Günther Garbrecht, "The Water Supply System at Tuşpa (Urartu)," *World Archaeology* 11/3 (February 1980):306–12. Also of interest but unavailable to me is B. Öğün, *Van'da Urartu sulama tesisleri ve Şamram (Semiramis) Kanalı* (Ankara: Ankara Üniversitesi, Arkeoloji Fakültesi, 1970).

130. Van Loon, *JNES* 34 (1975):205–7, assumes there are two separate sites called Uiše at some distance from one another. My own reading of Thureau-Dangin, *Huitième campagne*, lines 280–98, is that the province of Ajadi, in which "old Uajais" is located, is right next to the province of Uajais, where the major site of that name (Uiše, in Urartian) stood. Thus the two need not have been very far apart.

131. For the Murat Su, N. Arutjunjan, "Dainala-tini," *VON*, 1957, no. 4:97–106; for the Zilan Dere, Burney, *AnSt* 22 (1972):182.

132. Lehmann-Haupt, *Armenien einst und jetzt*, 2:43. See below, pp. 79–80 for my reasons for ascribing this stele to Rusa II.

133. Burney and Lang, *Peoples of the Hills*, p. 142.

134. The logograms and Urartian words for agricultural projects are generally translated thus, although the contexts are too restricted to give any certainty that these translations are correct. In Akkadian and Hittite texts, ^{giš}GEŠTIN refers to the vine, and would not be used for a whole vineyard without amplification. But even if Urartian texts literally commemorate the planting of a single vine, symbolically the logogram and the word that alternates with it, ^{giš}*uldi*, must refer to something larger, and "vineyard" is used by both König and Melikišvili. In non-Urartian cuneiform, ^{giš}TIR is a "forest" or a "grove," and Melikišvili translates it accordingly in the one instance where it appears as a royal agricultural project (268 [121]). But in that text, the word is in the position where other texts of this type have ^{giš}*zare*, so König (*HCI*, p. 205) is probably correct in regarding these words as equivalent. Since the ^{giš}*zare* is always planted and is composed of trees, it would not be unreasonable to view it as an "orchard." However, if

giš*zare* and gišTIR are not the same thing, there is no basis for assuming that the former has anything to do with trees. The translation of giš*zare* as "orchard" must therefore rest on at least an implicit assumption that it is related to gišTIR. The connotations of the logograms for grain fields are less problematic.

135. See table 12, reference numbers 3, 6, 7a, and 7b.

136. 111 (40). For the translation of sal*sila* as "daughter" rather than "wife," see *UPD*, p. 52.

137. 277 (123). We follow the translation of Melikišvili here. Although the translation of König is quite different, the discrepancies are unimportant to our argument.

138. Melikišvili, "Nekotorye voprosy social'no-èkonomičeskoj istorii Nairi-Urartu," *VDI*, 1951, no. 4:24–25.

139. Cf. Margarete Riemschneider, "Urartäische Bauten in den Königsinschriften," *Orientalia* n.s. 34 (1965):312–13. Riemschneider's contention that É was only used for secular buildings is hard to reconcile with inscriptions such as 66 (58), 70 (45), and *UKN* 388, where it is stated that the É was built "for Haldi."

140. See table 13, references 2a, 2b, and 3c for É.GAL association; 4 for Haldi Gates.

141. Tahsin Özgüç, *Altıntepe*, TTKY, ser. 5, no. 24 (Ankara: Türk Tarih Kurumu, 1966), fig. 1 and pp. 39–44.

142. W. Kleiss, "Ausgrabung in der urartäischen Festung Bastam (Rusahinili) 1970," *AMI* 5 (1972):14–18.

143. Sometimes written É *susi*, where the sign É apparently functions with the effect of a determinative. *Susi*, therefore, cannot simply be the phonetic writing of the word that is logographically represented by É.

144. The Arin-berd *susi* is dedicated to Iarša (or Iubša), and a *susi* at Çavuştepe was built for Irmušini.

145. E.g., 96 (76).

146. David Stronach, "Urartian and Achaemenian Tower Temples," *JNES* 26 (1967):278–88.

147. The plan of the building, as excavated, is given by Oganesjan, *Arin-berd I*, pp. 31–38. For the original form, see W. Kleiss, "Urartäische Architektur," in *Urartu: Ein wiederentdeckter Rivale Assyriens*, ed. H.-J. Kellner, Katalog der Ausstellung, Prähistorische Staatssammlung München (Munich, 1976), p. 40, and M. Salvini, "Das *susi*-Heiligtum von Karmir-Blur und der urartäische Turmtempel," *AMI* 12 (1979):265–67.

148. Mirjo Salvini, "Una 'bilingue' Assiro-Urartea," in *Studia Mediterranea I, Piero Meriggi dicata*, ed. O. Carruba, 2 vols. (Pavia, 1979), 2:581–82.

149. 27 (10).

150. M. Taner Tarhan and Veli Sevin, "The Relation between Urartian Temple Gates and Monumental Rock Niches," *Belleten* 39 (1975):401–12.

151. Salvini, *Studia . . . Meriggi*, 2:583.

152. 155G, line 10 (103A, para. III, p. 119). Beer is not mentioned in Urartian texts.

153. 79 (39).

154. Jeffrey J. Klein, "Urartian Hieroglyphic Inscriptions from Altıntepe," *AnSt* 24 (1974):85–86, notes that the maximum number of *aqarqi* per pithos at various sites is around eight—possibly as high as 8.8.

• 155. The verb that governs the king's action with regard to the '*ari* is always *šu-*, which appears in no other context. It is possible, therefore, that the king "filled" or did something else to the '*ari*, rather than building it. However, in the parallel case of the *gie*, the verb used is *zadu-*, "to build," so it is reasonable to conclude that the *šu-* also had something to do with construction.

156. 155G, line 10 (103A, para. III, p. 119).

157. Melikišvili derives his figure of 2.3 liters from a passage in Xenophon's *Anabasis* (1.5.6) where a Persian unit called a καπίθη and its equivalent in Attic standard measurement are given. See *UKN*, p. 399. On the other hand, in *UKN* 419, the capacities of two '*aris* are given in BANEŠ. Since the numbers involved are in the mid-range of the number of *kapi* in other '*aris*, it would seem that BANEŠ and *kapi* are at least roughly equivalent. According to J. N. Postgate, *Fifty Neo-Assyrian Legal Documents* (Warminster: Aris and Phillips, 1976), p. 67, the Assyrian *sutu* probably had a value of 18.40 liters. Consequently, 1 BANEŠ (= 3 *sutu*) would be 55.2 liters, if the standards in the two empires were similar.

158. 1–3 (1a–c).

159. R. Naumann, "Bemerkungen zur urartäischen Tempeln," *IM* 18 (1968):53–57, argues for a temple platform; C. Burney, *AnSt* 22 (1972):182, says that the structure "probably served to protect local springs for the garrison's water"; Lehmann-Haupt, *Armenien einst und jetzt*, 2:18–20, claimed that it was a harbor fortress on the unverified assumption that the ancient shoreline was much closer to Van than it is today. Recent work by Afif Erzen suggests that only part of the structure is Urartian. See M. Mellink, "Archaeology in Asia Minor," *AJA* 79 (1975):208.

160. 92 (59). For the argument that the word means "springs," see *UPD*, pp. 61–62.

161. 78 (57).

162. 88 (55a), 89 (56), 90 (55b), 299 (55c), *UKN* 379.

163. 63 (60), 64 (61).

164. 143 (97).

165. 83 (54a), 84 (54b), 86 (54c), *UKN* 419.

166. See Benedict, *JAOS* 81 (1961):373, for the passage at Kalleh Shīn and the potential correspondence of the word to *parakku*, "chapel, pedestal." The building of a *iarani* is also mentioned in 39 (25).

167. *UKN* 419.

168. AHw, p. 828; A. Leo Oppenheim, *The Interpretation of Dreams in the Ancient Near East*, Transactions of the American Philosophical Society, n.s. vol. 46, pt. 3 (Philadelphia, 1956), p. 293 and n. 184.

169. 280 (129).

170. See below, p. 79.

171. See below, p. 79.

CHAPTER 5: Governmental Administration and the Problem of Centralization

1. Stanislav Andreski, *Military Organization and Society*, 2d ed. (Berkeley and Los Angeles: University of California, 1968), p. 92.

2. Ibid., p. 76.

3. The orthography of this name varies somewhat between Urartian and Assyrian cuneiform sources. With one exception (*ABL* 123, r. 4, where ᵘʳᵘ*Tu-ru-uš-pi-a* is written) the Assyrians are consistent in recording the name with spellings that would be transcribed as Turušpâ. For references, see Simo Parpola, *Neo-Assyrian Toponyms*, Alter Orient und Altes Testament, vol. 6 (Neukirchen: Butzon & Bercker Kevelaer, 1970), p. 362. On the other hand, Urartian texts are equally consistent in recording the name without any *r* value between the consonants *T* and *š*. For references, see *UKN*, pp. 443–44. An explanation for this difference is offered by Warren C. Benedict, "Urartian Phonology and Morphology" (Ph.D. diss., University of Michigan, 1958), pp. 58–59, n. 8, who argued that the Urartian *š* had the value of a voiceless *r*. Faced with the problem of rendering a sound that did not exist in their own language, Assyrian scribes had to make use of a combination of signs.

4. The urban character of Tušpa cannot be demonstrated archaeologically because of technical problems of excavation in the area of Van. It seems reasonably certain, however, that Tušpa was a good deal more than a fortress, and the logogram URU, "city," was frequently written both before and after the name. The only other names in the Urartian corpus enjoying this distinction are Rusai-URU.TUR (Bastam) and Teišebaini-URU (Karmir Blur).

5. The earliest Urartian references to Tušpa are found in inscriptions written in the names of Išpuini and Menua together.

6. For the cuneiform text, see O. R. Gurney and J. J. Finkelstein, *The Sultantepe Tablets*, vol. I, Occasional Publications of the British Institute of Archaeology at Ankara, no. 3 (London: British Institute of Archaeology at Ankara, 1957), no. 43, p. 4, pl. 59, line 57. A translation and evaluation of the text is given by W. Lambert, "The Sultantepe Tablets VIII. Shalmaneser in Ararat," *AnSt* 11 (1961):143–58. Although the text is essentially a poetic rendition of events that may have taken place in different actions, its general content is close enough to the account of Shalmaneser's third year in the Kurkh Monument to lend it a certain historical validity. Lambert concludes: ". . . there is still no reason to despise the historical content of the poetic account. Royal annals have also been suspected of having transferred material from one year to another in certain cases. There is no reason whatsoever to doubt that this text was written during the reign of Shalmaneser III, though it may not have been composed immediately after the completion of the campaign" (*AnSt* 11 [1961]:156). Thus, even in this rather trusting view of the document, the mention of Turušpâ may be slightly anachronistic in the context of the third year (856 b.c.) and can certainly not be taken as proof that the site was founded before Sarduri I.

7. E.g., H. W. F. Saggs, "The Nimrud Letters, 1952—Part IV: The Urartian Frontier," *Iraq* 20 (1958), no. 45, pp. 196–98. The writer of the letter exhorts the Assyrian king to march on Urartu and capture Turušpâ, implying that Turušpâ would be the obvious primary objective in such a campaign.

8. "ᵘʳᵘ*Tu-ru-uš-pa* URU LUGAL-*ti-šu*." F. Thureau-Dangin, *Une relation de la huitième campagne de Sargon*, Textes cunéiforms du Louvre, vol. 3 (Paris: Paul Geuthner, 1912), line 150. No other Urartian site is so designated in this or any other Assyrian text dating to after the time of Shalmaneser III.

9. Fr. Schultz, "Mémoir sur le lac Van et ses environs," *Journal Asiatique*, 3d ser., vol. 9 (1840): 257–323.

10. There is one possible exception: 18 (12), inscribed on the Van citadel, mentions construction before the city of Tušpa. Usually such inscriptions are placed near the buildings they refer to, but not always. Sometimes building activities are mentioned in campaign inscriptions well removed from the sites on which the activities were carried out.

11. The genre of Urartian texts dealing with sacrifices is taken up by Mirjo Salvini, "Eine neue urartäische Inschrift aus Mahmud Abad (West-Azerbaidjan)," *AMI* 10 (1977):127–28. Among the texts that mention sacrifices, only the Meher Kapısı inscription, 27 (10), gives a long list of gods to whom offerings were made.

12. For plans and descriptions of the chambers, see B. B. Piotrovsky, *Vanskoe Carstvo* (Moscow:

Izdatel'stvo Vostočnoj Literatury, 1959), pp. 207–16, which has also been published in Italian as *Il regno di Van*, trans. Mirjo Salvini, Incunabula Graeca, vol. 12 (Rome: Centro di Studi Micenei, 1966), pp. 301–12.

13. E.g., Maurits N. van Loon, *Urartian Art: Its Distinctive Traits in the Light of New Excavations* (Istanbul: Nederlands Historisch-Archaeologisch Instituut, 1966), pp. 60–63; Tahsin Özgüç, *Altıntepe II* TTKY, ser. 5, no. 27 (Ankara: Türk Tarih Kurumu, 1969), p. 71; P. Calmeyer, "Zur Genese altiranischer Motive III. Felsgräber," *AMI* 8 (1975):101–7; Piotrovsky, *Vanskoe Carstvo*, p. 218 (*Il regno di Van*, p. 312). No burials have been found in any of the rock-cut chambers, but they are considered tombs on the basis of similarity to Iranian parallels and resemblance in general layout to the burial chambers at Altıntepe, where skeletal remains were found.

14. R. D. Barnett, "The Excavations of the British Museum at Toprak Kale near Van," *Iraq* 12 (1950):13–15; idem, "More Addenda from Toprakkale," *AnSt* 22 (1972):166–68.

15. I. M. Diakonoff, *Hurrisch und Urartäisch*, trans. K. Sdrembek, Münchner Studien zur Sprachwissenschaft, Beiheft 6 NF (Munich: Kitzinger, 1971), p. 43, n. 36.

16. See van Loon, *Urartian Art*, pp. 1–2. Van Loon also notes that the term Biainili was never used for the capital itself, but rather for the kingdom as a whole.

17. For a detailed topographic map of the area, see Afif Erzen, "Çavuştepe yukarı kale ve Toprakkale 1976 dönemi kazıları," *JKF* 4/5 (1976/77):fig. 18. Although the contour map is clearly drawn to scale, no scale is given. For an approximation of the distances involved, therefore, the sketch plan with scale given on the unbound map distributed with C. F. Lehmann-Haupt, *Armenien einst und jetzt*, 2 vols. (Berlin and Leipzig: B. Behr/Friedrich Feddersen, 1910–31) is still useful.

18. 268 (121). An additional transliteration and translation of the text are given by M. Tseretheli, "Etudes ourarţéennes," *Revue d'Assyriologie* 53 (1959):172–76. A partial translation and discussion of some of the problems in intrpreting the text are also found in I. M. Diakonoff, "Nekotorye dannye o social'nom ustrojstve Urartu," in *Problemy social'no-ėkonomičeskoj istorii drevnego mira*, Akademija Nauk SSSR, Institut Narodov Azii (Moscow: Izdatel'stvo Akademii Nauk SSSR, 1963), pp. 60–61.

19. Lehmann-Haupt, *Armenien einst und jetzt*, 2:43. Cf. *HCI*, p. 143, where it is stated that Toprakkale *cannot* be Rusahinili because the Keşiş Göl stele dates to Rusa I (cf. n. 20, below), and the earliest objects found at Toprakkale bear the name of Rusa II. The logic of this argument, and his grounds for dating the stele, escape me.

20. The date of the founding of Rusahinili is moot, but clearly belongs in the reign of one of the first two Rusas, because Ba 78-146 (see p. 79) shows that the site was in existence by the time of Rusa II. If the Keşiş Göl stele could be assigned to Rusa I with certainty, then he would have to be the founder, but the stele is broken and the preserved portion does not give the patronymic of the Rusa who erected it. The suggestion that 267 (120) is in fact the top part of the Keşiş Göl inscription, made by Lehmann-Haupt, *Armenien einst und jetzt*, 2:193–94, and accepted by Barnett, *Iraq* 12 (1950):32, has been rejected by both Melikišvili and König. Melikišvili (*UKN*, p. 330) argues that the forms of the signs in the two inscriptions are different, and that the contents have nothing to do with each other. König (*HCI*, p. 24) notes the signs are of different heights and the stones are of different thickness. There is no evidence, archaeological or textual, that confirms the existence of Rusahinili in the time of Rusa I, and since Rusa II "set up the throne in Rusahinili" (Ba 78-146), he may well have founded it.

21. C. A. Burney, "Urartian Fortresses and Towns in the Van Region," *AnSt* 7 (1957):40.

22. 268 (121).

23. The text is published as 286 (131) and *UPD* 12. No direct hand copy of the text exists, but it can be read with only a few problems from photographs. One set of photos was published by the tablet's discoverer: C. F. Lehmann-Haupt, *Materialien zur älteren Geschichte Armeniens und Mesopotamiens*, Abhandlung der Königlichen Gesellschaft der Wissenschaften zu Göttingen, Phil.-hist. Klasse, vol. 9 N.F., no. 3 (Berlin: Weidmannsche Buchhandlung, 1907), p. 105, figs. 77a–b. It is on this photo that König based his copy. A new and considerably clearer photo is published in *UPD*, p. 134.

There are serious problems in understanding this text. Our readings and translation follow Diakonoff, for the most part, not out of any conviction that he is infallible, but because his are the best guesses currently available. He transliterates the second line as: ᵐSá-ga DUMU *tar-a* LUGAL (sic) *Iš-qu-gu-ul-hi-e*. This is improbable, however, because the sign DUMU is not used elsewhere in Urartian to indicate filiation, and Išqugulhe is stripped of the mandatory personal or geographical determinative. König (*HCI*, p. 160, n. 8) states that KUR in the latter position is certain, but the photos give no grounds for his certainty. The sign appears to have been written over an erasure.

The first line is also very peculiar. In the normal pattern of Urartian syntax, one would expect the logical subject of the verb *ulabi* here, not an oblique case. If the URU sign is really present, it is the only place in the Urartian corpus that a word intervenes between a man's name and patronymic. The writing of the name for Bastam shows that when Rusa and URU appear together, the form is Rusai-URU, and, even ignoring this, it is hard to make an ablative out of the whole construction. The form, except for the URU, looks very much like the stem case we would expect. But the photograph bears out Diakonoff's reading, and to take Rusa as the subject creates a problem in deciding what to do with the second line.

In short, there are problems with Diakonoff's readings, but nothing else works either. The translation is thus only a guess.

24. Ba 78-146. I am indebted to Professor Wolfram Kleiss for his permission to make use of the text in my tentative field transliteration and translation. The definitive edition of the inscription is being prepared by Mirjo Salvini as part of the Bastam publication program.

25. Beyond the evidence of these two texts, the method by which the Urartians recorded dates, if they had one at all, is unknown. No other letters or administrative documents are dated in any way. The royal annals of Argišti I and Sarduri II group events and campaigns into annual blocks, but these blocks are given neither name nor number. If the Urartians had no formal dating system, the rather lengthy description of events in a given year that is found in our two texts would perhaps have been necessary to insure that later readers would be able to identify the year to which the document referred.

26. A deity named dQilibani appears in the Meher Kapısı pantheon—27 (10), lines 18 and 62—and may be related to the geographical term.

27. These are, admittedly, subjective judgments based on personal visits and the study of photographs. The closest thing to a detailed, scale plan of the citadel that has been published to date is to be found in Manfred Korfmann, "Die Ausgrabungen von Kirsopp und Silva Lake in den Jahren 1938 und 1939 am Burgfelsen von Van (Tušpa) und in Kalecik," *Berytus* 25 (1977):174.

28. *ABL* 381, rev. lines 4–6.

29. For a masterful attempt at translating these texts, see *UPD*.

30. For this and other titles of Urartian officials, see pp. 84–93.

31. *UPD* 1.

32. *UPD* 2.

33. *UPD* 3.

34. *UPD* 4.

35. For the tablet, see *UPD* 5; for the shield inscription, see *UPD*, p. 6.

36. *UPD* 6.

37. E.g., *AHw*, p. 862, s.v. pīhātu(m).

38. Mirjo Salvini, "Die urartäische Tontafeln," in *Bastam I*, ed. W. Kleiss, Teheraner Forschungen, vol. 4 (Berlin: Gebr. Mann Verlag, 1979), p. 122, on the grounds that more than one lúNAM appears to be associated with a single city in Bastam text no. 1 (my no. 18, p. 82).

39. *UPD* 7.

40. *UPD* 8.

41. *UPD* 9.

