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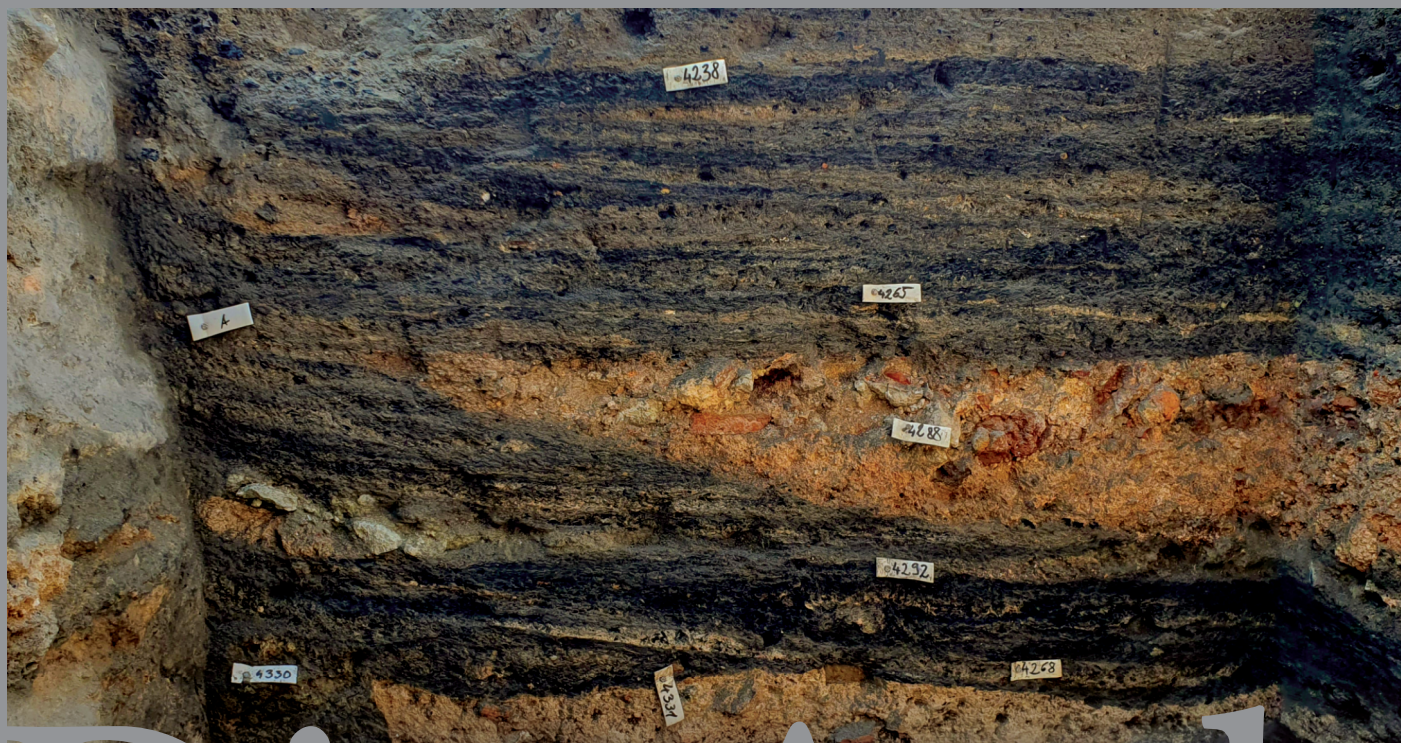

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Connection and disconnection

Reconstructing routes through and beyond the Rania Plain in Iraqi Kurdistan

Fruzsina Alexandra Németh
Institute of Archaeological Sciences, ELTE Eötvös Loránd University, Budapest, Hungary
nemeth.fruzsina.alexandra95@gmail.com

