

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/19095> holds various files of this Leiden University dissertation.

Author: Ahmed, Kozad Mohamed

Title: The beginnings of ancient Kurdistan (c. 2500-1500 BC) : a historical and cultural synthesis

Date: 2012-06-19

Introduction

This work aims to study the early history of a region known at present under the unofficial, but historical, name Kurdistan. During this early history important developments took place that influenced its fate for the millennia that followed. Among these was the formation of early states that, more or less, imitated Mesopotamian models but often kept or introduced local or particular traditions. The questions this study tries to answer include when the early states first appeared in this area, what was their identity and which peoples were responsible for establishing them, what was their history and what did they leave for posterity, what influence they had, what were the models they created and were these followed later by their descendants and whether the migration of new peoples into the territories had any effect on their history. Another question is how and why a country which was geographically divided produced large unified states, while one expects political formations to reflect physical geographical conditions.

To answer these and other questions one must go back to the beginnings of written history in Mesopotamia, which begins with the Early Dynastic period. At that time Kurdistan was populated by settlements of Ninevite V culture, a culture that produced complex societies that were ruled by chiefly lineages controlling the local surpluses produced by dry-farming agriculture. However, in the middle of the third millennium BC these chiefdoms developed into states, a phenomenon which coincided with the emergence of the Mesopotamian states in the south. The recorded history of the relations between the Mesopotamian states and the Northern states shows a warlike history with short peaceful intervals. Such conditions were the main stimulus for the formation of early states in this region. The constant threat and pressure exerted by the southern powers was a significant factor to the emergence of such socio-political organizations that could provide survival for the peoples of ancient Kurdistan. Before that, the natural conditions had allowed only smaller organizations such as chiefdoms to exist. But in times of threat and danger they formed federations and states. These federations and states must have been fragile because, once any threat had disappeared, they fragmented into smaller, independent, self-sufficient units. The few exceptions were the states that emerged in the plains of the region such as Gutium and Simurrum and perhaps also Urkeš, thanks to the plain territory that helped nucleation and eased communications.

The coming of the Hurrians was an important change that affected the history of this region for the subsequent millennia, especially the second millennium. The early states they founded, although not the very first ones, covered the majority of the area and coloured it with their culture and language. This was an auxiliary factor that later helped the emergence of the Mittani Empire.

The subject of state formation in such a region has been a forgotten matter in the shadow of the great civilizations of Sumer, Babylon, Assyria, Persia and the others. The region under study has always been seen as peripheral, unimportant and non-essential for investigative research for Mesopotamia or even for Iran and Anatolia. However, the fact that the foundations of these great civilizations were laid down in these peripheral territories should not be underestimated. Moreover, many of the natural resources that contributed to the

existence of these civilizations were found in ancient Kurdistan. Ancient Kurdistan was the arena not only for the foundations, but also for the socio-political developments that led to the formation of chiefdoms and early states on its territory as early as the mid-third millennium BC. The historical circumstances that pertained then and the ethnic changes and the process that led to the formation of chiefdoms and states deserve more detailed and serious study.

In recent years new written material has appeared that has shed new light on the history of the region under study. These were some historical inscriptions and iconographic material of some of these early states, such as Simurru, Urkeš and Gutium. They showed that the socio-political organization of these peoples was similar in some aspects to those of Mesopotamia and, more interestingly, dissimilar in some others. The question was always which factors prompted the emergence of states there and which factors constrained the emergence of large and highly centralized states or empires similar to those known from Mesopotamia.