42. *UKN* 448; N. V. Arutjunjan, *Novye urartskie nadpisi Karmir-Blura* (Erevan: Izdatel'stvo Akademii Nauk Armjanskoj SSR, 1966), pp. 9–41.

43. The name is written "[. . .d]Te-i-še-ba-i-ni-URU" on a door lock excavated at Karmir Blur. See 283 (130A).

44. *UPD* 10.

45. *UPD* 11.

46. Diakonoff suggests this word may be related to *mari-an-ne*, the term used to designate the Indo-Aryan nobility of the Hurrian states in the second millennium. *UPD*, p. 81.

47. Written lúŠÁ SAGmeš. In Neo-Assyrian texts this title is often considered to be the designation for "eunuch"; e.g., J. V. Kinnier-Wilson, *The Nimrud Wine Lists*, Cuneiform Texts from Nimrud, vol. 1 (London: British School of Archaeology in Iraq, 1972), pp. 46–48. This is not accepted by *AHw*, p. 974a, where it is defined as "(Hoch-)Kommissare (. . . keine Eunuchen!)." J. A. Brinkman, *A Political History of Post-Kassite Babylonia*, Analecta Orientalia, vol. 43 (Rome: Pontifical Biblical Institute, 1968), pp. 309–10, states that although the meaning "eunuch" fits Middle Assyrian contexts, there is no evidence that it had that connotation in Babylonia.

48. Literally, "people of the lands."

49. Literally, "people." The -še suffix in Urartian is often used to form abstractions but may simply stand here as part of the word for man, 'aše. See G. A. Melikišvili, *Die urartäische Sprache*, Studia Pohl, vol. 7 (Rome: Biblical Institute Press, 1971), p. 30. There are no subdivisions of this or the previous category of people in the text, so it is hard to understand how they differ.

50. The word *ešiate* is used only here, and its meaning is not known. The following logogram apparently qualifies it to indicate they are "*ešiate* of the palace." One of the subgroups of this category is designated "lúŠÁ-REŠI of the palace." Since the latter are distinguished from the larger category of lúŠÁ-REŠI above, it seems unlikely that the whole text relates only to palace personnel.

51. The meaning of this term is unknown, but the subcategories under it include mule drivers (lúANŠE.GÍR.NUN.NA), "people before" a man named Ubiabi, people of the land of Buliuhi, and people designated lú gišgarurda. The last is also unknown.

52. Sources for this text are given in n. 23, above.

53. Cf. Kinnier-Wilson, *Nimrud Wine Lists*, p. 116.

54. A. H. Sayce, "The Cuneiform Inscriptions of Van, IV," *JRAS*, 1893, pp. 15–18.

55. The meaning of this term, which also appears in the poorly understood greeting formulae of letters (*zanidabi* TI DINGER *guni*), is not known. Diakonoff suggests "right, correct, true, regular," taking it as an adjective here and an adverb in the greetings (*UPD*, pp. 48, 88). In 96 (76), *gu-di* seems to stand in contrast to GÚB-*di*, hence Diakonoff's association with "right" as a direction and, by extension,

with various concepts of correctness. However, *gudi* (directive/allative?) need not be the same word as *guni*. Taking the latter as a noun in the dative case and KUR-*ni* as a genitive is a more economical alternative, insofar as nothing in the morphology of either word demands *guni* be taken as an adjective.

56. *UPD* 13.

57. *UPD* 14. For the photograph upon which Diakonoff's copy is based, see Lehmann-Haupt, *Materialien*, p. 106, figs. 78A–B.

58. Lehmann-Haupt, *Materialien*, p. 107; cf. *UPD* 15.

59. Possibly an adjective derived from [lú]*mari* (see n. 46, above). *UPD* 15.

60. For a photograph of the tablet, see Lehmann-Haupt, *Materialien*, p. 107, fig. 79C. For a transliteration based on this photo, see *UPD* 16.

61. E. von Schuler, "Urartäische Inschriften aus Bastam II," *AMI* 5 (1972): 121–22, 133, Tf. 29.

62. Salvini, *Bastam I*, pp. 118–23. The Rusa in question has the same patronymic as King Rusa I, but probably is a different man. Bastam, Rusai-URU.TUR, was founded by Rusa II, and it is unlikely that two tablets of his grandfather would be preserved there.

63. Ibid., pp. 124–25.

64. Ibid., pp. 125–28.

65. Publication of this tablet, Ba 78-1287, has been entrusted to Mirjo Salvini.

66. Lehmann Haupt, *Materialien*, p. 108, figs. 81A–B.

67. The 1975, 1977, and 1978 seasons at Bastam added hundreds of new examples to the hitherto limited inventory of surviving Urartian bullae. For the discoveries of the 1975 season, see Ursula Seidl, "Die Siegelbilder," in *Bastam I*, pp. 137–49; and Mirjo Salvini, "Zu den beschrifteten Tonbullen," in *Bastam I*, pp. 133–36. A brief statement as to the status of excavations at the end of 1978 in the primary area in which the bullae were found is given by me in "Bones and Bullae: An Enigma from Bastam, Iran," *Archaeology* 32, no. 6 (November/December 1979), pp. 53–55. The new finds make it clear that many of the bullae discovered by Lehmann-Haupt at Toprakkale were also royal. Unless two kings were using a seal with exactly the same iconography, the drawings on the following pages of Lehmann-Haupt's *Armenien einst und jetzt*, which are published without comment as illustrations at the ends of chapters, may be assigned to Rusa II: vol. 1, pp. 56, 199, 222; vol. 2, pp. 15, 34, 166, 198, 222, and possibly 450. For the bullae from Karmir Blur, see B. B. Piotrovsky, *Karmir Blur II* (Erevan: Izdatel'stvo Akademii Nauk Armjanskoj SSR, 1952), p. 23; and N. V. Arutjunjan, "K interpretacii nadpisi na glinjanoj bulle Karmir-Blura," *IFŽ*, 1960, no. 1: 223–29.

68. All seals of the [lú]A.NIN that have been identified to date are similar in iconography, both on their rolling and stamping faces, e.g., Seidl, in *Bastam I*, p. 137. Seal impressions with this iconography, but not securely linked to a [lú]A.NIN by inscription because of their poor state of preservation, have been found in modest numbers—roughly twenty out of more than one thousand bullae—in the Bastam citadel during the campaigns of 1977 and 1978.

69. Many seals have either no inscription, or an inscription consisting solely of hieroglyphs, which cannot be read. Some of the bullae from Bastam were unsealed.

70. Diakonoff, *UPD*, p. 47, applies the principle, which is explicitly stated by Salvini, *Bastam I*, p. 118.

71. Document nos. 18 and 19.

72. Document no. 3.

73. It is within the realm of possibility—just barely—that the Urartians were not referring to the king at all when they wrote the sign LUGAL. In display inscriptions on stone, the logogram ⪥ (XX, *ŠARRU*) was invariably used in the titulary of the Urartian king. LUGAL (𒈗) was used only for foreign kings against whom the Urartian kings campaigned. On the other hand, in Urartian letters and documents inscribed on clay, LUGAL is common and XX never occurs. The one possible exception is *UPD* 12, line 2, but König's emendation of ⪥ into ⪥ (KUR) in that text seems plausible. Otherwise, the following place name would begin without a determinative of any kind. Could LUGAL, a logogram never directly associated with the personal name of the Urartian king, actually refer to some prince or monarch of lesser stature than the sovereign of the empire?

Several factors, albeit none of them conclusive, caution against acceptance of this argument. In cuneiform outside Urartu the two logograms are generally regarded as interchangeable. LUGAL is considerably more difficult to carve on stone than XX, which may help to account for its rarity. Although LUGAL is used for enemy kings, it is not particularly common, and XX is also used for enemies, even quite petty ones. Finally, most references to the Urartian king by title appear in rather formulaic expressions of his titulary, where one would expect the orthography as well as the choice of words to be dictated by tradition. If all of these cases were deleted, the statistical significance of the contrast in use of the two signs would be greatly diminished.

74. Seidl, in *Bastam I*, p. 142, points out that all variants of the royal seal in question are in evidence on bullae exclusively, while completely different sealings predominate on letters. Her suggestion that dissimilar seals were used by various branches of the central government is attractive but cannot be proven given the poverty of evidence for Urartian royal seals in general. None of the sealings on letters definitely comes from the personal seal of a king rather than a [lú]A.NIN, and no dissimilar seals are known for one and the same king.

75. Rooms packed with bones of butchered animals have now been found at Bastam, Karmir Blur,

and Toprakkale, although only at Bastam is the association with bullae apparent. It is by no means clear what the function of these rooms was, but the large numbers of animals involved suggest the remains accumulated over an extended period of time. If so, and if there was a sequential use of different seals, one would expect some differentiation in frequencies of appearance of their impressions in the three Bastam bone rooms. But each room shows approximately the same ratio of variant seal impressions. Stratigraphic variation in types is not to be expected because the bones and bullae fell from a higher floor into the basements where they were found. The archaeology of the Bastam bone rooms and conflicting views on its interpretation are discussed at length by myself and others in the forthcoming report on the 1977 and 1978 seasons, *Bastam II*, ed. Wolfram Kleiss. For the bone room at Karmir Blur, see B. B. Piotrovsky, *Karmir Blur I* (Erevan: Izdatel'stvo Akademii Nauk Armjanskoj SSR, 1950), p. 61; R. D. Barnett and W. Watson, "Russian Excavations in Armenia," *Iraq* 14 (1952): 144; N. V. Arutjunjan, *Zemledelie i skotovodstvo Urartu* (Erevan: Izdatel'stvo Akademii Nauk Armjanskoj SSR, 1964), pp. 189–91. W. Belck and Lehmann-Haupt reported that human remains were among the bones they found concentrated at Toprakkale, but this hardly seems credible in the light of their absence at Karmir Blur and Bastam, where more expert identification of the bones was possible. See W. Belck's untitled report in the *Verhandlungen der Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte*, Jahrgang 1898 (appendix to *Zeitschrift für Ethnologie* 30 [1898]), pp. 587–88; Lehmann-Haupt, *Materialien*, p. 69; idem, *Armenien einst und jetzt*, 2:468.

76. The title is discussed here as ^{lú}A.NIN because of convention, with full cognizance that it might actually be better rendered ^{lú}A.NIN.LI.

77. See n. 68, above.

78. Document no. 4.

79. Document nos. 18 and 19.

80. The Russian word simply means "son of the tsar," i.e., "prince," but English-speaking authors quoting Diakonoff have consistently used "crown prince" as the translation of ^{lú}A.NIN. It is not clear to me whether or not Diakonoff had this nuance in mind; there is nothing detectable in the title that would suggest its holder was the heir apparent. Salvini, *Bastam I*, p. 123, makes the point that in the Middle Assyrian government the crown prince held no official office, and if similar conditions prevailed in Urartu, the ^{lú}A.NIN would be any prince other than the crown prince.

81. *UPD*, p. 62.

82. For the confused chronological picture of the period of the letters, see Salvini, *Bastam I*, pp. 129–31.

83. This is argued by N. V. Arutjunjan, *IFŽ*, 1960, no. 1:223–29, on the basis of a legend above and below the pictorial part of a seal impression. Preserved on the bulla are the following signs, which comprise almost two circumrotations of the seal in a single rolling:

(1)   ]-*sa i-ni* KIŠIB ^{m}*Ru-[s]a i-ni* KIŠIB ^{m}*R[u-*
        pictorial representation
(2)   ]^m*Ru-sa-hi* É.[G]AL?-[*ni*?] ^{m}*Ru-sa-hi* [É

Arutjunjan reads: "This is the seal of Rusa, son of Rusa, from the palace." Melikišvili, *UKN* 277a (in "UKN II") offers the following alternative reading: "This is the seal of Rusa. Palace of Rusa." The question is, what does the adjectival ^{m}*Ru-sa-hi* of the lower line modify, Rusa or É.GAL? Salvini's argument (*Bastam I*, p. 129) in favor of Melikišvili, to the effect that a patronymic cannot be so far removed from the nomen, is vitiated by more recently discovered seal impressions of Rusa II from Bastam, in which precisely this division is manifest. These impressions also show the same elision of the *i* of the genitive ending of Rusa's name and the initial *i* of the demonstrative *i-ni*, presumably because the sign was expected to serve twice by being read at both the beginning and end of the first line. One of the variants of the Rusa II seal at Bastam reads "*i-ni* KIŠIB *Ru-sa-i*"; another, "*i*-ni* KIŠIB *Ru-sa-i**," where the asterisked sign is actually written only once, is otherwise virtually identical. Both versions have the patronymic, ^{m}*Ar-giš-te-hi*, in the second line. The similarity between the Bastam examples and this bulla from Karmir Blur suggests that the *Rusahi* patronymic and the É.GAL(?)-*ni*(?) are separate entities. If the scribe had wished to indicate that the palace was Rusa's, the more normal way of expressing it would be through the use of the genitive, *Rusai*. The adjectival form ending in -*hi*, when standing in the absolute case, is used exclusively for patronymics. All of this favors Arutjunjan's interpretation, but, as Salvini points out, there is no irrefutable proof that the Rusa Rusahi in question is a king.

84. Diakonoff, *UPD*, p. 35, transliterates the name as ^{m}*I-nu-uš-ši-la-a-še*. He argues (pp. 65–66) that it is a compound name consisting of the elements *inuše* and *silae*. On the strength of Hurrian parallels and some segments of Urartians words, he states that the first is an unattested Urartian word for "god." The second he takes to be a verbal adjective from an otherwise unknown verbal root **šil-*. No other Urartian name of this "sentence" type has been identified. This rather speculative explanation is unnecessary, however. In the photograph that Diakonoff publishes, the fourth sign after the personal determinative is clearly *pi*, not *ši*. The name is thus *Inušpila-še*, and the problem of having a geminated consonant, highly irregular in Urartian, is avoided without having to split the name into pieces. A root *inušp-* is clearly present in the name of Inušpua, son of Menua, who appears in royal inscriptions, so it would not be surprising to find it here.

85. Document no. 4 is the clearest example of an order by a ^{lú}A.NIN where the name and title of the

king are not invoked. Although its opening signs are broken away, it is reasonably certain that the king's title was not there because of the address formula used. All of the cases in which the king's title is attested begin with the phrase "LUGAL-*še ali tie* PN-*di* (the king speaks, tell PN . . .)." The other common address formula of letters begins "PN₁-*še bauše šiuni tie* PN₂ (PN₁ sends word, tell PN₂ . . .)." To date, no example of the king's use of the second formula has come to light, although if Diakonoff's reading of the seal on Document no. 3 is correct, he may have sealed letters of this type when someone else was actually named as the sender. Since document no. 4 begins with this second formula, it must either have had the name of the lúA.NIN himself or some other individual—not the king.

86. *ABL* 197 and 492.

87. *ABL* 144.

88. G. Wilhelm, "Ta/erdennu, ta/urtannu, ta/urtānu," *Ugarit Forschungen* 2 (1970):277–82, derives this title from a Hurrian root. While the etymological connection is interesting, it is the meaning of the term to the Neo-Assyrian scribes who used it that is of concern for our purposes. After all, it was the Assyrians, not the Urartians, who applied it to an Urartian official.

89. *RLA*, 2:428–31.

90. "Black Obelisk" inscription, lines 141–46. For a translation of this passage, see *ARAB*, 1:208.

91. F. Thureau-Dangin and M. Dunand, *Til Barsib* (Paris: Paul Geuthner, 1936), pp. 145–50.

92. For a general appraisal of the role of the *turtānu* in Assyria, see E. Klauber, *Assyrisches Beamtentum nach Briefen aus der Sargonidenzeit*, Leipziger semitischen Studien, vol. 5, no. 3 (Leipzig: J. C. Hinrichs, 1910), pp. 60–63.

93. This name, as it stands, is not Urartian. It has a clear Akkadian etymology (see *AHw*, p. 899) but may well have been simply an approximation of sounds the Assyrians found meaningless and unpronounceable. Cf. the city name *Qaduqaniuni* and the Urartian verb *qabqaru-* ("to take"?—see *UKN*, p. 404). The word cannot have been pronounced by the Urartians as the Assyrians spelled it because doubling of consonants is practically unknown in Urartian. See Benedict, "Urartian Phonology and Morphology," p. 19; cf. M. Salvini, "Urartäisches epigraphisches Material aus Van und Umgebung," *Belleten* 37 (1973):286–87. Alternatively, the name could actually be Akkadian, belonging to someone who defected from Assyria or, for one reason or another, had a foreign name although he served the Urartians.

94. *ABL* 197: (obv. 27) *ma-a ú-ma-a* KUR-*su né-ha-at* (28) *ma-a* LÚ GAL^meš-*šú ia-mu-tú* (29) *ina lib-bi* KUR-*šu it-ta-lak* (rev. 1) *ma-a* ^mSAG.DU-*a-nu* ^lú*tur-ta-nu-šú* (2) *ṣa-bi-it ma-a* LUGAL KUR URI-*a-a* (3) *ina* ŠÀ KUR *Ú-a-za-un šu-ú.*

95. *ABL* 492: (obv. 4) *ina* SAG.DU ITU *ša* ^itu BARAG (5) LUGAL KUR URI-*a-a* TA* ^uru*Tu-ur-uš-pa-a* (6) *it-tu-ṣi a-na* ^uru*El-iz-za-da* (7) *i-tal-lak* ^mSAG.DU-*a-nu* (8) ^lú*tur-ta-nu-šu ina* ŠÀ (9) ^uru*Ù-e-si i-tal-lak* (10) ^lú*e-muq-qi ša* KUR URI (11) *gab-bu de-et* LUGAL (12) *a-na* ^uru*El-iz-za-du* (13) *[i]-ra-di-a.* . . .

On a suggestion of Simo Parpola, I take *de-et* (line 11) to be a variant of *dāt*, commonly appearing as *ina dāt/iddāt* and meaning "after, behind."

96. *ABL* 444.

97. *ABL* 590 and G. Contenau, *Contrats et lettres d'Assyrie et Babylonie*, Textes cunéiforms du Louvre, vol. 9 (Paris: Paul Geuthner, 1926), no. 67, also mention an individual named Qaqqadanu. The first is badly damaged, and little can be said about the man in question. The second, which is closely related to *ABL* 590, mentions a city, Aira, which is said to belong to the "house" (É) of Qaqqadanu, but that city is clearly in Assyrian hands. Interestingly, a traffic in precious goods is conducted by Kumeans from that place to Urartu. The connection between this Qaqqadanu and the Urartian of the same name is obscure.

98. *ABL* 144.

99. See p. 81, above, for this title.

100. Document nos. 1, 2, 4, 6, 18, and 20.

101. He is the sole addressee in document nos. 4 and 18; the first of two addresses in no. 2; and in no. 6, the first-mentioned addressee, where it is impossible to determine if other names followed. He is the second of two addressees in no. 20, behind a ^lúNAM.

102. *UPD*, p. 47.

103. In Akkadian texts the synecdochic use of the logogram NA₄ and the underlying word *abnu* for seals is not particularly common in comparison to other meanings. See *CAD*, A, pt. 1, p. 61 for references.

104. Hittite *ep(p)-*; Akkadian *ṣabātu* and *kullu*.

105. E.g., UD.KA.BAR.DAB.(BA) for *zabardabbû*, lit., "he who holds the bronze," *CAD*, Z, pp. 5–6; and (LÚ) DIB.(KUŠ.)PA.(MEŠ) for *mukil appāti*, "chariot driver," *CAD*, A, pt. 2, p. 182. Also of interest is the *kartappu-*official, frequently written KA.DIB (KIR₄.DIB), whose title means "he who holds the nose (rein) (of the horse)." See *CAD*, K, p. 226b. While this designation could be used for a groom or a low-level official, in post-Kassite Babylonia it apparently was used for someone of more elevated status. See Brinkman, *Political History of Post-Kassite Babylonia*, p. 305.

106. *UPD*, pp. 26, 59, 93.

107. Although the reading NÍG.KA₉ is generally agreed to be correct by all modern sign lists and dictionaries, we retain the traditional transliteration since it is firmly implanted in secondary literature.

108. E.g., Kinnier-Wilson, *Nimrud Wine Lists*, p. 72, for the translation of *ṭupsarru* as "accountant." Neither this word nor the logogram DUB.SAR is found in Urartian texts.

109. E.g., ibid., p. 104.

110. This translation follows Diakonoff, *UPD*, p. 33, whose transliteration of the text is as follows: (obv. 7) 1 ANŠU.KUR.RA : [x x Z]ÍZ (??) ERÉN-*a-di* (8) 6 GUD : *ul-d/ta si-di-tú-bé* (9) *e-li-a-'i uš-tú-ú-bé* (10) *ú-i* : URU-*ri-še* : *ši-ú-[ni?]* (11) *ur-bi-né-e-di e-'i* (12) *su-l[u]-uš-t[ú]-ú-[ni??]*. . . . In view of the photograph of the tablet that he publishes, p. 123, the twelfth line is restored on the basis of almost pure guesswork, so we have omitted it from the translation.