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Abstract: Rania Plain lies on the eastern side of Iraqi Kurdistan, at the foot of the seemingly impenetrable Zagros Mountains. During the Early Modern Period, this microregion was on the fringe of the two major powers of the Middle East, the Ottoman and Persian Empires, but it was also part of the Soran Emirate, one of the semi-autonomous vassal states that existed for hundreds of years. The Rania Plain was close to the main trade route linking Baghdad with the major Kurdish cities of Erbil and Mosul. In addition, the Lower Zab River, which flows through this valley to reach the Mesopotamian Plain, provided a natural trade and information route between the inner parts of the Zagros Mountains, the Iranian Plateau, and the fertile plains crossed by the Tigris River. Despite this, the Rania region and its cities do not appear on Ottoman Period maps, and written sources are silent about the function of the area between the 16th and 20th centuries. Field survey and excavation data from the last fifty years have provided a complex and varied picture of the valley's topography, which, combined with the dense water network in the area, defines possible lines of population movement. One of the key questions to be addressed in examining the historical significance and complex use of the area is how to reconstruct the historical road use in the microregion using historical, archaeological, topographical, ethnographic, and GIS data and whether the area played a connecting or separating role in relation to the eastern frontier of the Ottoman Empire.

Keywords: Islamic archaeology, Kurdish history, road network reconstruction, least cost path analysis, road network of the Ottoman Empire

Introduction

The southeastern frontier of the Ottoman Empire was one of the most conflict-ridden regions in the early modern Middle East. However, beyond its political and event-based history,[1] we possess limited data about the border stretching through the Zagros Mountains in the areas inhabited by Kurds. Especially little is known about the local states that emerged here,[2] their populations, roles within the empire's network of relations, and involvement in the centuries-old Turkish–Persian conflicts.

The Rania Plain (رانیە), encircled by mountains, lies in this area, Southern Kurdistan, near the Iranian border. Its history and archaeological treasures have attracted the attention of researchers over the past half-century. Topographical surveys in recent decades have allowed us to develop a general understanding of settlement changes in the region from the Neolithic to the modern era.

1 Allouche 1983; Ateş 2013; Bajalan 2017; Brummett 2009; Minadoi 2019.

2 Eppel 2008; Özoğlu 1996; Ghalib 2011; Bajalan 2012; Alsancakli 2017a; Alsancakli 2017b; Eppel 2018.

This study aims to present the relations of the area during the Ottoman period, i.e., from the 16th to the early 20th century, of particular importance due to the enduring Turkish–Persian conflicts and the emergence of Kurdish emirates. Additionally, these centuries can be considered a transition between the traditional, local Kurdish social structures and culture and the centralised Ottoman administration, modern society, and a more globalised way of life.

Objectives and methodology

This study aims to examine the position of the Rania Plain, its internal communication networks, and external connections, which may shed light on the microregion's role and significance concerning both the Kurdish heartland and the Ottoman Empire[3] (Fig. 1).