While preparing this project its title has raised, and will raise in future, some uncertainty about combining the name 'Kurdistan' with 'Ancient.' This is a good reason to begin with a presentation of the reasons why this title and this region have been chosen for this study. As for the territories under study, they share three common characteristics:

- 1) The region under study, which is basically distributed over four contiguous modern Middle Eastern states, is scarcely studied as a unit and archaeologically investigated. Political conditions are the primary reasons for this. The territories have been since the birth of scientific archaeology and Assyriology and even earlier politically unstable. They were the arena for many political struggles and military clashes between the great powers of the region in addition to local rebellions, uprisings and conflicts. Because of this fieldwork was restricted to a large degree. Moreover, the inhabitants of these territories were generally seen as intruders and strangers by the governments in power because of ethnic differences between them and their rulers. Those governments tried over the decades, if not the centuries, to keep the history of those regions and those peoples unknown as a means of forced integration and fighting nationalism. Gaps were created between the modern inhabitants of these regions and their past, and as a consequence between them and their homeland. There were no studies or investigations of these territories while neighbouring territories were being well-studied and well-investigated.
- 2) The second common characteristic of the region under study is the ethno-cultural integrity that can easily be noticed to have existed since ancient times. The region was in prehistoric ages at the centre of the food-gathering culture because of its generally speaking geographical and climatic uniformity. Later, the region became a core of the Neolithic Culture and its subsequent cultures, such as Hassuna, Halaf, and Ninevite V. These cultures have prevailed in almost all the territories under study, although they have not been completely investigated. This fact makes it possible to study the region as one cultural whole, which yields more realistic results than a fragmented study of those cultures in Iraq, Iran, Turkey or Syria.

This cultural uniformity was not restricted to prehistoric times, for the same can be said about historical times too. Cultural uniformity was in some cases coupled with an ethnic uniformity, such as the predominance of the Hurrians in the second millennium BC. A similar situation pertained in the first millennium BC with the

coming of the Indo-Iranians (the Medes) to the region, and similarly afterwards with the Kurds ever since the beginning of this era.

However, the role of the other ethnic, cultural and religious minorities who were always present in the history and culture of this region should not be forgotten. They have always contributed to the cultures (in its fullest sense) of the ethnically predominant peoples, particularly when they were aboriginals of the land or belonged to an earlier migrant group. They have lived either in enclaves or became distributed over other ethnic textures, exactly as they are in present-day Kurdistan.

It is noteworthy that similar geographical and climatic conditions make different cultures adapt to similar ways of life and mould one similar culture, disregarding the diversity of ethnicities inhabiting a certain region. This can be seen in the way of life of the Kurds and the Turkomen in the Kirkuk region, in the nomadic Kurdish and Chuchāny tribes in Sulaimaniya province, and in the sedentary Kurdish and Christian communities in the Diana and Shaqlāwa regions to the northeast of Erbil.

- 3) Since there is a modern name for these regions, though it is not recognized formally in some countries, the use of Kurdistan seemed to be the best solution to avoid a cumbersome periphrasis such as “the regions of the northeast of Iraq, the west and northwest of Iran, the southeast of Turkey and the north and northeast of Syria.” Using Kurdistan as the name of a land first occurred formally under the Seljūq sultan ‘Sanjar’ (11th century AD), while the oldest occurrence of Kurd as an ethnonym goes back to the beginning of our era. It is found in the *Kârnâmê î Artakhshîr î Pâpakân*, composed to commemorate the victories of Ardashîr, founder of the Sassanian dynasty. So it is then older than the country names of Iraq, Syria and Turkey, for which expressions such as “Ancient Iran,” “Ancient Iraq,” “Neolithic in Turkey” are still used.

It is also important to mention that the present study will sometimes touch upon territories beyond Kurdistan, and conversely at other times neglects territories within Kurdistan. This is determined by their significance for our theme, that fundamentally treats the lands inhabited by the Hurrians and their predecessors. There are also territories not studied in detail because of the scarcity of historical and archaeological data, especially for those parts of the region which fall under what some call ‘bureaucratic illiteracy.’