111. Transliteration and translation following *UPD*, p. 39.

112. The form of the sign that Diakonoff reads DA is somewhat aberrant. On the photograph published on p. 134 of *UPD*, I see 𒀭 . In Urartian texts, DA is normally written 𒁕 . There is a possibility that the sign is actually MAH, which is written 𒈤 in its only other occurrence in Urartian (M. Tseretheli, "Etudes ourarṭéennes III. La stèle de Sidekan-Topzaoua," *Revue d'Assyriologie* 45 [1951]: 17–18, pls. 1–2; cf. *HCI*, p. 144, n. 1). If the sign is MAH, then this individual is an "elevated" or "supreme" accountant. Another possibility is that the sign is to be read as a phonetic complement rather than part of the logogram.

113. Document no. 3.

114. *UPD*, p. 52.

115. "Money" is of course an imprecise translation of KÙ^{meš} since that English word has connotations beyond simply indicating a standard of value. There is no evidence from Urartu on what served as a standard of value or a medium of exchange, and the assumption that silver played either or both of these roles is simply an extrapolation from the state of affairs in Assyria.

However tempting, a reading of LÚ KÙ^{meš}—taking the first sign as the word for man and the second as an adjective modifying it—is not supported by the one Urartian reference. If such a reading were possible, the Akkadian equivalent of KÙ would be *ellu*, referring to people who are either "free, noble" (as some individuals are designated in the Hittite law code and in scattered Old Babylonian and Middle Babylonian texts) or "(culticly) clean." See *CAD*, E, pp. 102–6, for references. But the KÙ in the Urartian text is plural and so cannot be an adjective modifying the singular LÚ. There is no doubt that a single individual is involved, since a singular PN precedes the title in the address formula of the letter.

116. Salvini, *Bastam I*, p. 126.

117. Document no. 20.

118. Sedat Alp, *Untersuchungen zu den Beamtennamen im hethitischen Festzeremoniell* (Leipzig: Otto Harrassowitz, 1940), pp. 25–26.

119. 311 (77a–b).

120. H. F. W. Saggs, "The Nimrud Letters, 1952—Part IX," *Iraq* 36 (1974):208, note to line 4.

121. For a discussion of the significance of variant spellings of this term, see Brinkman, *Political History of Post-Kassite Babylonia*, p. 296, n. 1940.

122. Ibid., pp. 296–304.

123. *UPD*, p. 66, n. 75.

124. E.g., J. N. Postgate, *The Governor's Palace Archive*, Cuneiform Texts from Nimrud, vol. 2 (London: British School of Archaeology in Iraq, 1973), pp. 42–43, no. 14, line 20, dated to 802 B.C.; pp. 47–49, no. 17, line 15, dated to 783 B.C.; pp. 50–51, no. 18, lines 3 and 20, dated to 781 B.C.

125. Kinnier-Wilson, *Nimrud Wine Lists*, pp. 12–13; Richard A. Henshaw, "The Office of Šaknu in Neo-Assyrian Times," *JAOS* 88 (1968):465–66.

126. Kinnier-Wilson, *Nimrud Wine Lists*, pp. 12–15.

127. Postgate, *Governor's Palace Archive*, p. 8, n. 21. If the *šaknu* and the *bēl pīhati* were distinct and recruited from different classes, it is hard to see how one and the same person could hold both titles. Cf. now also idem, "The Place of the *šaknu* in Assyrian Government," *AnSt* 30 (1980):67–76.

128. 42 (73); Hans-Peter Schäfer, "Zur Stele Menuas aus Bağın (Balın)," *IM* 23/24 (1973/74): 33–37.

129. 155D, line 19 (103, sec. 11, para. IV, p. 125).

130. *ABL* 444.

131. 155F, lines 15–21 (103, sec. 15, para. X, p. 127).

132. *ABL* 112: (obv. 14) ^[lú] DUMU *šip-ri* (15) *·šá* ^{lú}EN.NAM (edge 1) ^{uru}*Ú-e!-[si]* (2) *muhhi* ^m*Ur-[za]-ni* (3) *it-⌈tal⌉-[ka]* (rev. 1) *ina* UGU [xxx] (2) *ma-a* ⌈*e-mu*⌉-*qi-k[a]* (3) *lil-li-ku-ni* (4) *ina muhhi* ^{uru}*Bu-li-a-a* (5) *ina muhhi* ^{uru}*Su-ri-a-na-a-a* (6) KUR URI *gab-bi-šú* (7) *ip-ta-lah* (8) *a-da-niš* (9) *e-mu-qi ú-pa-hu-ru*.

133. Saggs, *Iraq* 36 (1974):206–9.

134. *ABL* 380: (obv. 4) 3000 ^{lú}ERÍN^{meš} GÌR2^{meš} (5) ^{lú}GAR-*nu-te* ^{lú}GAL *kal-lap*^{meš} (6) *ša* ^m*Si-e-ti-ni* ^{lú}EN.NAM (7) *ša pu-tu-u!-a! a-na* ^{uru}*Mu-ṣa-ṣir* (8) *ú-ta-mi-šu*.

135. *ABL* 409: (rev. 1) *ina* ^{uru}*Mu-ṣa-ṣir* (2) *dul-lu e-pu-šú*.

136. *ABL* 424, obv. line 10. However, this could conceivably be translated "with a second governor."

137. *ABL* 197: (obv. 11) *a-na ma-la de-e-ka ma-a-* 11! ^{lú}EN.NAM^{meš}-*šú* (12) *a-na* ^{lú}*e-mu-qi-šú-nu še-e-lu-u*.

138. *ABL* 646, obv. lines 4–15. It might be argued that the last two lines could be translated "a total of nine of his governors were defeated," rather than "were killed." However, if the verb *dâku* is taken in this secondary meaning rather than the primary, "to kill," it is hard to see why each governor was listed by name in the preceding lines.

139. E.g., *ABL* 646: (obv. 8) [lú]EN.NAM *ša pu-ut* [m]*Ša-Aššur-du-bu*, and (obv. 12) 2 [lú]EN.NAM[meš] *ša pu-ut* KUR *Kar*-ZABAR.

140. 128 B1, lines 15–17 (82, rev., para. III, p. 105). König and Melikišvili interpret this passage differently. König takes it to mean that the four kings actually became the Urartian governors; Melikišvili views the latter as replacements for the kings. I do not find any support for König's interpretation in the text, which reads "4 kings I *uediadu*-ed, PN₁, PN₂, PN₃, and PN₄. I established governors there." König translates the key verb, *uediadu-* (clearly related to [lú]*uedia* and [sal]*uedia*, who are a class of people encountered on booty lists), as "make into followers." His idea that the [lú]*uedia* and [sal]*uedia* are "beardless youths" is not generally accepted; others interpret *uedia* as "woman," and the verb as "to emasculate."

141. 265 (119).

142. The term *nagû* goes back at least as far as the Old Babylonian period as a vague designator for a quantity of territory. It is used by Neo-Assyrian kings for districts in parts of the world that are quite different from Urartu, e.g., southern Mesopotamia. It would be instructive to contrast its use in mountainous and nonmountainous areas, but unfortunately, no itineraries of comparable detail to the one given for the eighth campaign exist for other lands.

143. For various alternatives and bibliography see p. 40, n. 55, above.

144. Thureau-Dangin, *Huitième campagne*, lines 167–69.

145. Ibid., line 280.

146. Ibid., lines 297–98.

147. *ABL* 444, obv. line 11. Parpola, *Neo-Assyrian Toponyms*, p. 30, also treats these as variants of the same name. Urartian is notoriously inconsistent in the writing of diphthongs, and one would expect a certain amount of confusion in the Assyrian renderings of Urartian place names.

148. For references, see table 17. Thureau-Dangin, *Huitième campagne*, line 301, says that Rusa stationed his governors (pl.) in the fortress at Uajais, but other texts mention only individual governors. Since Uajais (Uâsi) was on the frontier and served as the mustering point for military actions, it is understandable that Sargon might have considered it the base of more than one governor.

149. E.g., Salvini, *Bastam I*, pp. 135–36. Other examples have been found since the 1975 campaign and will be published in Kleiss, *Bastam II*.

150. See above, p. 79.

151. For 'Aza in association with Argištihinili (Armavir), see 127 (80), 128 (82), and 142 (98). For the association of 'Aza with Teišebaini (Karmir Blur), see *UKN* 448 and document no. 10, above.

152. See above, p. 80.

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Fig. 15. Key to Areas Covered by Plates

PLATES
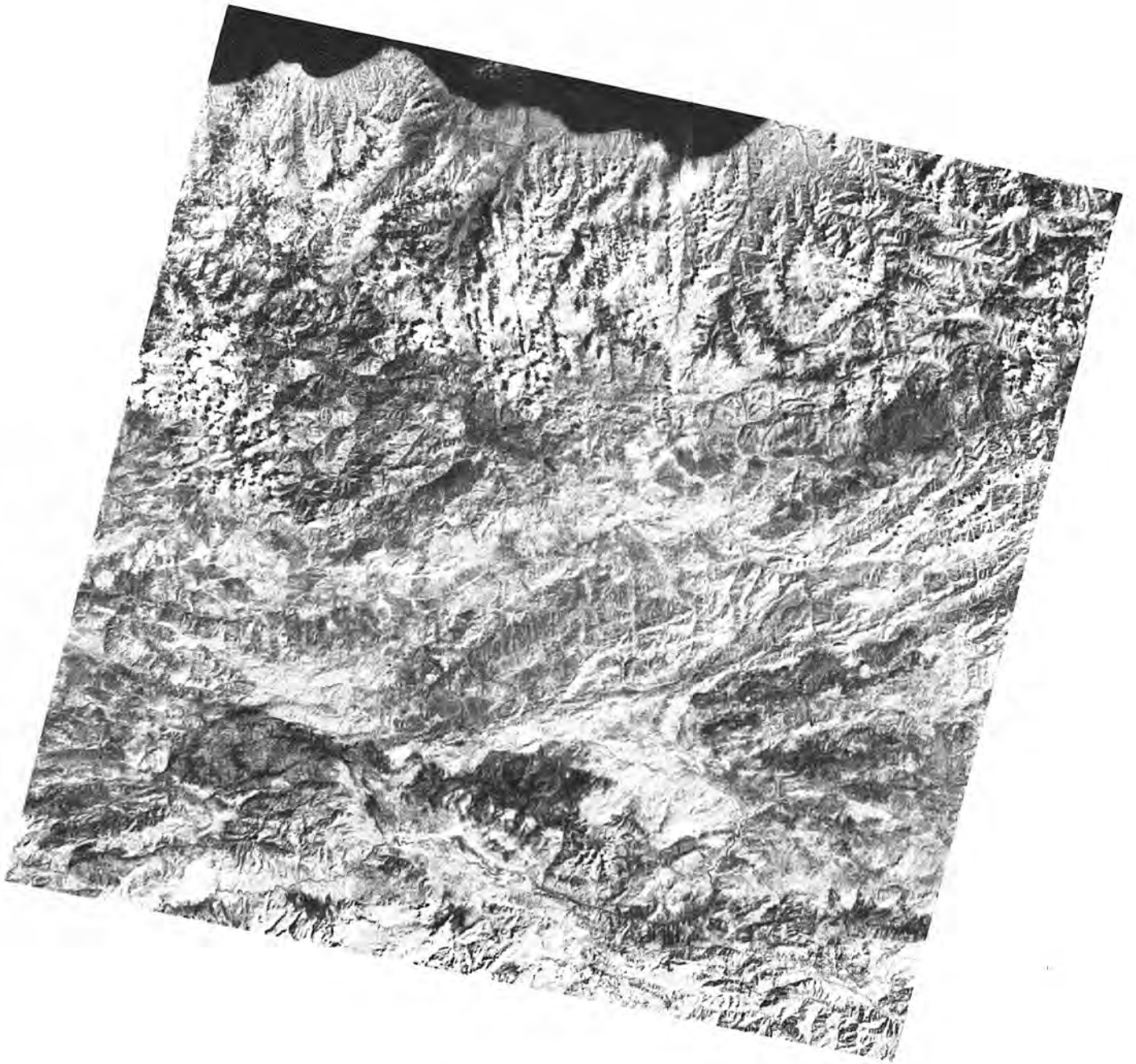
Plate 1A. *Landsat* image no. 8222907214500, path 186, row 32, September 8, 1975.

SCALE

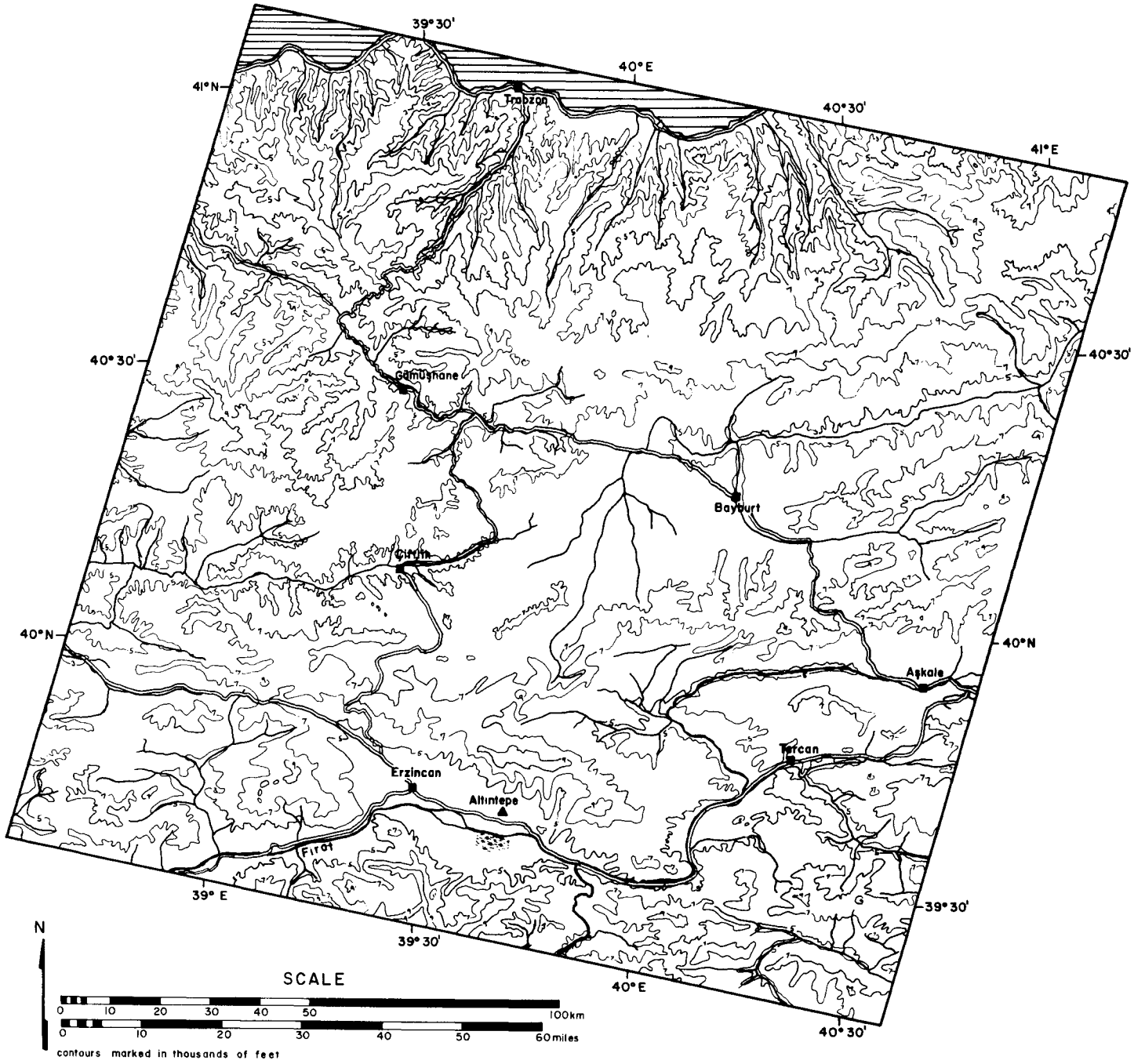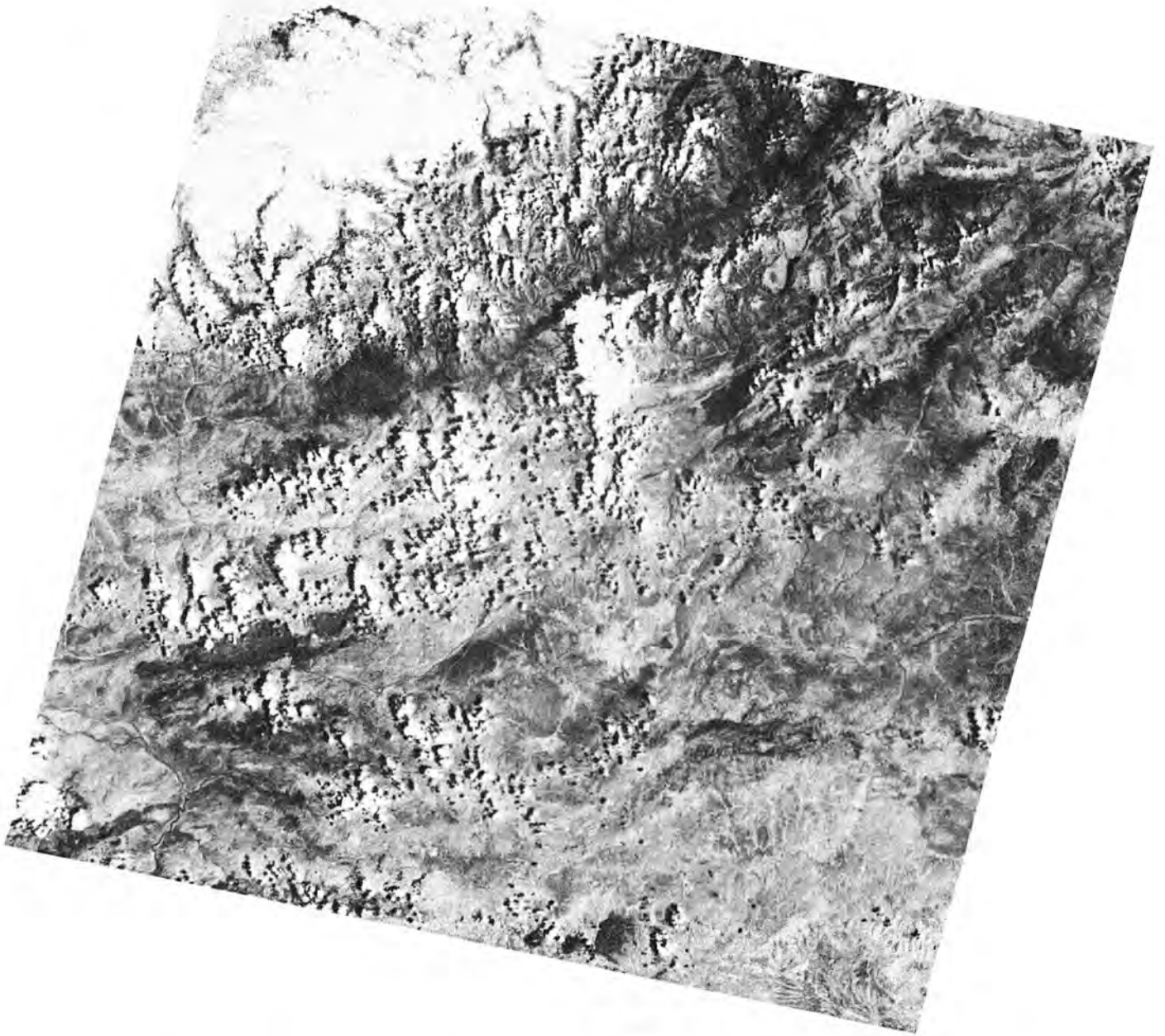contours marked in thousands of feet