The Arena

In the second common characteristic mentioned above, the geographical conditions of our region have been pointed out as a means of unifying culture and the way of life. Yet, this does not contradict the fact that rugged mountainous terrains form natural barriers between different areas. This produces elements of diversity in cultural details, such as linguistic dialects and some aspects of lifestyle particular to the plains and the mountains, or to nomadic and sedentary communities. For a better understanding of this a short geographical description of the arena on which the historical episodes took place would be of interest, especially seeing that our study focuses on the process of state formation from a historical-anthropological perspective.

The region under study is generally shaped like a great arc, beginning in the northwest in the region west of Malatya, to the region of Lake Urmia through the region of Lake Van,

thence down along the Zagros to the southeast as far as the region round the cities Burujird and Ilam (see the map). It is mountainous for the greater part; mountains constitute more than half of its total area. However, plains, plateaus, undulating areas and lakes are not absent. The majority of the area falls within the range of dry-farming regions. It benefits from sufficient winter and spring rainfall and is watered with plentiful springs, *karēzs*, brooks and rivers with several lakes, natural (such as Van, Urmia and Zirēbār) and artificial (such as Dukān, Darband-i-khān and the GAP lakes in Eastern Anatolia).

The principal mountains of the region are the central and northern Zagros, the eastern two-thirds of the Taurus and Pontus and the northern half of the Amanus Mountains.¹ These ranges have been formed by the Alpine movement that began in the Oligocene period through the Miocene until the beginning of the Pliocene.² The region consists geologically of fragile layers that were subject to great pressure from both the Anatolian-Iranian plateaus in the northeast and the Arabian plateau in the southwest. This produced the shape of the mountain ranges of the region as a great arc in a generally northwest- southeast direction.

The heights of these mountains range from 500 to more than 5000 meters,³ some of the highest peaks still harbour glaciers that increased in size during the last glaciation and advanced to form tongues of ice protruding down into adjacent valleys.⁴ The northern part of the region has numerous old volcanoes that have filled many valleys and made plateaus. For millennia the territory around Lake Van has been a source of obsidian.

The mountain peak of Ararat (5165 m)⁵ is the highest peak in the region under study, followed respectively by Dinar (4432 m), Rashko (4135 m), Jilō (4116 m), Sipan (4058 m), Halgurd (3600 m) and then other peaks.⁶

The Zagros Mountains that branch off from the Caucasus in the northwest of Iran form the greater part of the mountains of our region. They extend for almost 1500 kilometres in length and 300 kilometres in width in a northwest - southeast direction,⁷ including the mountainous regions in the Iraqi side. In most places limestone predominates⁸ and shows a considerable topographic variation. It is remarkable that, apart from a string of granite masses along its northeastern edge, there are no volcanic deposits or ancient volcanoes in the Zagros,⁹ though there are in the Taurus.

The Zagros range can be divided into three main sections, northwestern, main or middle and southern (part of the second and the whole of the latter are beyond the region under study). The former extends from the frontiers with Turkey and Armenia as far as a line that linking Qazvin, Hamadan and Kirmashān.¹⁰ This section dominates the Iranian side of the

¹ Izady, M., *The Kurds: A Concise Handbook*, Washington, 1992, p. 13.

² غهفور، عبدالله، جغرافیای کوردستان، ههولێر، ۲۰۰۵، ل. ۲۵.

[Ghafour, A., *Geography of Kurdistan*, Erbil, 2005, p. 25. (in Kurdish)].

³ All heights given are above sea level, unless otherwise stated.

⁴ Butzer, K. W., "Physical Conditions in Eastern Europe, Western Asia and Egypt before the Period of Agricultural and Urban Settlement," *The Cambridge Ancient History (CAH)*, Vol. I, part 1, 3rd ed., Cambridge, 1970, p. 49.

⁵ *Persia*, (Geographical Handbook Series, edited by the Naval Intelligence Division), 1945, p. 47.

⁶ Ghafuor, *op. cit.*, p. 28. For the height of this mountain and others in the Iranian side, cf. Ehlers, E., *Iran, Grundzüge einer geografischen Landeskunde*, Darmstadt, 1980, p. 31ff.