Plate 1*B*. Map

Plate 2A. *Landsat* image no. 8215607171500, path 185, row 32, June 27, 1975.
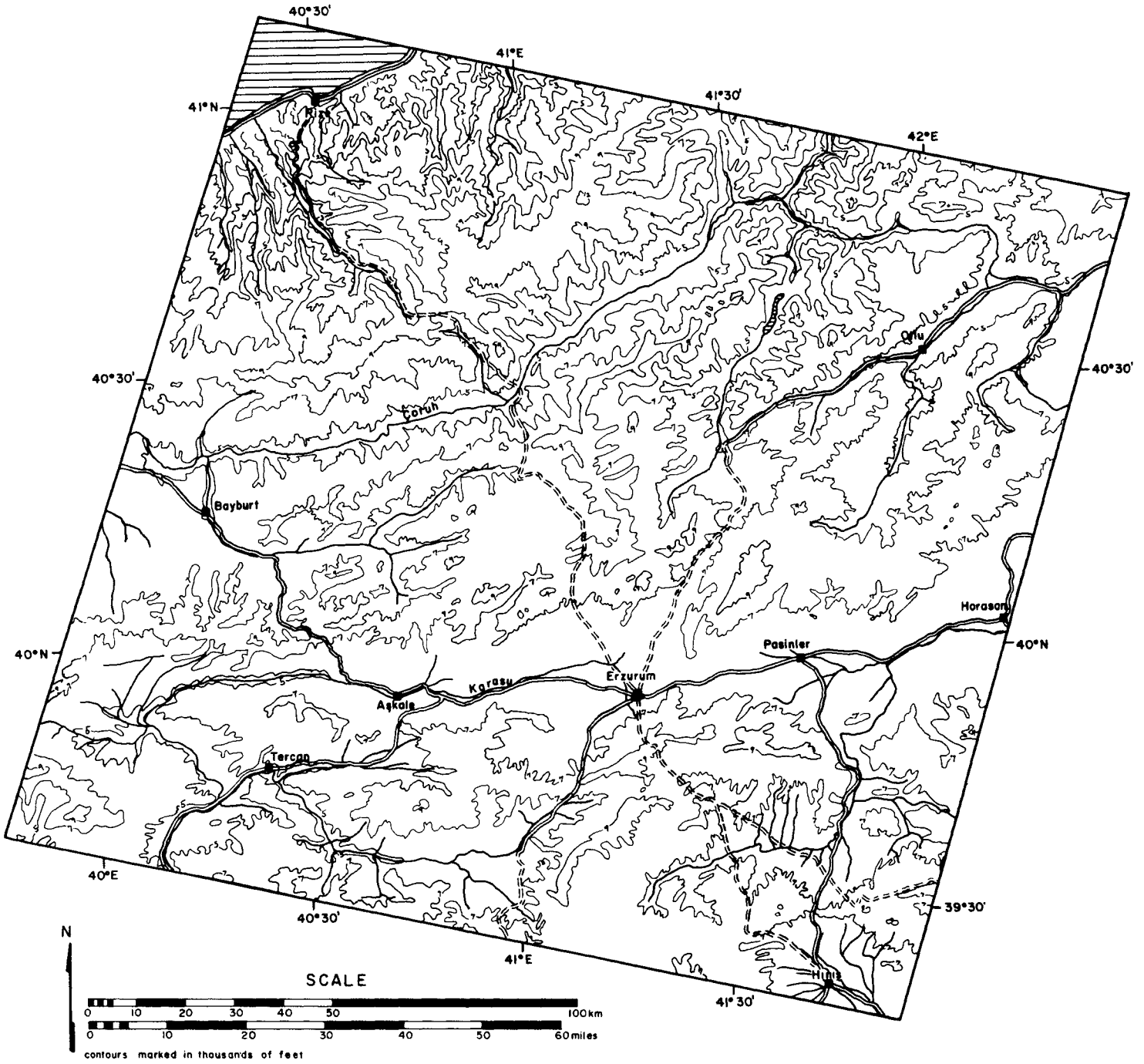
Plate 2*B*. Map
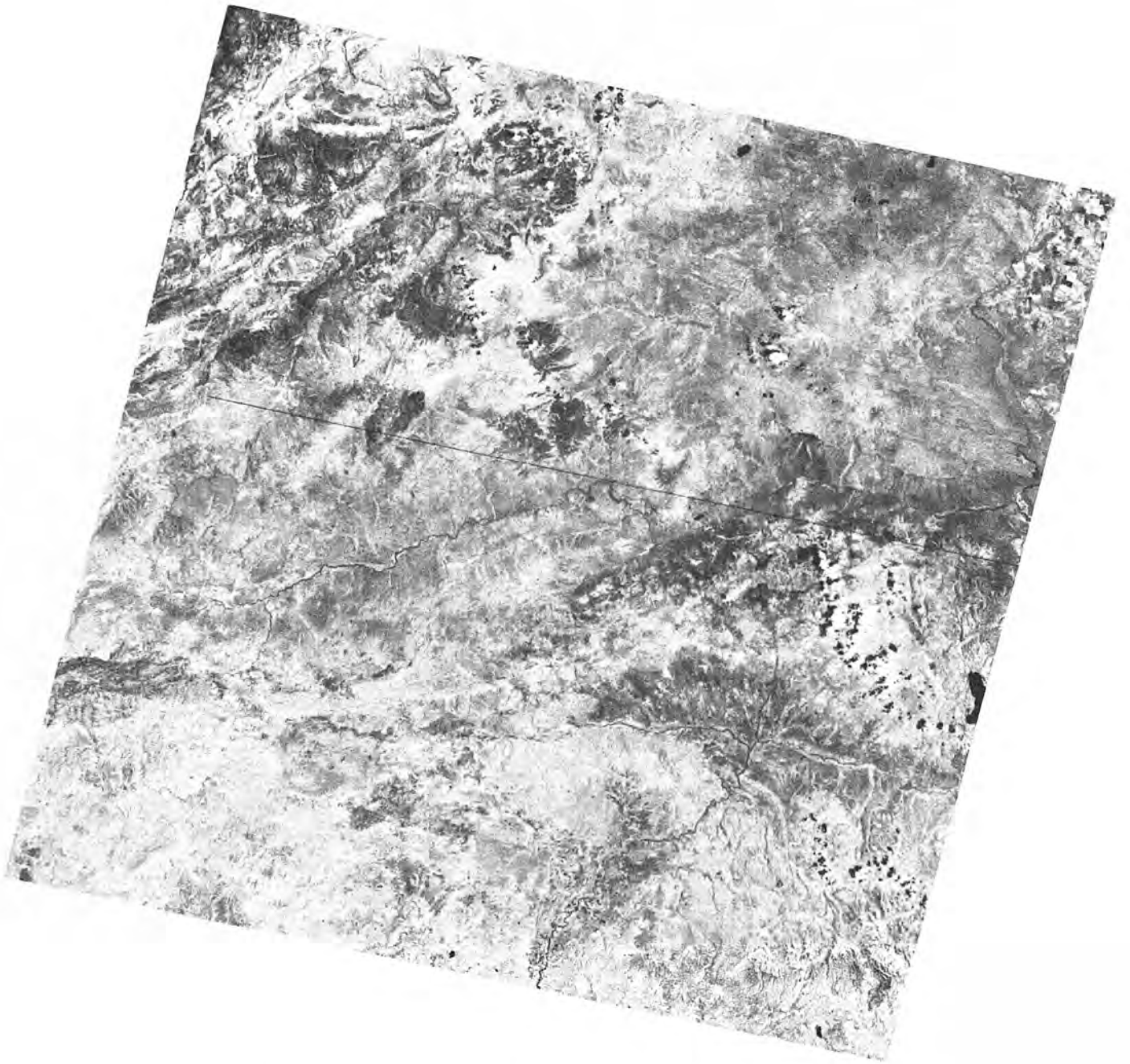
Plate 3A. *Landsat* image no. 8213707112500, path 184, row 32, June 8, 1975.
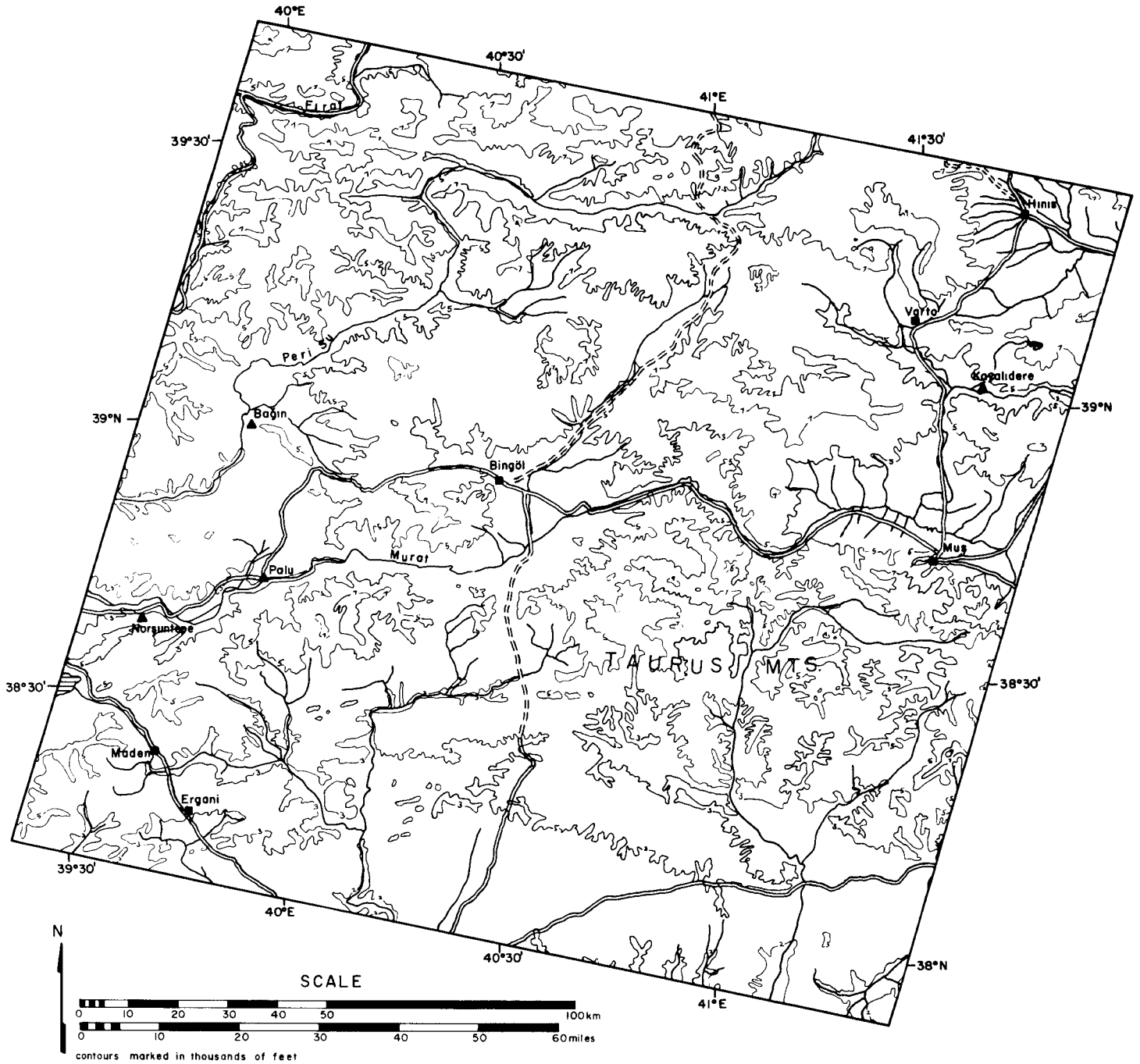
42°E

42°30'

43°E

43°30'

40°30'

Oltu

40°30'

Sarıkamış

Kars

Kara Çay

Arpa

Aras

Horasan

Tuzluca

40°N

Pasinler

Velibaba

40°N

Tahir Pass

Zidikan

Ağrı

39°30'

39°30'

41°30'

42°E

Murat

Aznavurtepe

Hancıklı

42°30'

Patnos

Zilan Dere

43°E

N

SCALE

0   10   20   30   40   50   100 km

0   10   20   30   40   50   60 miles

contours marked in thousands of feet
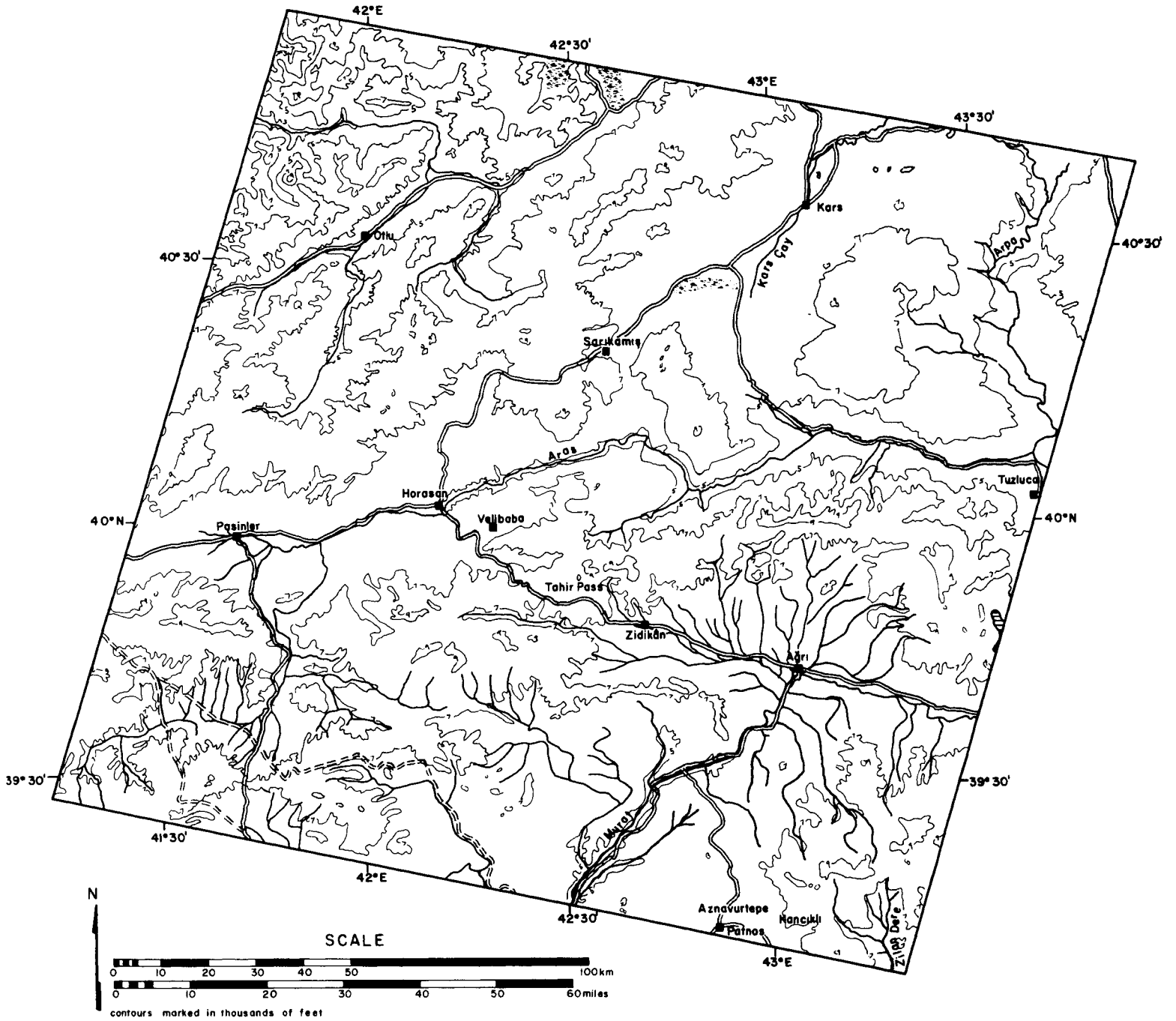
Plate 3B. Map
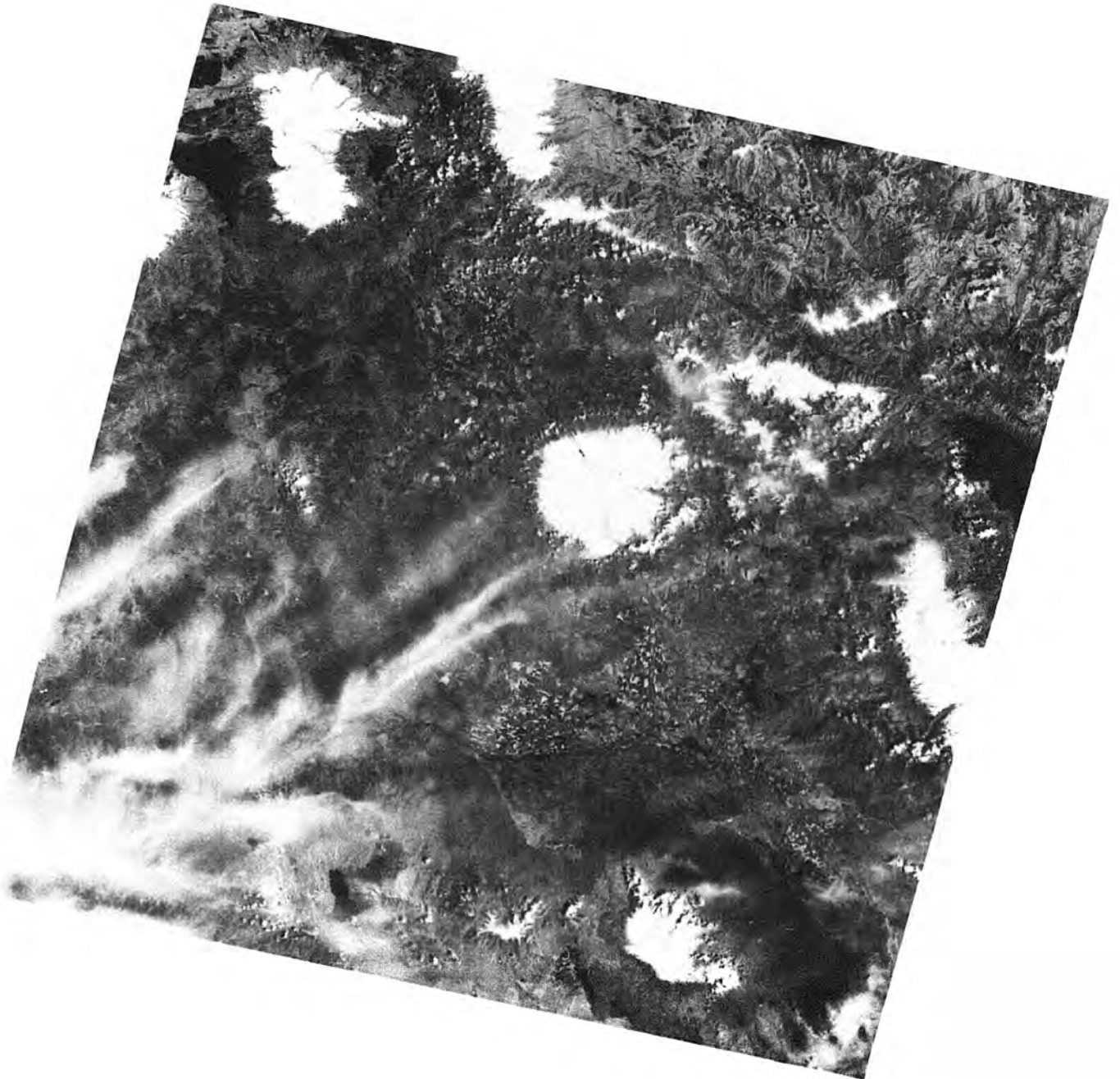
Plate 4A. *Landsat* image no. 8283806465500, path 183, row 32, May 9, 1977.