⁷ Ehlers, *op. cit.*, p. 369.

⁸ *Persia*, *op. cit.*, p. 16.

⁹ *Ibid.*

¹⁰ Fisher, W. B., *Physical Geography, CHI* vol. 1, Cambridge, 1968, p. 8. Kirmashān is the proper form of this city name as used by local residents. The Arab geographers rendered it as Qi/arma/isīn, sometimes pointing out that Kirmanshāhān is a Persian form of this older name, cf.

region under study. The mountains of this section are amply spaced without crowding,¹¹ but much disturbed, partly by folding and mostly by fracturing followed by differential warping.¹² They belong chiefly to the Upper Cretaceous, Miocene and Plio-Pleistocene geological ages.¹³ The highest mountains of this section are those in the extreme north and west towards the border with Iraq. The average height of this northern section is 2000 m, forming a vast plateau that embraces numerous cities and towns and is cut by rivers such as Mahabād, Simine Rūd (= Tata'u), Zarine Rūd (= Jaghatu), Khur Khure (all pour into Urmia Lake), the two Zābs, Sirwān, Zimkān, Qarasu, Gamasiyāb, Alwand and others. Through this section main routes are running that link Anatolia, the Caucasus and Iran. Through the border between this section and that of the Middle Zagros runs the most important route in the region, the Great Khorasān Road, which Herzfeld called 'The Gate of Asia.' This was the main route that linked Mesopotamia with the eastern lands of Iran, Afghanistan and beyond and was a branch of the silk route in the Middle Ages. It came from Central Asia to Dameghān (ancient Hecatompylos), Rayy (ancient Rages) Hamadan, Kirmashān through Sar-i-Pul-i-Zohāb and terminated in Baghdad. Other minor routes are those linking it with the Iraqi side via a number of mountainous passes in Khaneh-Haji Omarān, Sardasht-Qala Dizeh, Mariwān-Penjawēn, and Prwēz Khān. The largest downthrow basin in this section of the Zagros is the complex pattern of drainage that flows into the central Urmia Basin,¹⁴ followed by Khoy to the north of Urmia. The water of the Lake Urmia is saline, although less than the Dead Sea, and the only flora on its shores are a few halophytic plants and shrubs.¹⁵ The volcanic cones of Mounts Savalan and Sahand, the likelihood of earthquakes and the erosion caused by rivers that have shaped the landscape are all geological characteristics of this section of the Zagros. The high altitude of the ground here makes the rainfall heavier, and this effect "is augmented by the sharply seasonal onset, which concentrates the erosive effects into a short period."¹⁶ Annual rainfall ranges between 600 to above 1000 millimetres, while mean annual temperature ranges from 5 to 25° C according to position and altitude.¹⁷ This considerable swing of temperature, from freezing winters to markedly hot summers, results in a distinct zonation of vegetation.¹⁸ There is also an appreciable extent of woodland, which gives way to an alpine pasture at higher altitudes in addition to patches of alluvium supporting regular cropping.¹⁹ These conditions, i.e. the pastures in the higher altitudes and the crops in the relatively lower altitudes with the swing in temperatures, have stimulated the appearance of seasonal displacement of the (semi)nomadic groups living in the region, side by side with the majority population, the sedentary village dwellers.

لسترنج، كي، بلدان الخلافة الشرقية، ترجمة بشير فرنسيس و كوركيس عواد، بيروت، ١٩٨٥، ص. ٢٢٢.

[Le Strange, G., *Lands of Eastern Caliphate*, Beirut, 1985, p. 222 (Arabic version)].

The name Qi/arma/išīn is said to be derived from King Kirmāžin, who is supposed to have ruled the city in antiquity. In the time of the Islamic republic the name was changed to Bakhtarān.

¹¹ *Persia, op. cit.*, p. 17.

¹² Fisher, *op. cit.*, p. 8-9.

¹³ Fisher, *op. cit.*, p. 8.

¹⁴ Fisher, *op. cit.*, p. 10 and 11.

¹⁵ *Op. cit.*, p. 12.

¹⁶ Cf. Fisher, *op. cit.*, p. 10.

¹⁷ Ghafour, p. 29-30. Cf. also: Gehrke, U. and H. Mehner (eds.), *Iran, Natur- Bevölkerung- Geschichte- Kultur- Staat- Wirtschaft*, Tübingen and Basel, 1975, p. 30; 33. In some parts of the Northern Zagros temperatures can be 0-5° C, cf. Izady, *op. cit.*, p. 17, and the map no. 10.

¹⁸ Fisher, *op. cit.*, p. 18.

¹⁹ Fisher, *op. cit.*, p. 20.

The two different ways of life in this section are pastoralism and cultivation. The former is found mostly in the higher parts and the latter, mostly of a settled kind, in the lower-lying areas. Cultivation covers a wide range of cereals such as wheat, barley and some maize, the basic crops and a wide range of fruit and vegetables.²⁰

The main section of the Zagros (= Middle Zagros) lies to the south of the first section. It extends from the line Qazvin-Hamadan-Kirmashān down to the Kavir-i-Marvast and Lake Bakhtagān in the vicinity of Shirāz (beyond our region). A smaller part of the region under study lies in this section that is the highest and most rugged part of the Zagros, especially between Khurramabād and Shirāz.²¹ The average height in this section approaches 2500 m, and its highest peak is Zardakūh (4571 m), slightly to the south of our region. One of the remarkable features of this part is the fold structures which for the most part are aligned from northwest to southeast.²² The folds of this whole section, from Hamadan-Kirmashān to Bushihr on the Gulf, are extremely regular, straight in form and parallel in strike, and relatively tightly packed together.²³ Several rivers cut through this part or spring from its mountains and valleys and play a significant role in the life of its inhabitants, as they have done in the past. Among these are the Karūn, Diz, Karkha (of which the northern part is called Saimara), Zuhre, and Jarrāhi (known also as Marūn). The first three have contributed to the build up of the Mesopotamian alluvium by bringing silt and clay deposits. From the Zagros the Karūn and Diz flow into the Shaṭṭ el-^cArab and the Karkha into the Al-Huwēza marsh.²⁴ It is remarkable that the site of the city of Penjwēn, located to the east of Sulaimaniya, is the meeting point for three river basins, for the rivers that flow into Lake Urmia, into the Caspian Sea, and into the Persian Gulf.²⁵ The Urmia and Zirebār lakes are the two natural lakes in the northern Zagros. The former gets its water from the mountainous slopes of Savalan and Sahand on the eastern side, together with western and southern tributaries that are of considerable value for agriculture.²⁶ The latter is close to the city of Mariwān and is much smaller than Urmia. It gets its water from the mountain streams and springs around the lake. Among the artificial lakes, Dukan and Darband-i-Khān are well-known. These are the result of dams built in the 1950s. The lakes of Faida in Eski Mosul and Hamrīn date from the 1980s.

In the northern and western parts of the Saimara basin nomadic groups are also found. Between the deep valleys of this region some high level plains provide good natural grasslands.²⁷ In the region of the River Diz the overall width of the Zagros is reduced and folding is more intense. Due to the extremely rigid terrain, seen in sheer mountain cliffs, bare rock faces, frequent landslides and poorer soil cover compared with the Northwestern Zagros, human occupation is reduced to small isolated groups of settled farmers, who are mostly pastoralists.²⁸

The northern mountains that are located to the east of the Anatolian plateau cover almost the whole territory of the northern part and extend in ranges in a west-east direction. Towards the east, the ranges veer to the northeast and come close to the northern ranges of the Pontus.

²⁰ Fisher, p. 13.