SCALE

0 10 20 30 40 50   100 km

0   10   20   30   40   50   60 miles

contours marked in thousands of feet
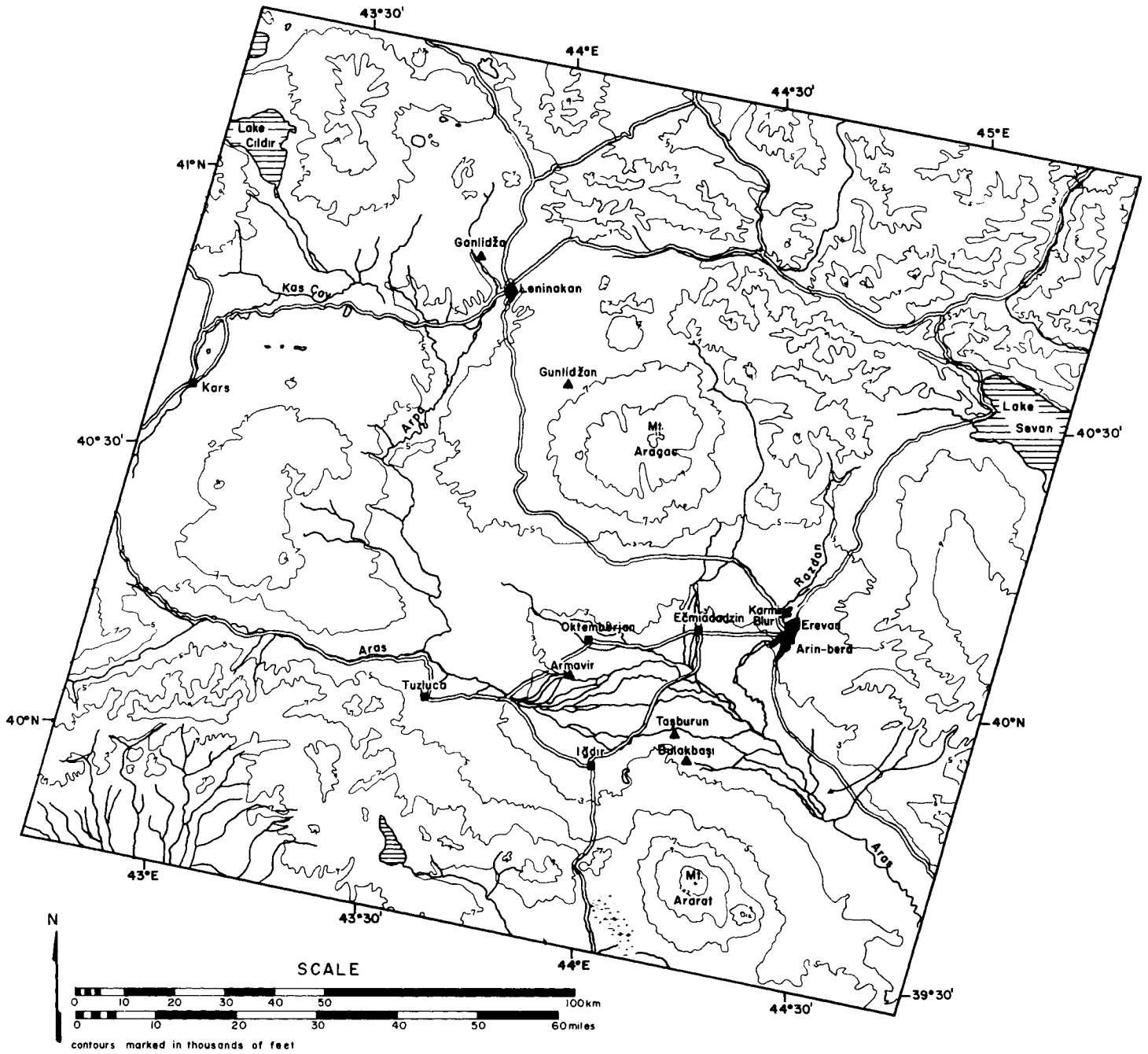
Plate 4B. Map
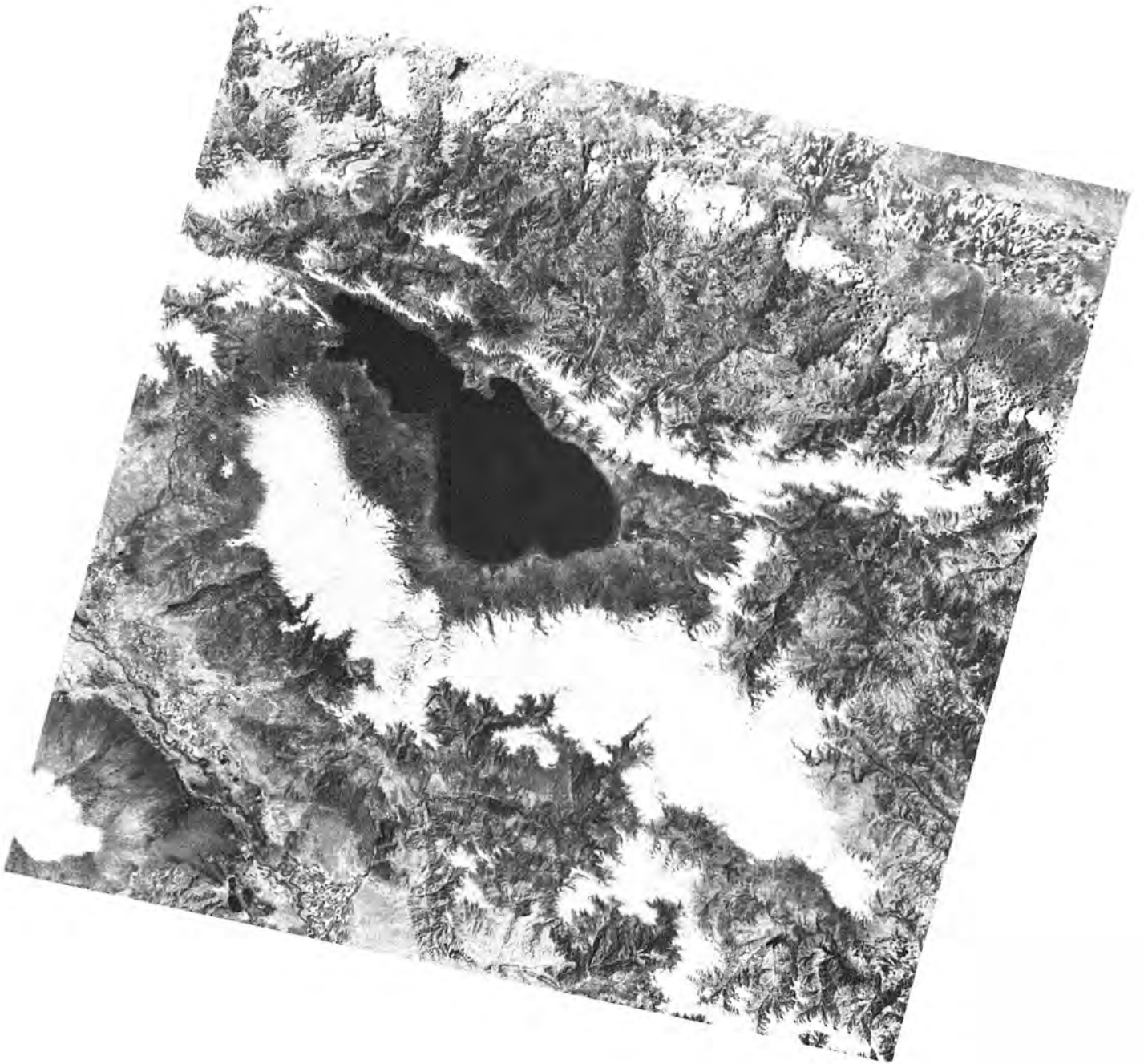
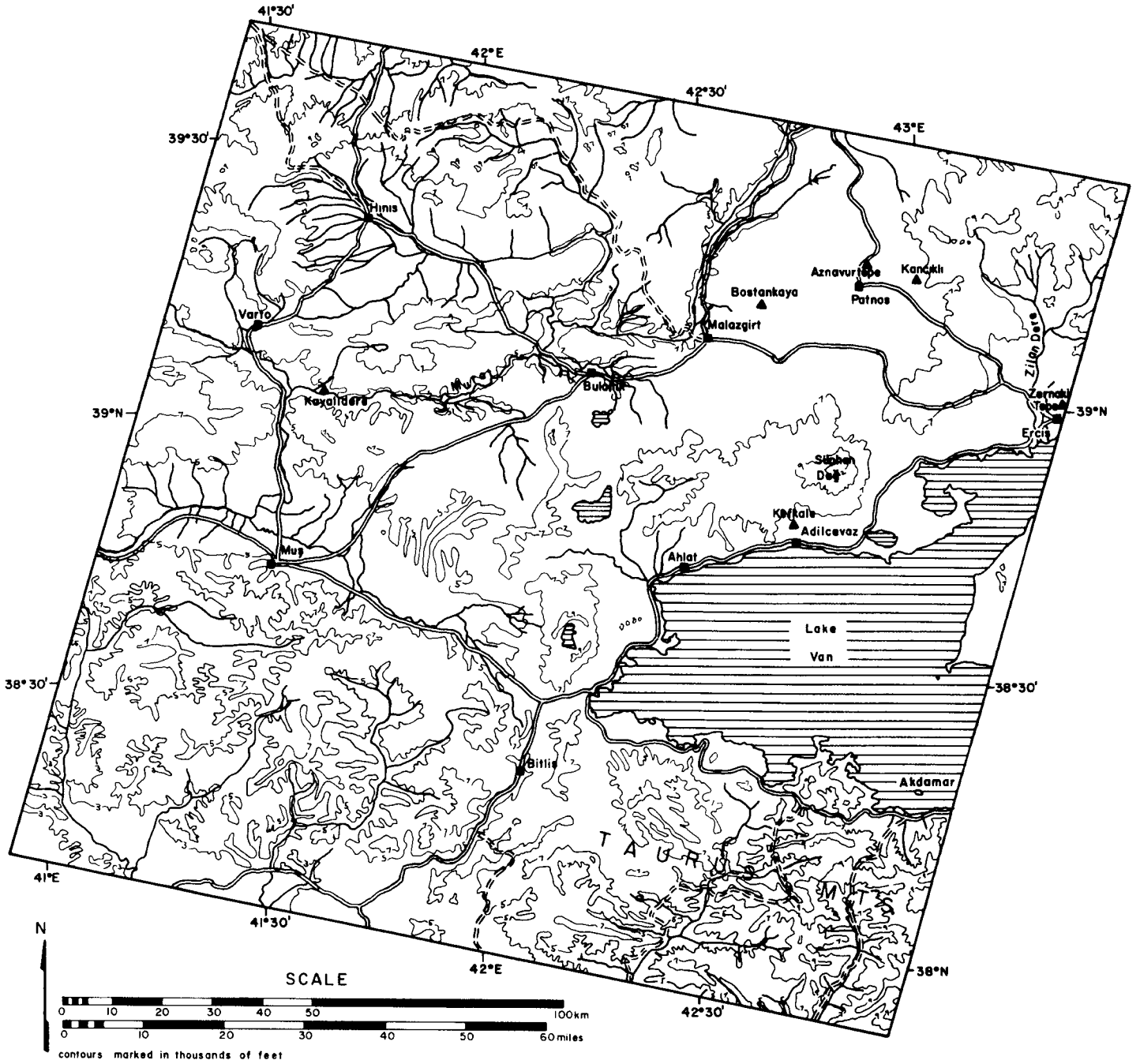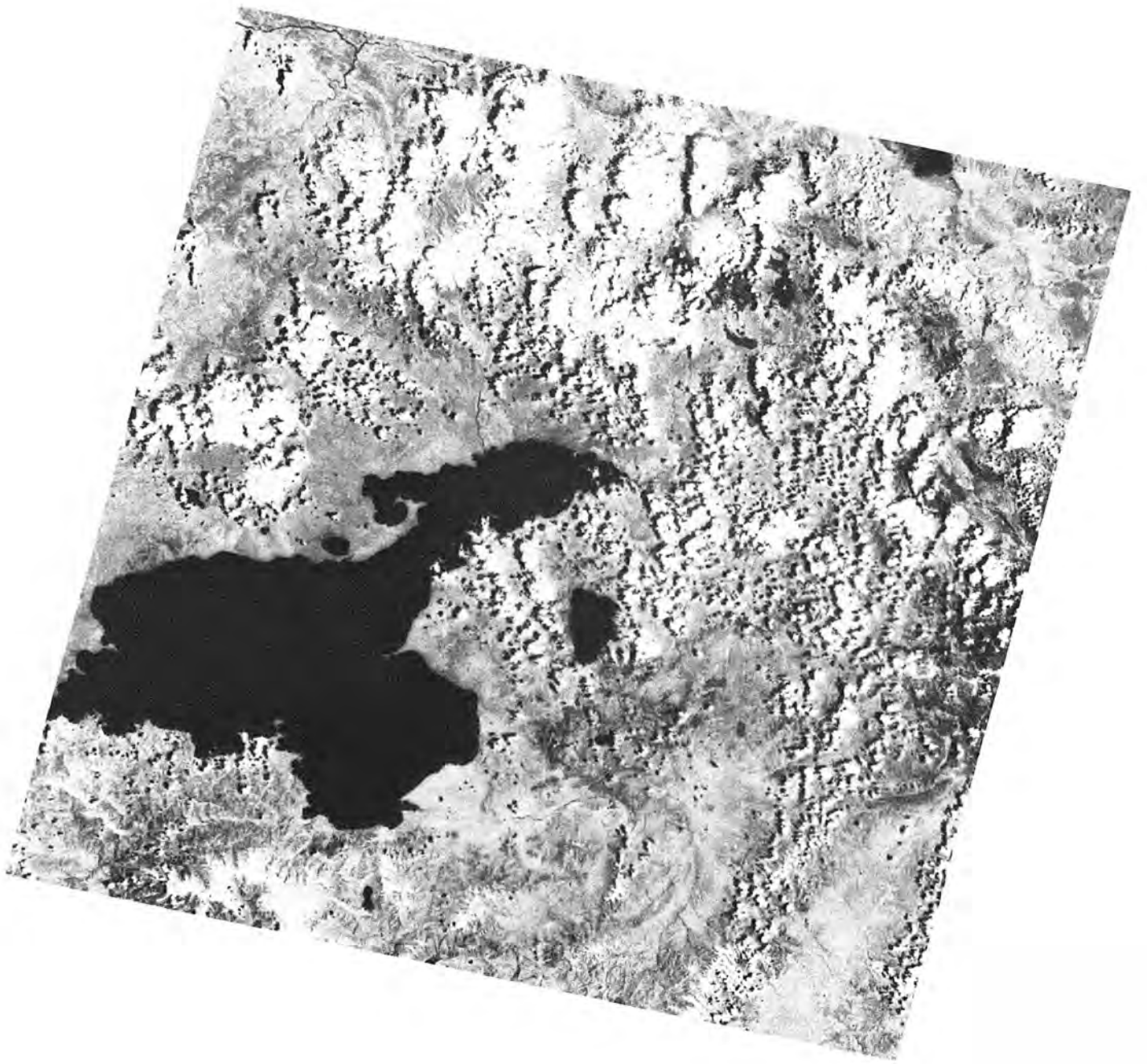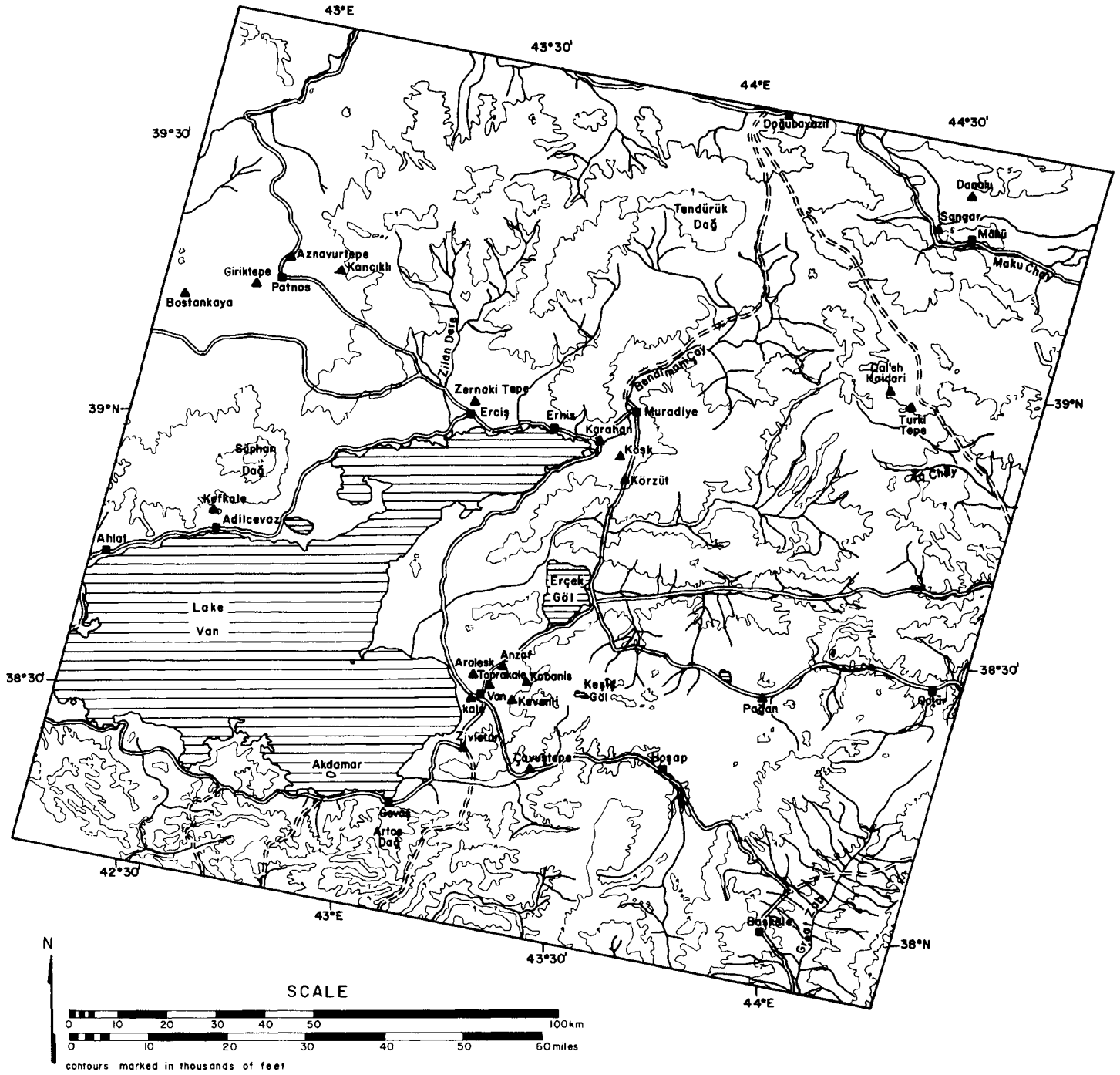**Plate 5A.** *Landsat* image no. 82119706353X0, path 182, row 32, May 3, 1978.
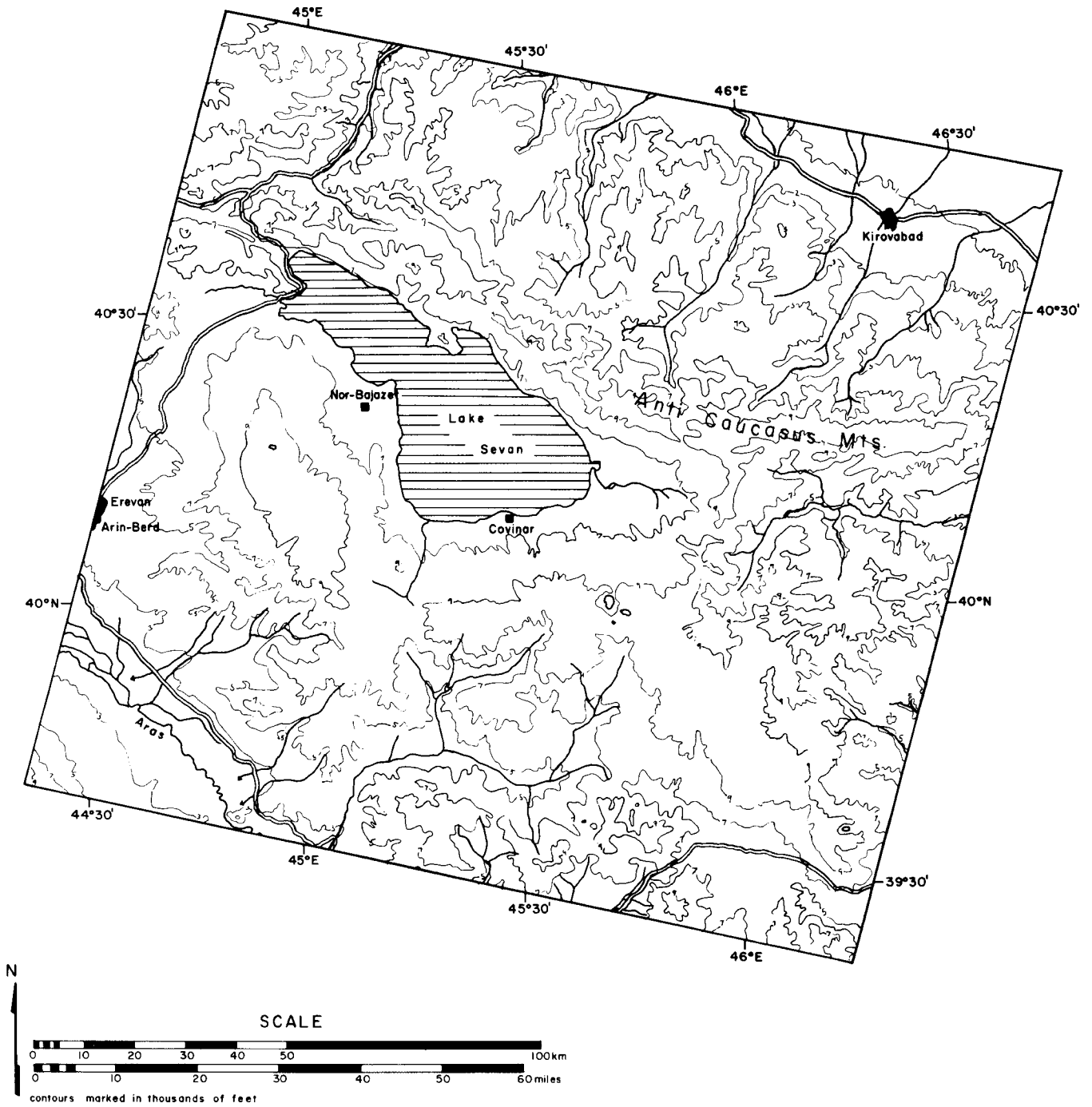
Plate 5B. Map
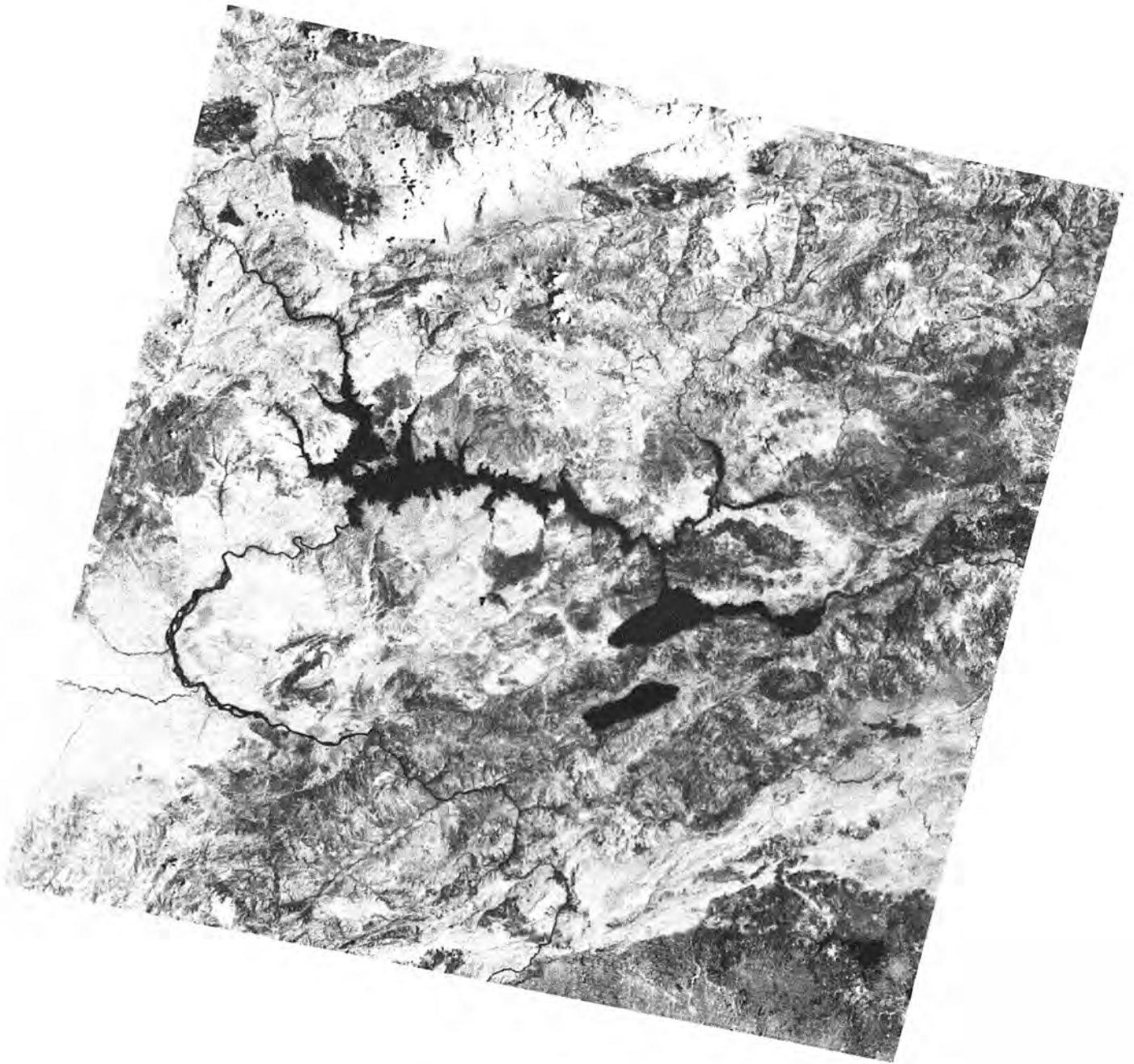
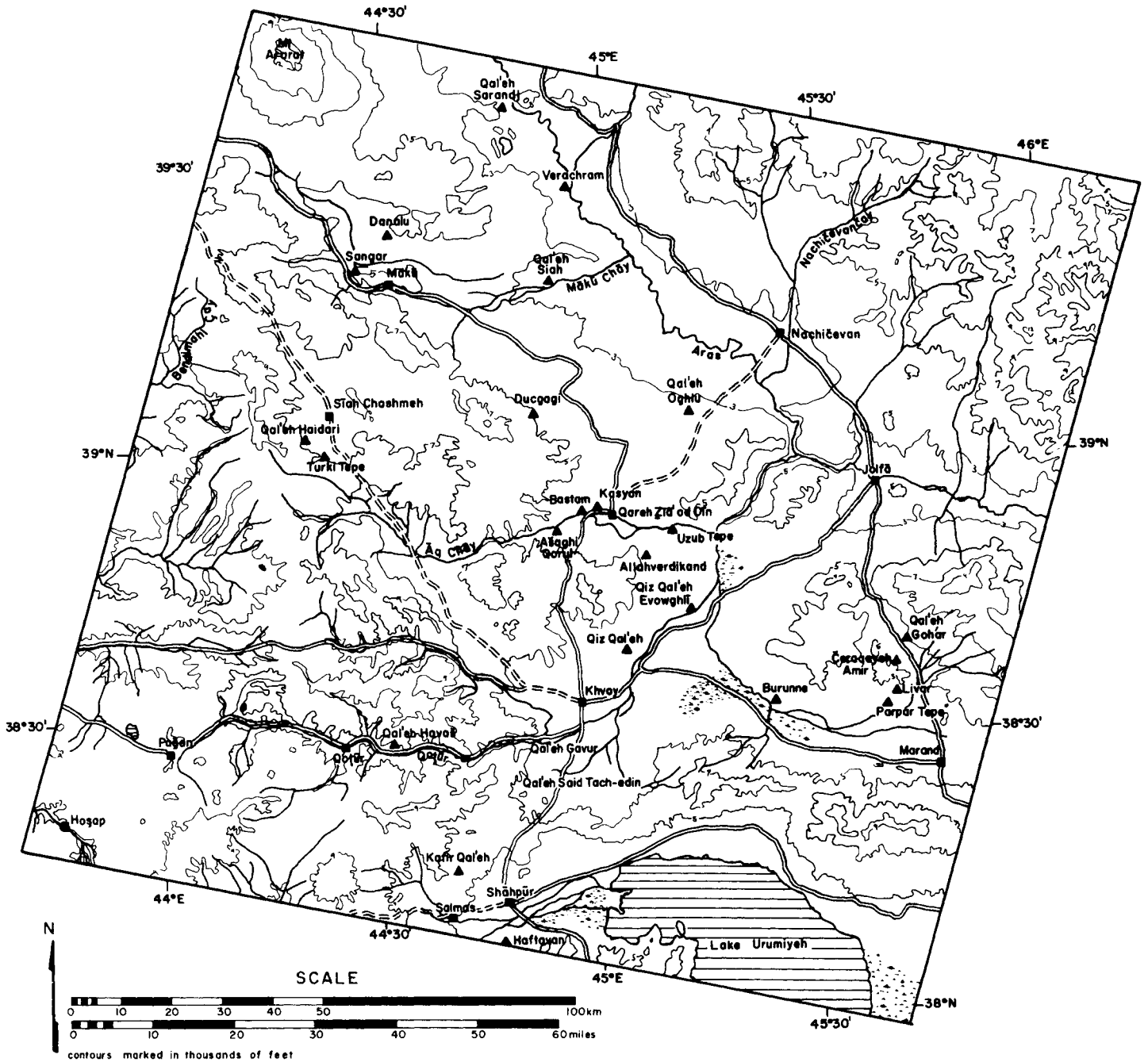Plate 6A. *Landsat* image no. 8249907171500, path 186, row 33, June 4, 1976.
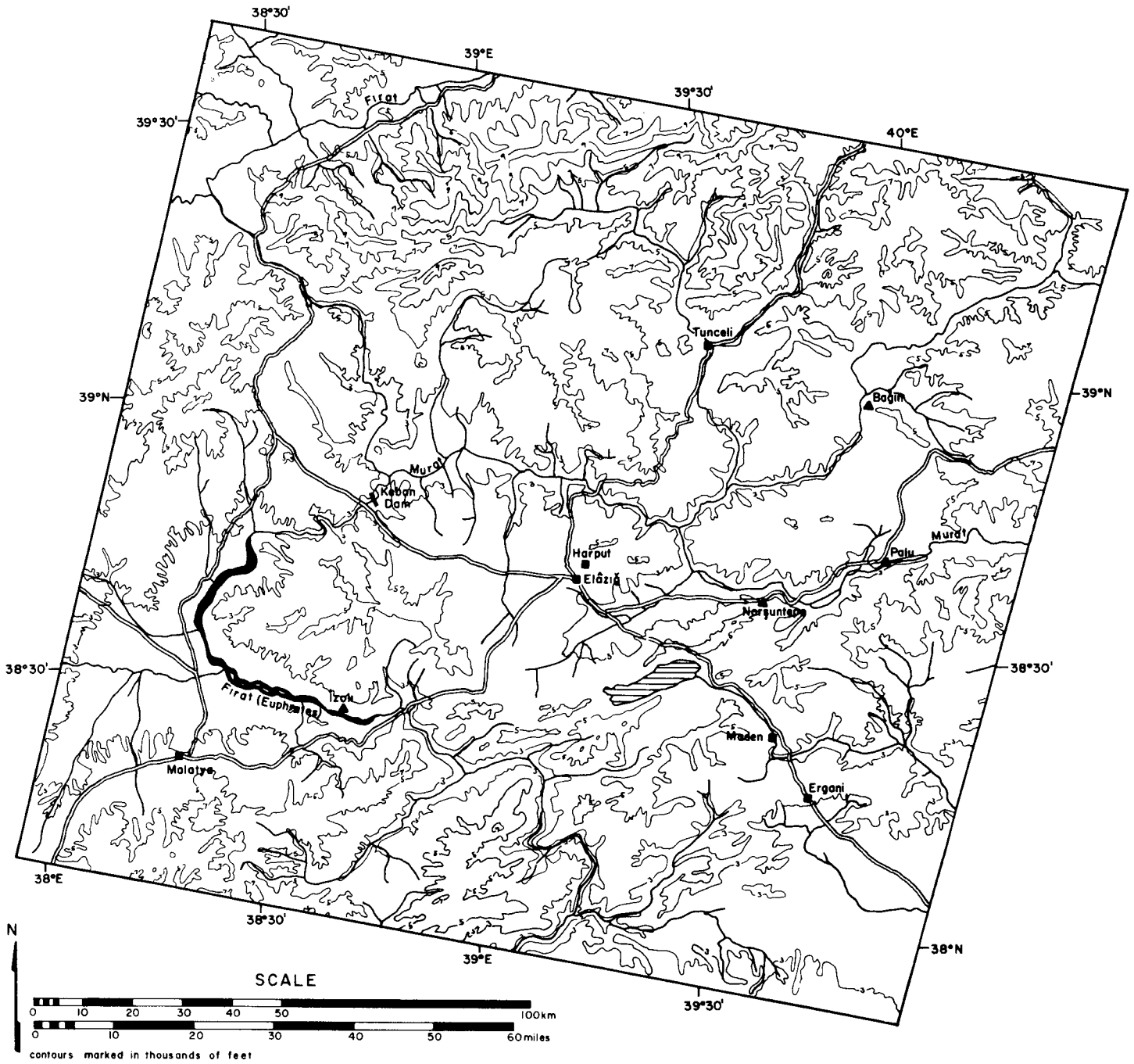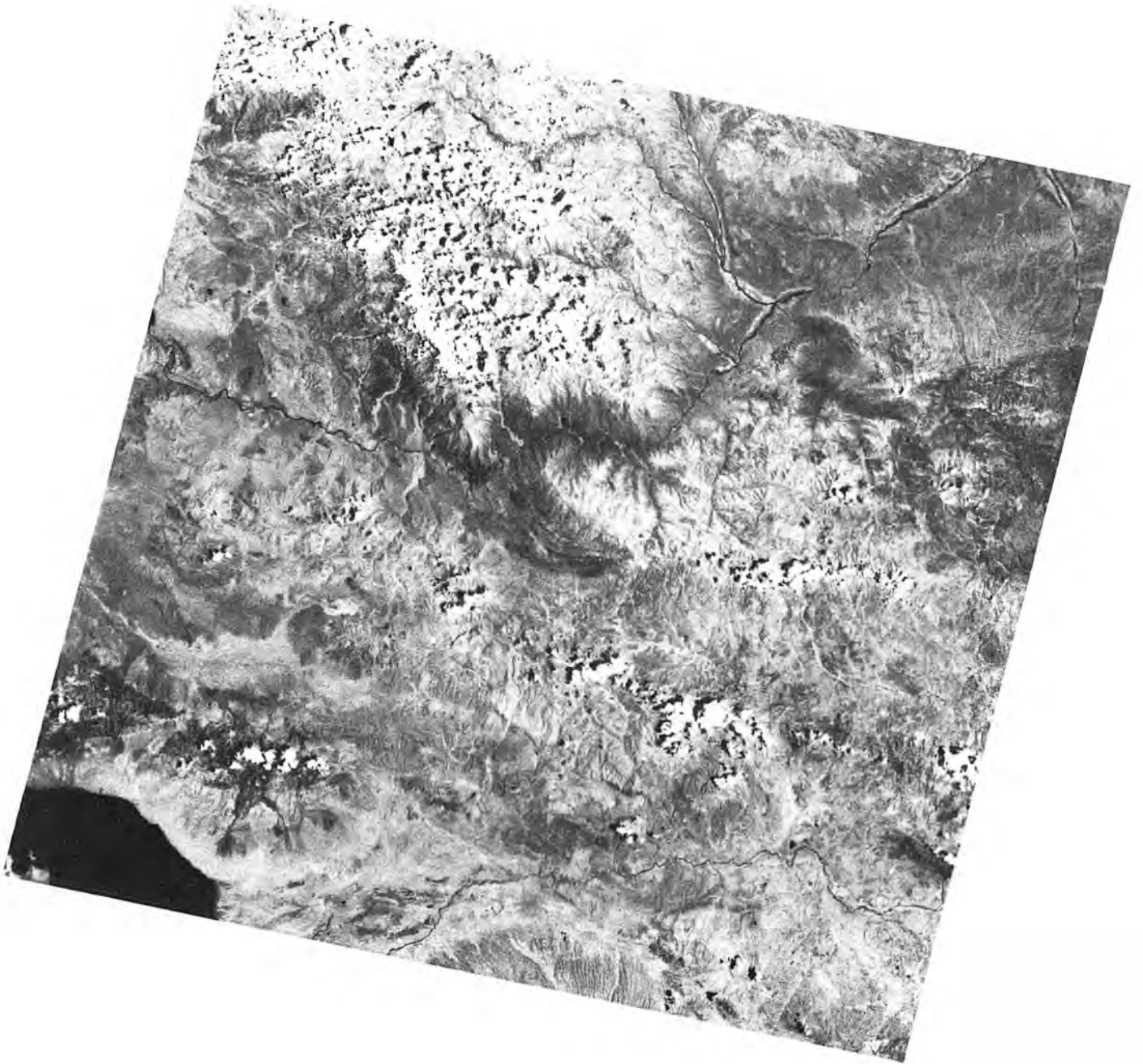
Plate 6*B*. Map
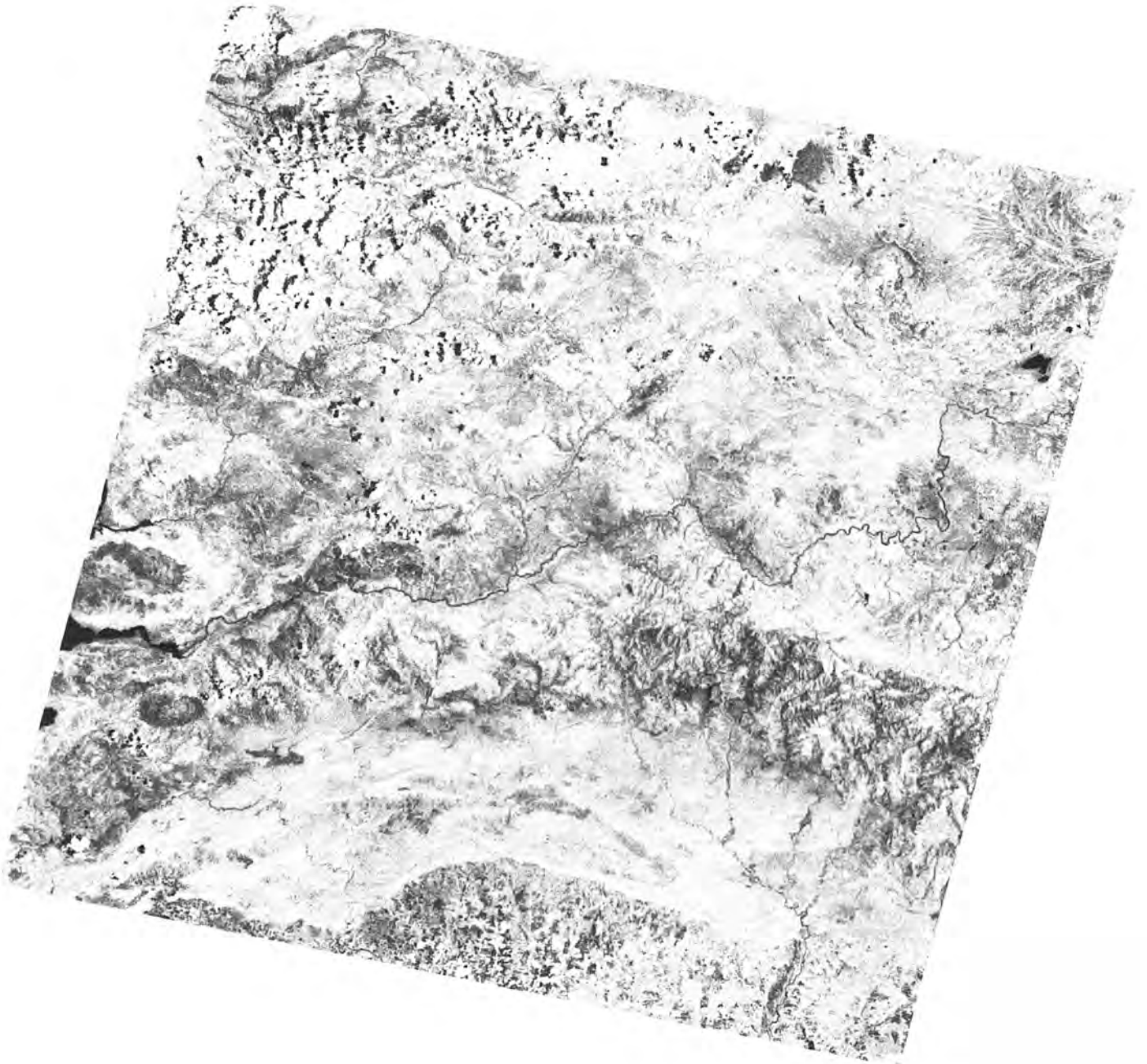
Plate 7A. *Landsat* image no. 8215607173500, path 185, row 33, June 27, 1975.