²¹ Gehrke and Mehner, *op. cit.*, p. 20.

²² Fisher, *op. cit.*, p. 17.

²³ *Ibid.*

²⁴ *Persia*, p. 27.

²⁵ See the map in: Ehlers, *op. cit.*, Map no. 2 (opposite p. 38).

²⁶ *Persia*, p. 31.

²⁷ Fisher, p. 20.

²⁸ *Op. cit.*, p. 20-21.

They end with Mount Ararat to form the Armenian Knot. These mountains bear the characteristics of Southern Alpine systems²⁹ and form the greater part of the Taurus Mountains. The highest mountain peak of our region, Ararat (5265 m), is located in this area, close to the border with Iran. According to some, these ranges can be divided into arches, internal and external. The external arches begin with the mountains of Hakari and extend in the direction of Siirt, Ergani, the north of Marash and from there southwards to reach the Amanus mountains.³⁰ Some other ranges in these arches are those round Gaziantep in the west and the range to the south of Antioch. In general, the mountains located between Shemdinli and Shirnak are amongst the highest, being 3000-4000 m high. These begin in the east with Qaradagh, Sat, Jilo (Turkish Cilo), Sümbül, Samur, Altin, Serdolusu, and Tanintanin and continue to the River Hizil³¹ on the Iraq-Turkey border. Several river valleys run through these arches, such as Shemdinli between Qaradagh and Sat, Injichaiy between Sat and Jilo,³² the greater Zāb and the upper part of the Habur to the west. Another river in this category is the River Nehil that cuts through the Yüksekova plain in the Hakari region, a plain at an altitude of 2000 m to the northeast of the Jilo and Sat mountains.

Because of the rugged terrain and the steep mountains, communications are quite difficult in this region, particularly in the winter months. Yet there are some main routes, such as Yüksekova-Shemdinli, Siirt-Chukorova and Siirt- Shirnak- Jazira (Turkish Cizre)- Silopi. The region is well-watered by plentiful permanent and seasonal springs, and it has sufficient rainfall for the abundant pastures which support large herds of cattle.

To the west of Hakari in the direction of Van Lake the area has lower mountains (1500-2500 m). Among them are the southern Mush, Akchara, Yumrutash, Akdagh, Maden, Gördük, the southern Malatya, Engizek, Ahir and the Amanus. The latter is a long range within the Taurus, 175 kilometres long by 20-30 kilometres wide. It begins in the vicinity of Mush and ends on the eastern shore of the Gulf of Iskenderün.

Communications are somewhat easier in this area as its terrain is less steep. The main routes are Bitlis-Siirt-Diyarbakir, Bingöl-Diyarbakir, Elazig-Diyarbakir, Malatya- Marash-Gaziantep, Adana-Gaziantep, and Iskenderün-Antakya. But one of the most important routes even in the antiquity is the one leading from Ararat to Maku on the Iranian side and from there to Tabriz. This route leads on to Qazvin, Tehran and Khorasān, with a branch to Hamadan, Kirmashān and Mesopotamia.³³

The internal mountain arches, known also as the Middle Taurus System,³⁴ begin generally to the north of Chukurova in the west and extend in ranges between Mount Taseli and Uzunyayla. Their average height is 3000 m. The eastern part of these ranges fall within our region of study, such as Munzur and Sheytan ranges, known also as the Ante-Taurus Ranges.³⁵

The main communication route in this district passes through the deep Gülek pass that connects Adana with Konya. This pass is the same known as the Cilician Gate in antiquity. Another pass, Chakit, is 15 kilometres to the east of Gülek, controlling the route from central Anatolia to the Chukorova region.

²⁹ Izbirak, R., *Geography of Turkey*, Ankara, 1975, p. 19.

³⁰ Izbirak, *op. cit.*, p. 18.

³¹ *Ibid.*

³² *Ibid.*

³³ Frye, R., *The History of Ancient Iran*, München, 1984, p. 10.

³⁴ Izbirak, p. 19.

³⁵ *Ibid.*

Many of these mountains were formed by volcanic eruptions, such as Tendürek Sübhan near Van, Greater and Smaller Agri, Nemrut Dagħ, and Qaradagħ to the west of Mardin.

The mean annual temperature of the northern mountains varies according to the elevation. It is between 0-5° C in the higher mountains, where there can be snow for seven months of the year.³⁶ In the less high mountains the figure is 5-10° C.³⁷

The plains in the region under study are of great significance, for this kind of terrain is scarce in comparison to the vast areas covered by steep mountains. The plains have always been important centres of economic and political power, particularly for those of Habur, Erbil and Kirkuk. Other plains that are of economic, as well as archaeological significance are Erzinjan, Mush, Erzurum, Kars, Jazira (= Cizre), Ighdir, Harīr, Rāniya, Shahrazūr, Amirabād (in Kamyarān region), Bijār, Tāl (near Baneh), Sindī (near Zakho), Mardin, Mahi Dasht (near Kirmashān) and others.³⁸ The plains are not restricted to the undulating areas where the mountains end, but also between some mountain ranges. There they resemble plateaus more than plains because of their high altitude, in some cases reaching 1800 m (Erzurum and Kars).

The vast plains connected to the southern piedmonts of the Taurus extend to the north of modern Syria and constitute part of our region under study. These plains are known for their fertility and abundant agricultural productivity,³⁹ even in antiquity, and are sometimes called “the bread basket” of the Assyrians.⁴⁰ They are watered by several rivers, such as those of the Habur system (springing from the mountains of Mardin) in the eastern section,⁴¹ and the Balikh and the Euphrates to the west of the Balikh. Underground water too is abundant and easy to reach in this region with wells 5-10 metres deep.⁴² The numerous archaeological tells in this region indicate an earlier prosperity and a density of population. Mean annual temperatures in these plains and the piedmont plains in the Iraqi side are 15-20 °C, and in a few areas it can reach 20-25 °C, as in Kirkuk, Kifri, Tūz-Khurmātu, Khānaqīn and others.⁴³

Communication routes in these plains have always been important, such as the route along the Euphrates to Mesopotamia through al-Qā’im and the route that connects Aleppo and southern Anatolia with Mosul.

The flora of the region consists primarily of oak and dwarf oak. Other trees, though less in number but valuable for their wood and fruits, are chestnut, juniper, pine, wild figs, almonds, mulberry, blackberry, walnuts, pears, cherry, azarol, grapes and many others. Wild fungi and other edible plants are and were always an important source of food to sustain the inhabitants. However, the forests of the Zagros and the Taurus suffer from deforestation and overgrazing. Archaeological evidence and historical allusions suggest that there used to be a greater variety of trees and thicker forests in these mountains and foothills, but they have now unfortunately disappeared.⁴⁴

³⁶ Izady, *op. cit.*, p. 16.

³⁷ Detailed figures of mean annual temperatures in the region under study can be found in tables 1, 2 and 3 in Ghafour, *op. cit.*, p. 48 ff.

³⁸ Cf. Ghafour, *op. cit.*, p. 37 ff.

³⁹ For more information about the agrarian lands of this plain cf. Wirth, E., *Syrien, eine geographische Landeskunde*, Darmstadt, 1971, p. 381 ff.