Plate 7*B*. Map
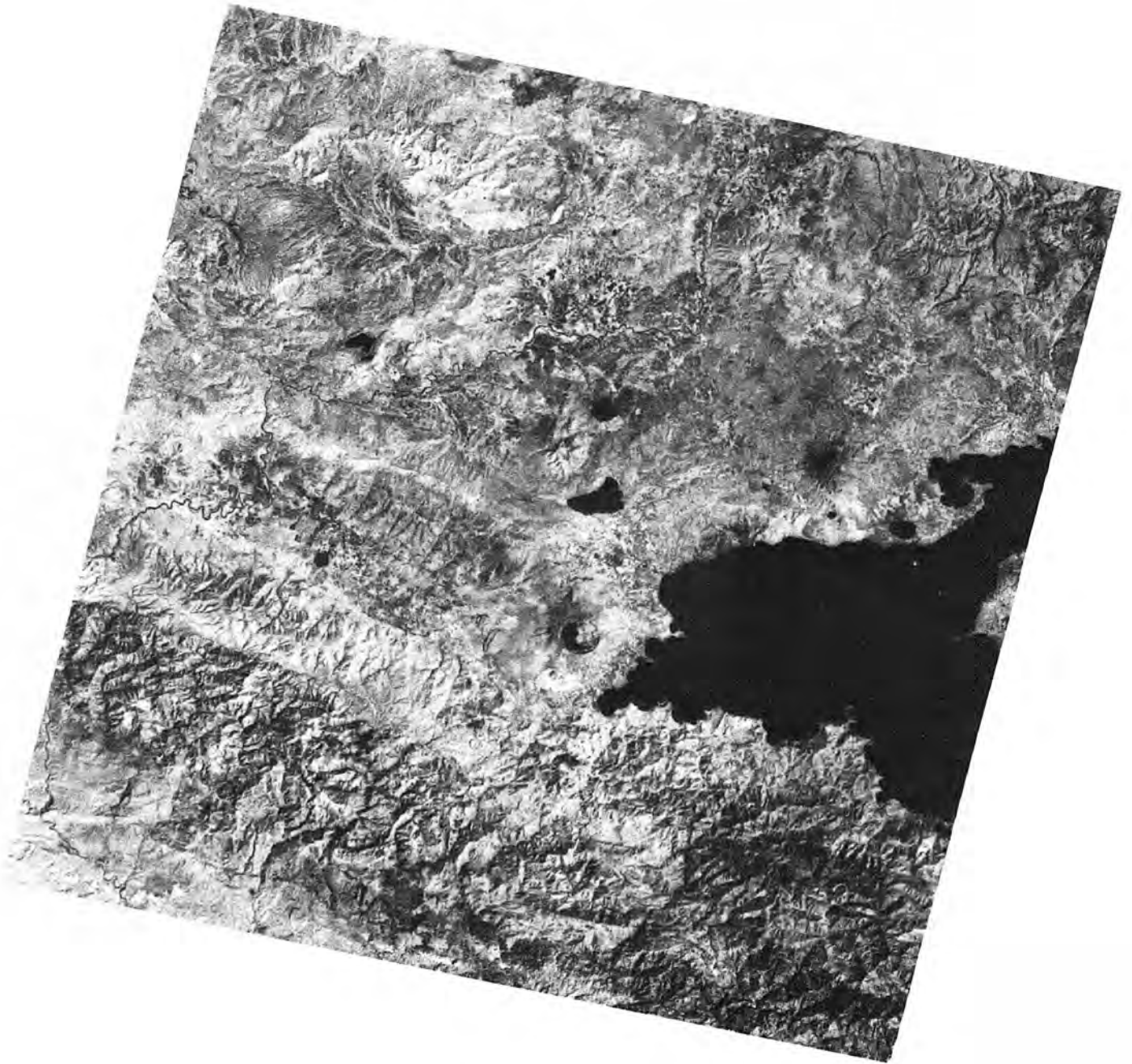
Plate 8A. *Landsat* image no. 8222707104500, path 184, row 33, September 6, 1975.

41°30'
42°E
42°30'
43°E
39°30'
Hınıs
Aznavurtepe
Kançıklı
Bostankaya
Patnos
VarTo
Malazgirt
39°N
Bulanık
Kayalıdere
Muş
Zilan Dere
Zernaki
Tepe
39°N
Erciş
Süphan
Dağ
Kefkale
Adilcevaz
Muş
Ahlat
38°30'
Lake
Van
38°30'
Bitlis
Akdamar
41°E
T A U R U S
41°30'
M T S
42°E
38°N
42°30'

N

SCALE

| 0 | 10 | 20 | 30 | 40 | 50 | | 100 km |

| 0 | 10 | | 20 | | 30 | | 40 | | 50 | 60 miles |

contours marked in thousands of feet

Plate 8*B*. Map

Plate 9A. *Landsat* image no. 8249607000500, path 183, row 33, June 1, 1976.

43°E

43°30'

44°E

44°30'

39°30'

Doğubayazıt

Tendürük
Dağ

Damalı

Sangar
Maku

Maku Çay

Aznavurtepe
Giriktepe Kancıklı
Patnos

Bostankaya

Zilan Dere

Bendimahi Çay

Cal'eh
Haidari

39°N

Zernaki Tepe
Erciş   Ernis

Muradiye

Turki
Tepe

Süphan
Dağ

Karahan
Köşk

Za Chay

39°N

Kefkale
Adilcevaz

Körzüt

Ahlat

Erçek
Göl

Lake

Van

38°30'

Aralesk Anzaf
Toprakale Kabanis
Van Kevanli
kale

Keşiş
Göl

Pagan

Qotor

38°30'

Akdamar

Zivistan

Çavuştepe

Hoşap

Sevaş
Artos
Dağ

42°30'

Great Zab

43°E

BaşKale

38°N

43°30'

44°E

N

SCALE

0   10   20   30   40   50   100 km
0   10   20   30   40   50   60 miles

contours marked in thousands of feet

Plate 9*B*. Map

Plate 10A. *Landsat* image no. 8287306394500, path 182, row 33, June 13, 1977.

SCALE

contours marked in thousands of feet

Plate 10*B*. Map

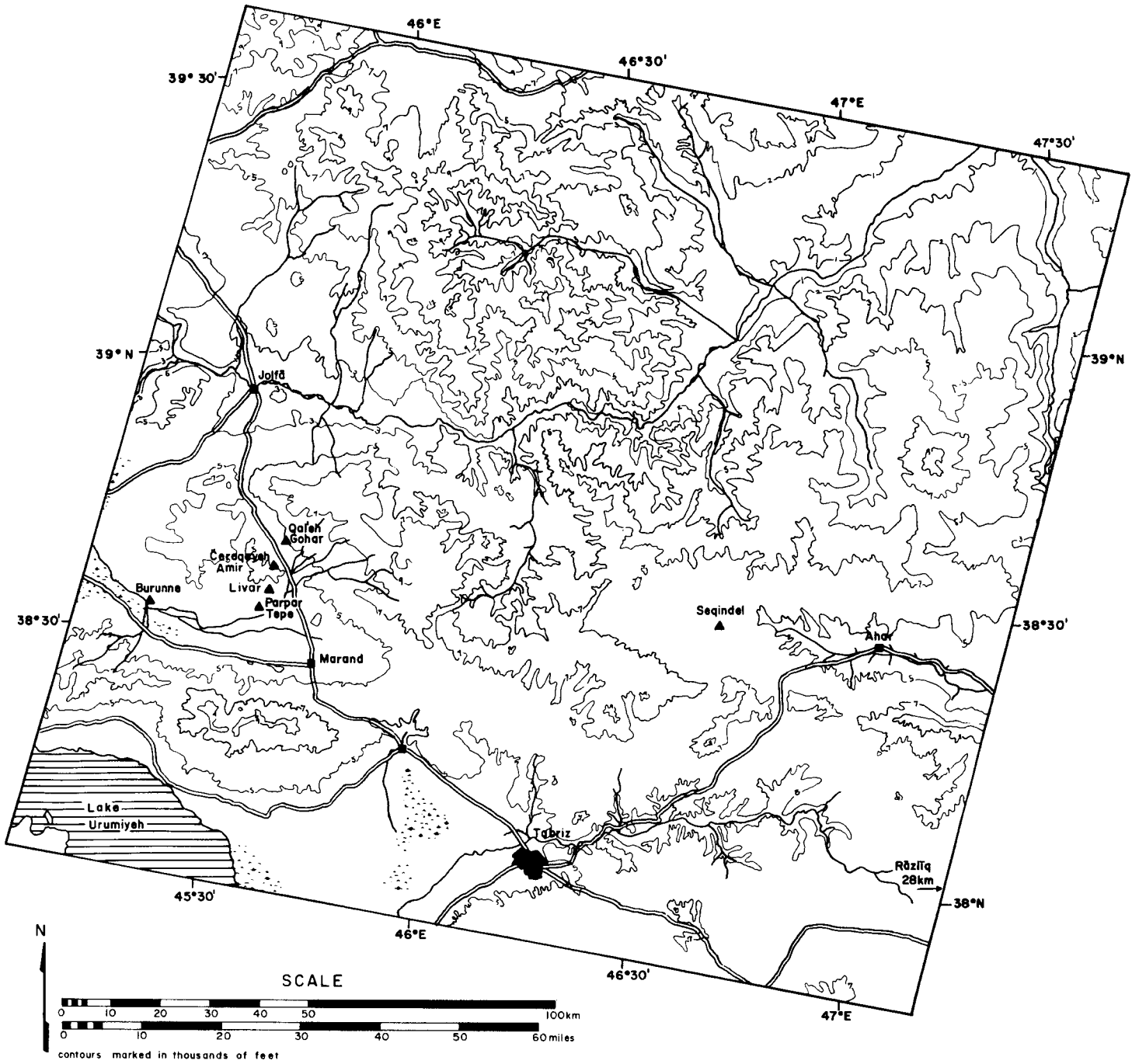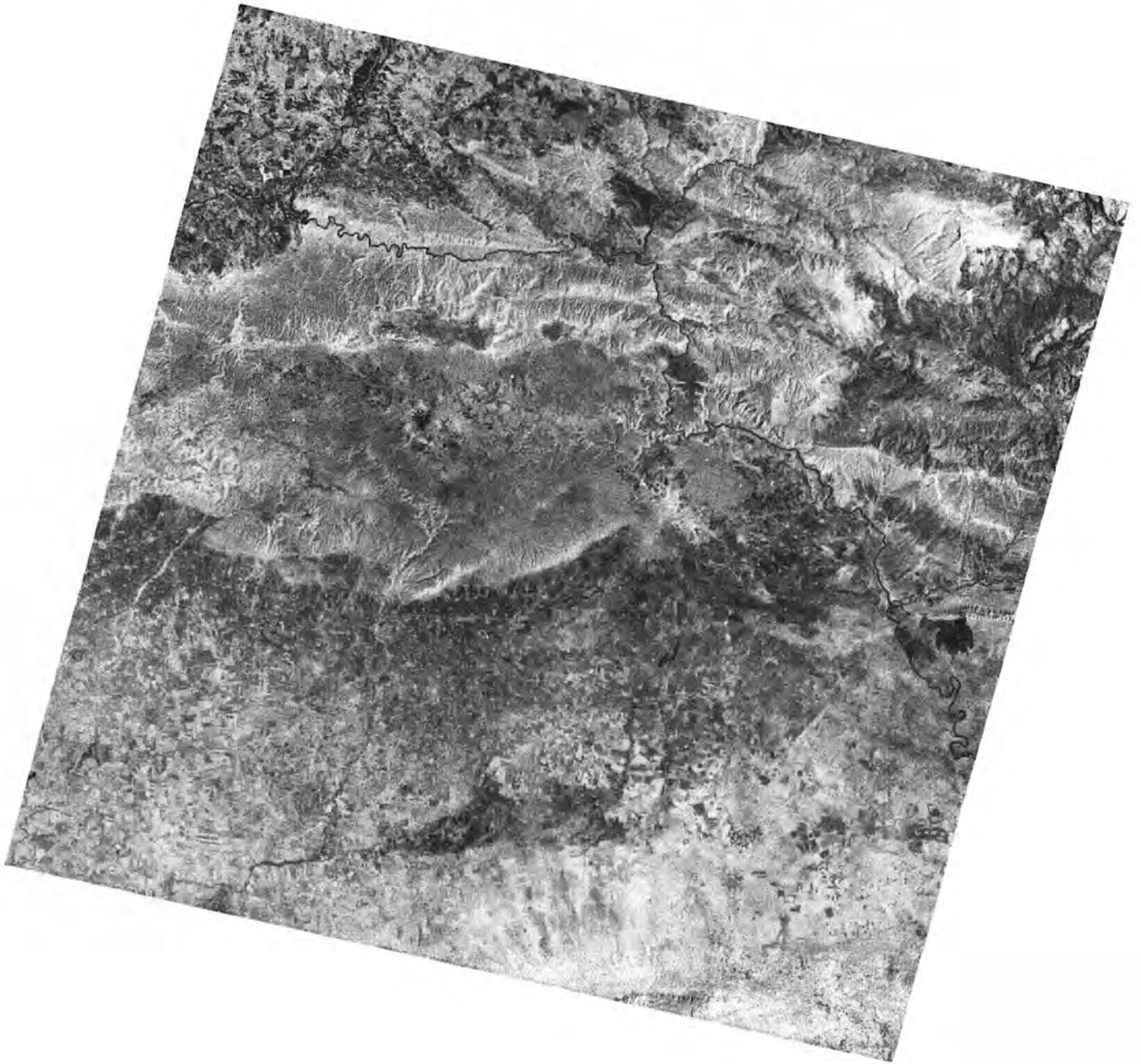Plate 11A. *Landsat* image no. 8251206481500, path 181, row 33, June 17, 1976.

Plate 11*B*. Map

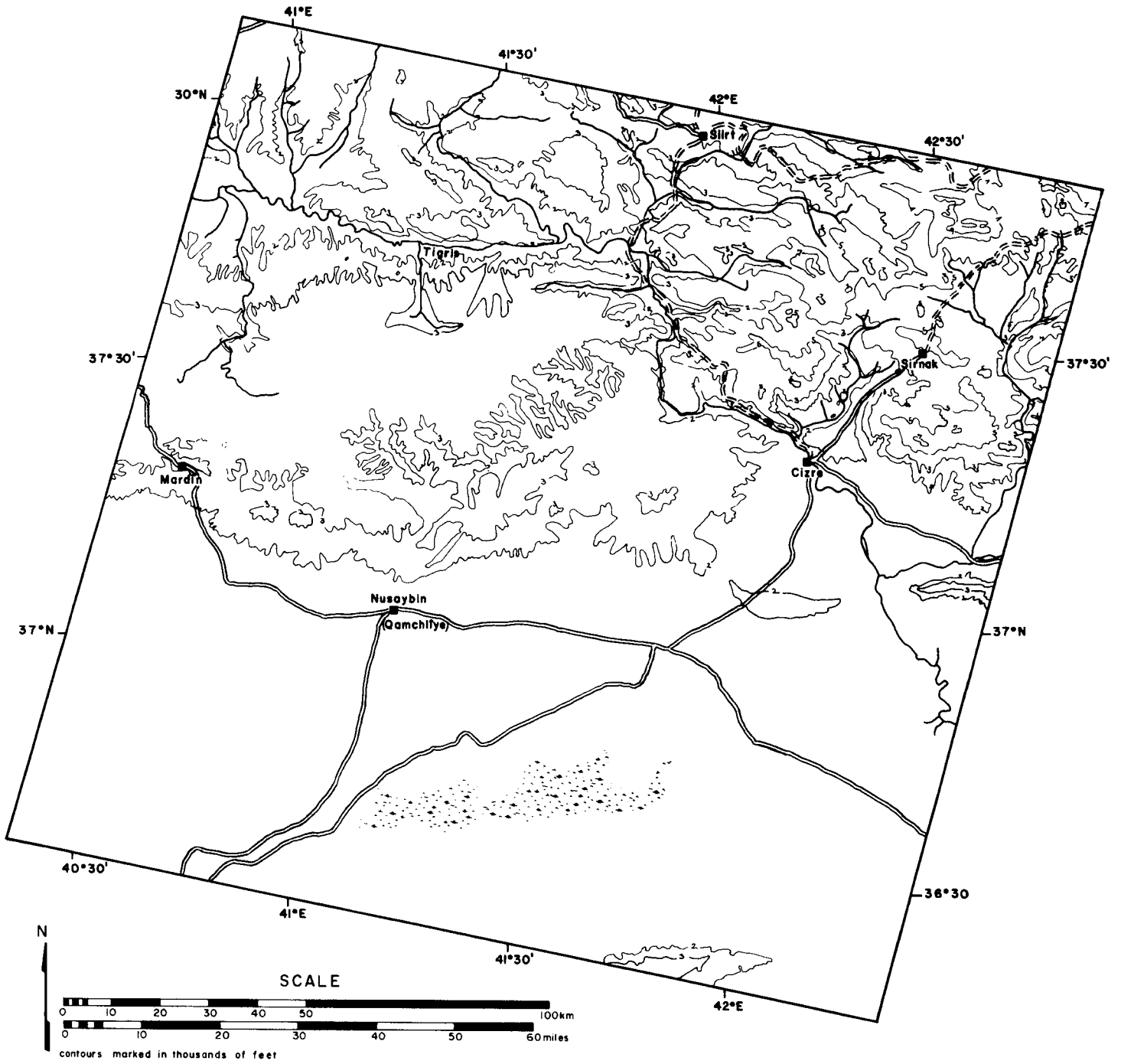Plate 12A. *Landsat* image no. 8213707121500, path 184, row 34, June 8, 1975.

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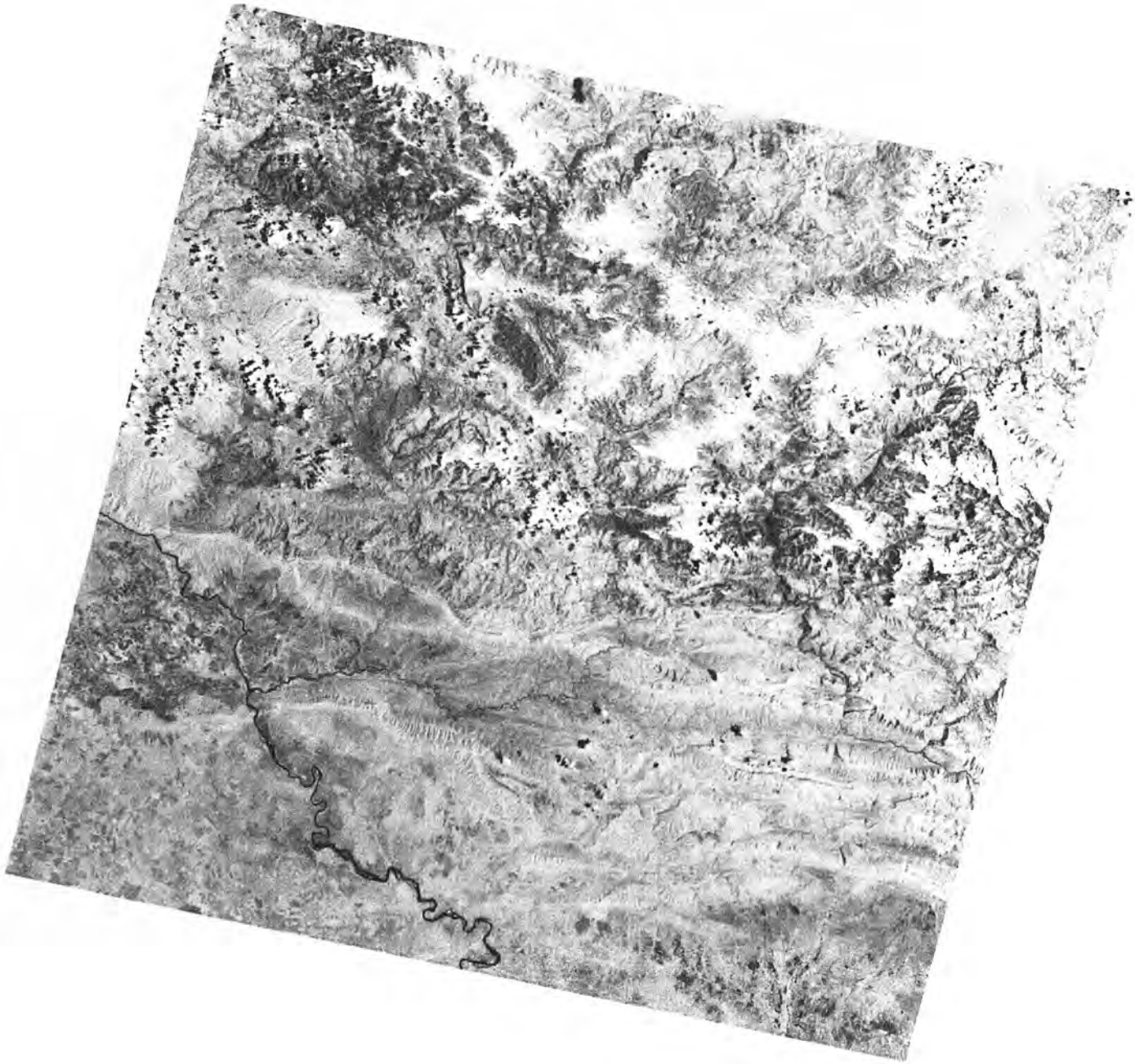
contours marked in thousands of feet