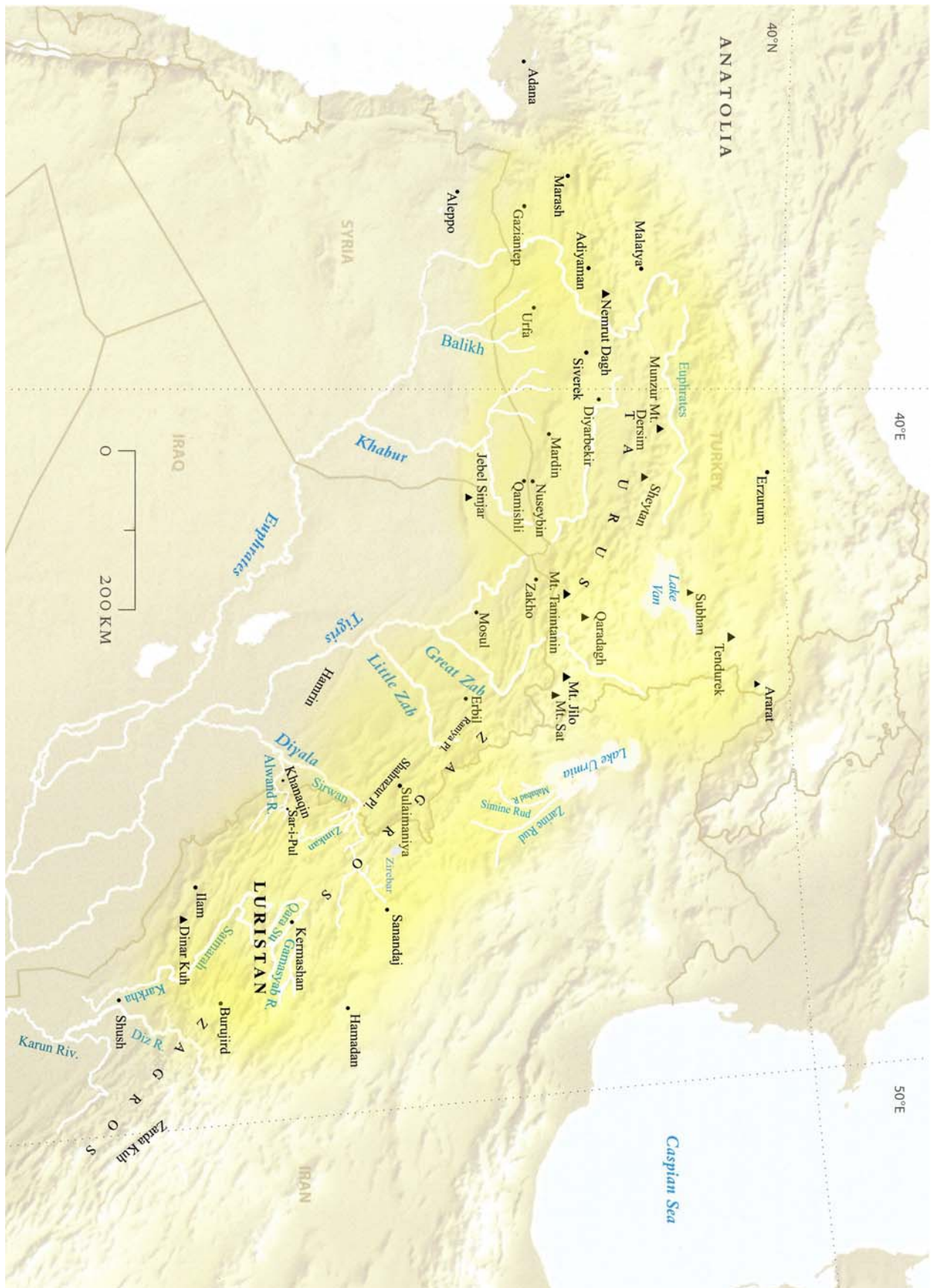
⁴⁰ Cf. Harrak, A., *Assyria and Hanigalbat*, Zürich, 1987, p. 284.

⁴¹ Wirth, *op. cit.*, p. 421.

⁴² Wirth, *op. cit.*, p. 422.

⁴³ Izady, *op. cit.*, p. 17.

⁴⁴ For some of these allusions cf. Izady, *op. cit.*, p. 18-21.



A modern map of the region under study.