Plate 12B. Map

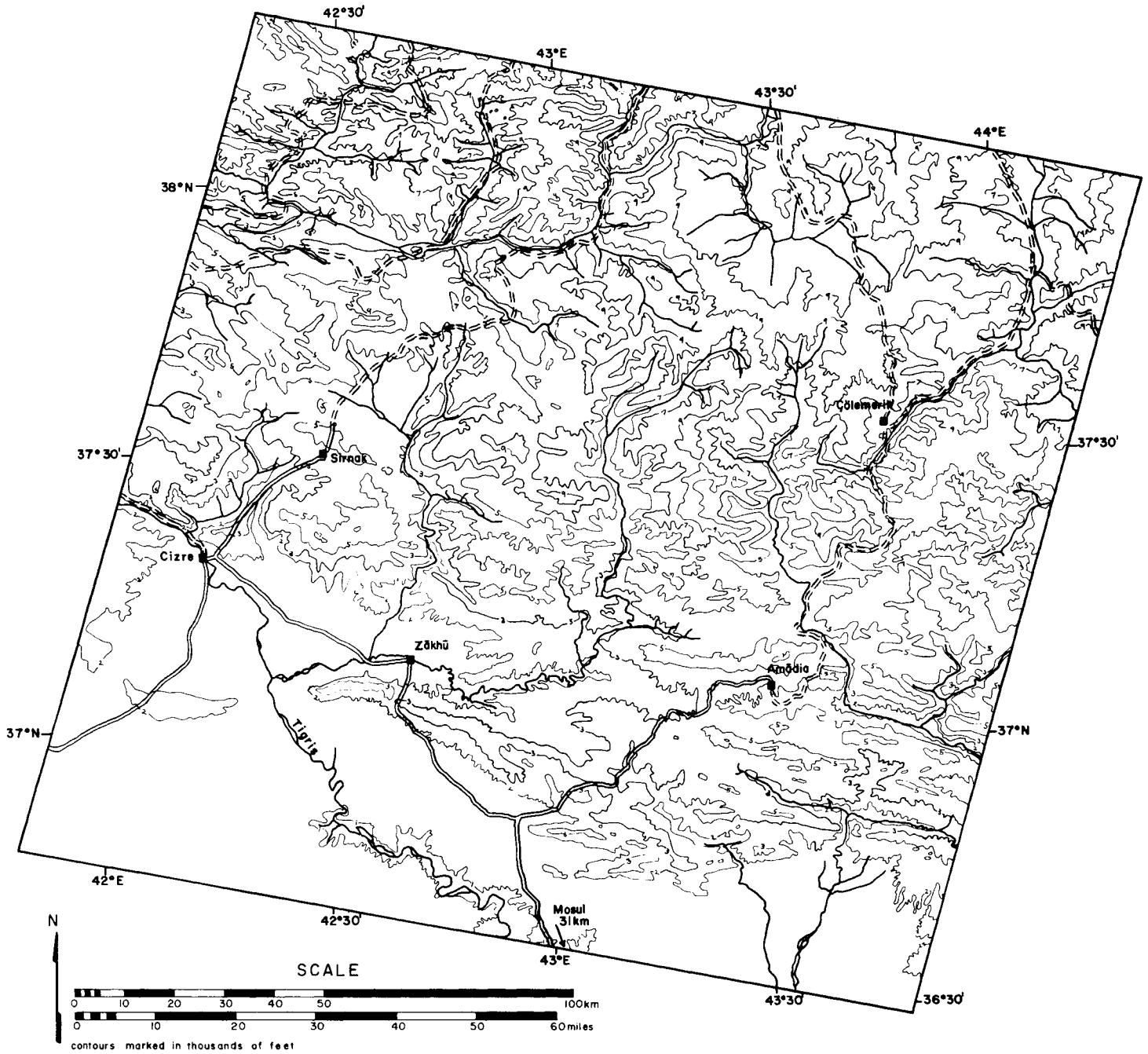Plate 13A. *Landsat* image no. 8249607002500, path 183, row 34, June 1, 1976.
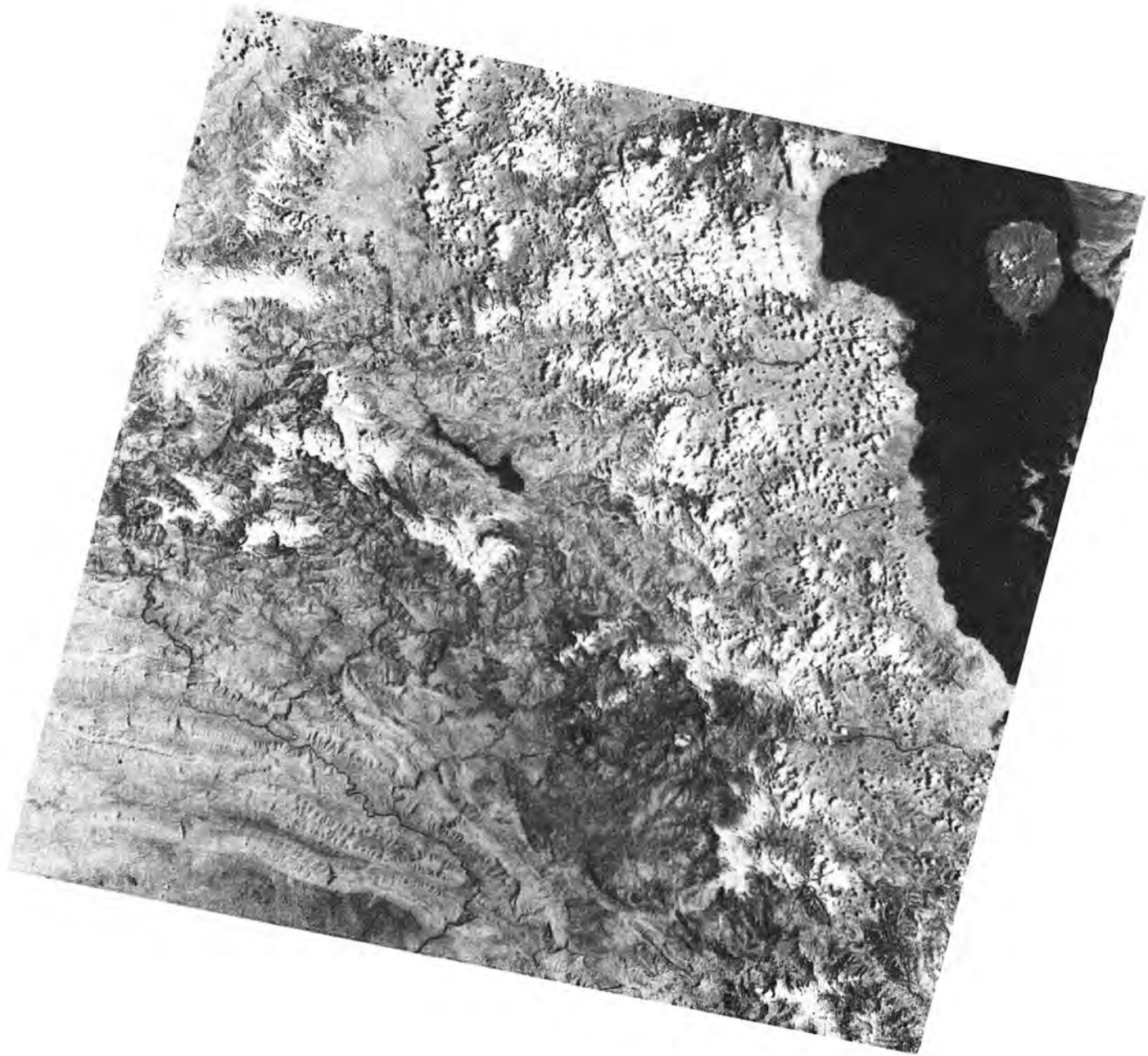
Plate 13*B*. Map

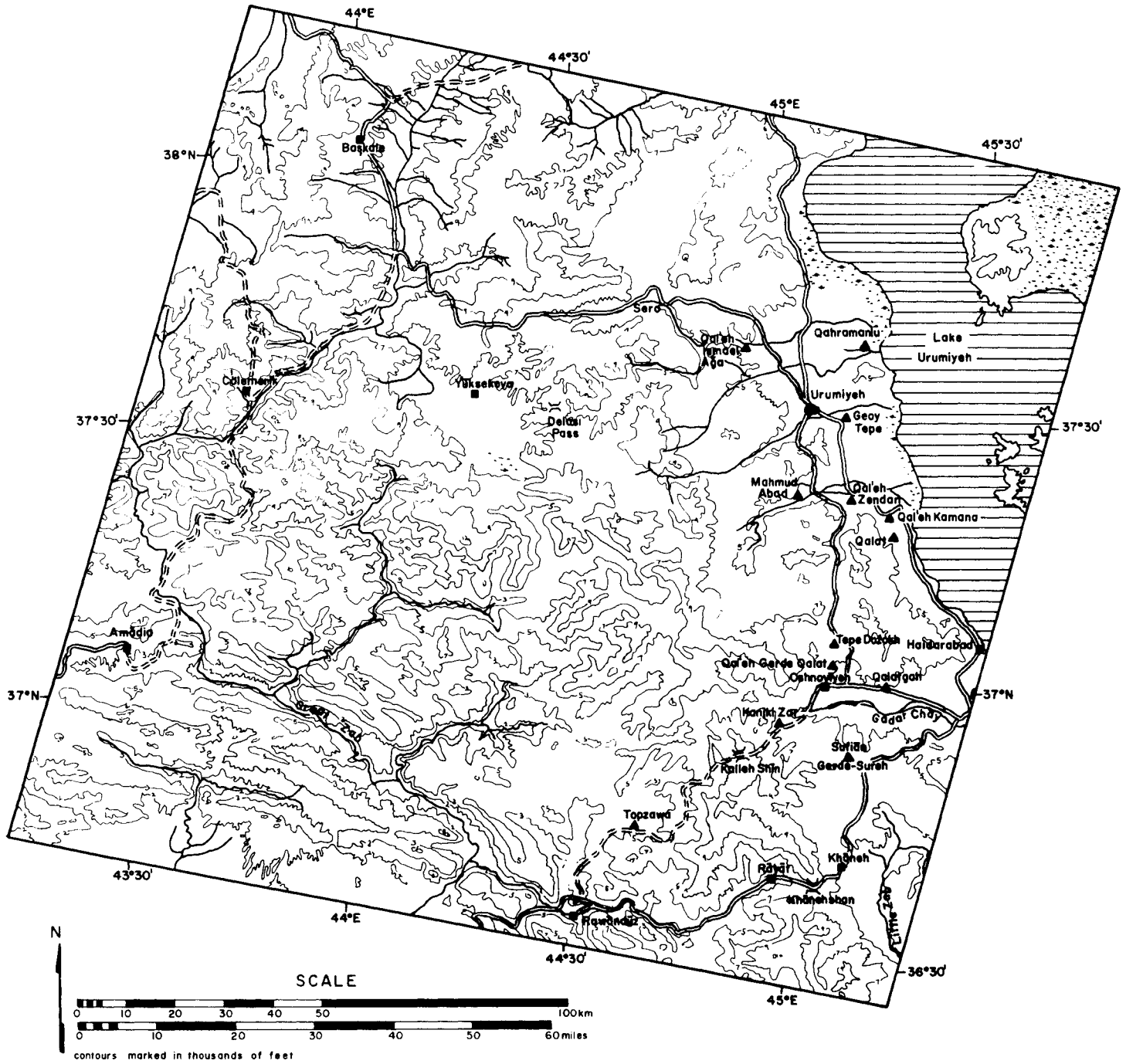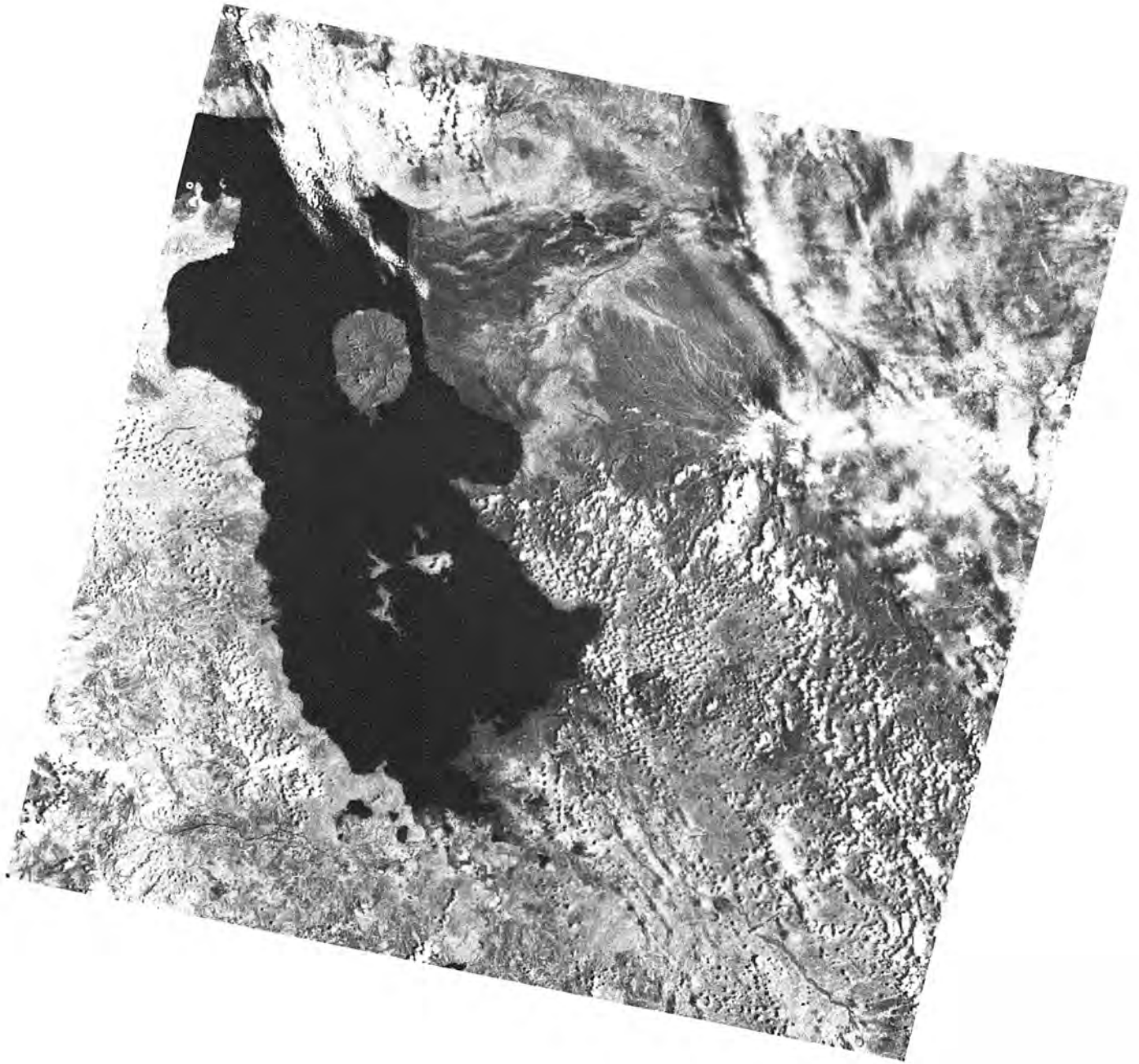Plate 14*A*. *Landsat* image no. 8249506544500, path 182, row 34, May 31, 1976.

Plate 14*B*. Map

Plate 15A. *Landsat* image no. 8285406352500, path 181, row 34, May 25, 1977.
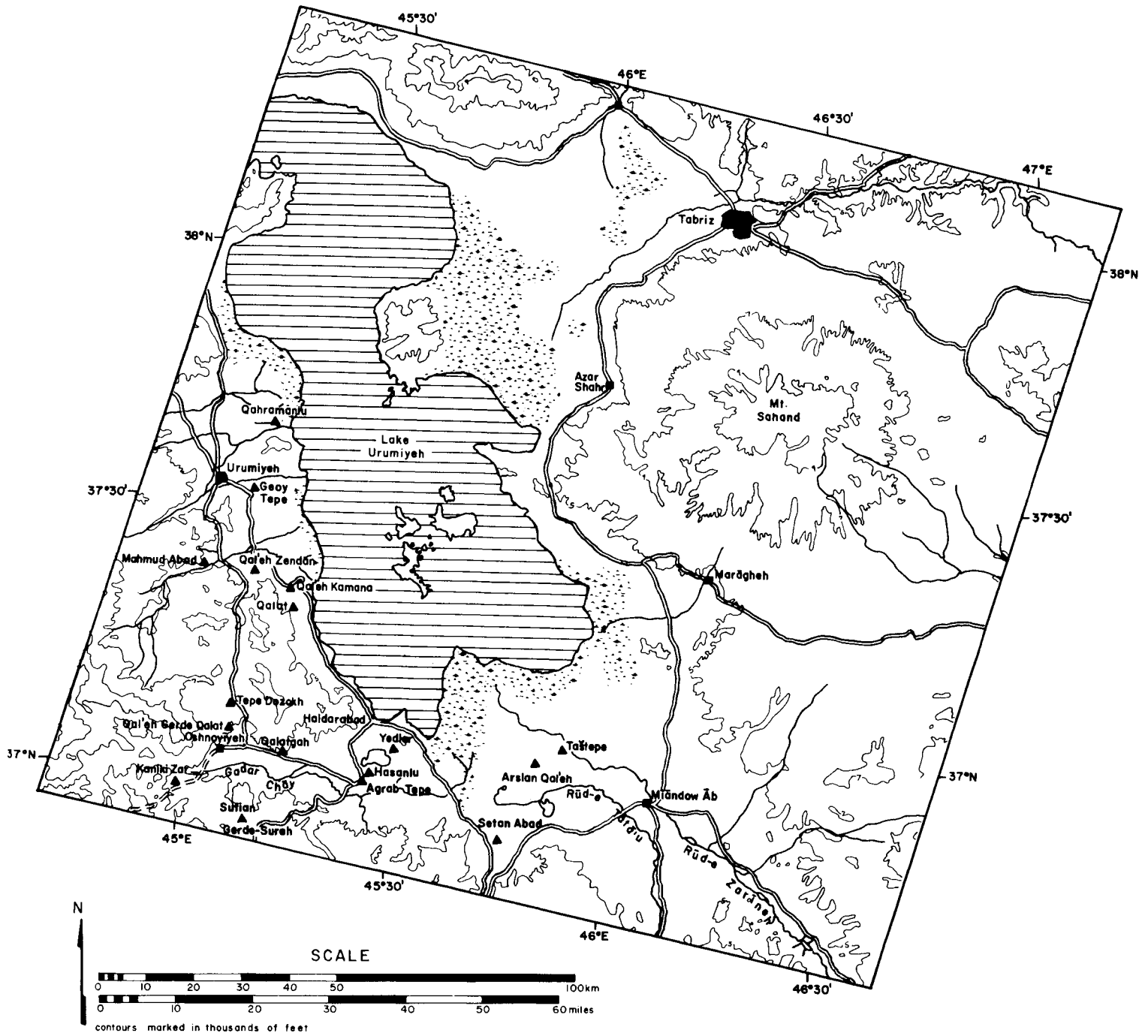
45°30'

46°E

46°30'

47°E

38°N

38°N

Tabriz

Azar
Shahr

Mt.
Sahand

Qahramānlu

Lake
Urumiyeh

37°30'

37°30'

Urumiyeh

Geoy
Tepe

Marāgheh

Mahmud Abad

Qal'eh Zendān

Qal'eh Kamana

Qalat

Tepe Dežakh

Haidarabad

Qal'eh Gerde Qalat

Yedle

Taštepe

37°N

Oshnoviyeh

Qalatgah

37°N

Kanlu Zal

Arslan Qal'eh

Hasanlu

Gadar Chāy

Rūd-e

Mīandow Āb

Agrab Tepe

Sufian

Rūd-e

Setan Abad

Gerde Surah

Rūd-e Zarineh

45°E

45°30'

46°E

46°30'

N

SCALE

0   10   20   30   40   50   100km

0   10   20   30   40   50   60 miles

contours marked in thousands of feet

Plate 15*B*. Map