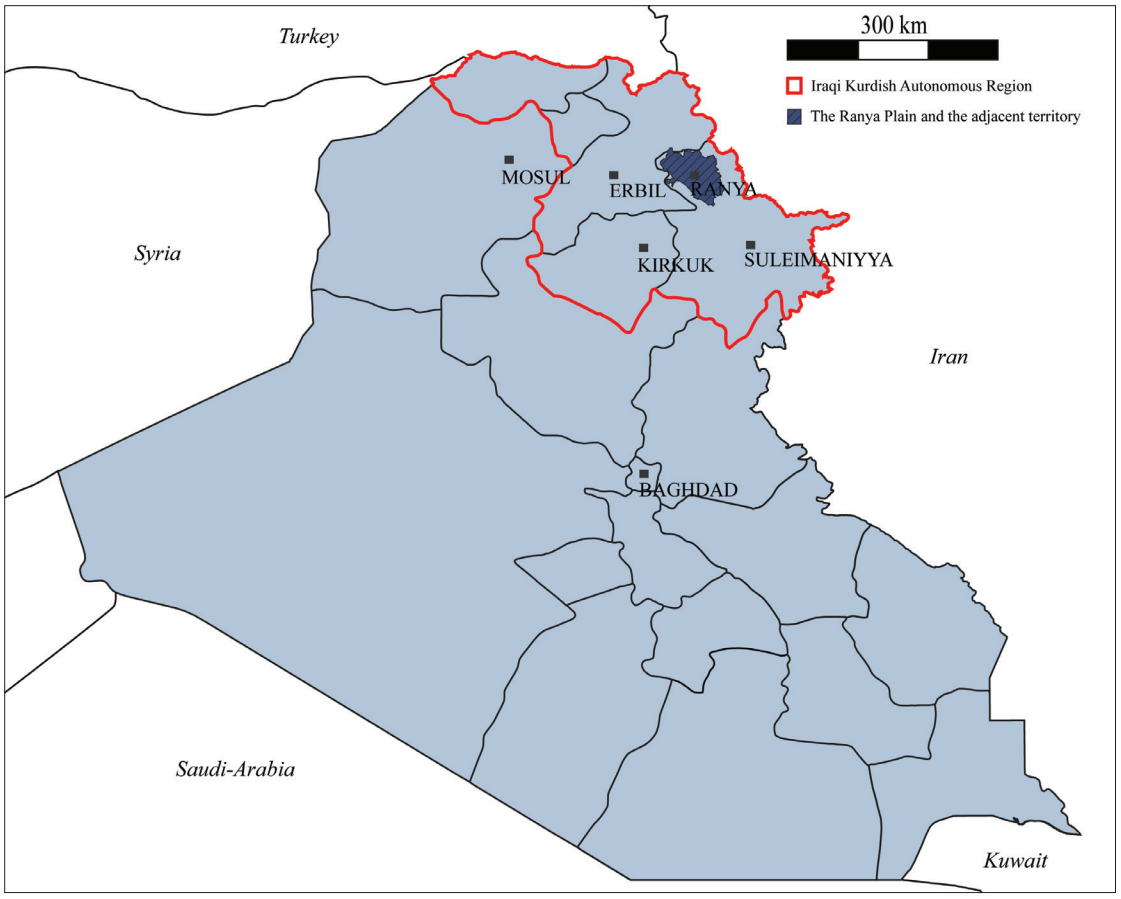

Fig. 1. Location of the Rania Plain in the Iraqi Kurdistan Autonomous Region.

As the first step, I attempted to reconstruct the roads, connections, and communication routes within the region by analysing the position, geographical characteristics, and topographical features[4] of the archaeological sites identified during numerous field surveys and site cataloguing projects.[5]

3 Research related to the Ottoman Period of the Ranya Plain was supported by the National Research, Development and Innovation Office (NKFIH) within the framework of our project titled *Intensive Archaeological Research of a Local Administrative Center of the Neo-Assyrian Empire* (K-132429; PI: Gábor Kalla).

4 Abdullah 2010; Sissakian *et al.* 2016; Viczián 2020.

5 Iraq. Al-ʿĀmmah, M. Ā. Q. 1967; Al-Soof 1970; Eidem 2011a; Eidem 2011b; Eidem 2012; Giraud 2012; Giraud 2013a; Giraud 2013b; Eidem 2014; Skuldbøl – Colantoni 2014; Skuldbøl – Colantoni 2016; Skuldbøl – Hald 2017; Uildriks 2020; Skuldbøl *et al.* 2013; Hasegawa *et al.* 2016, 143–152; Skuldbøl *et al.* 2017; Giraud *et al.* 2019; Eidem 2020; Giraud *et al.* 2020; Skuldbøl *et al.* 2021.

I then fitted the outlined routes to the road and trade network of Kurdistan[6] and the Ottoman Empire's eastern frontier as depicted by historical sources,[7] travelogues,[8] and academic literature. This helped clarify whether the microregion primarily served as a connecting point between the Persian and Ottoman empires—acting as a natural passage through the seemingly impenetrable Zagros Mountains—or whether it was a border area difficult for both powers to control, where local authorities played a significant role in the conflicts between the Porte and the Shah, taking advantage of their strategic position.

In addition to historical sources, Ottoman administrative texts, travelogues, historical maps, and military records, the analysis also draws on detailed field surveys from the past two decades, as well as preventative excavations[9] conducted before major construction projects that significantly altered the historical environment. Although these sources often provide incomplete information, they still allow for reconstructing historical settlement patterns and road networks, along with their changes. Ethnographic research, which began in the 20th century, can further supplement these findings, offering key insight not only into the differences between the lifestyles of settled and nomadic populations,[10] but also into the relationships, cooperation, and trade relations between these groups.

Next, I used GIS software for a graphic presentation of the collected data,[11] modelling the easiest access and communication routes between settlements based on GPS and elevation data. The obtained model was compared with various significant elements of the environment—such as springs, waterways, and arable lands—as well as the modern road network.

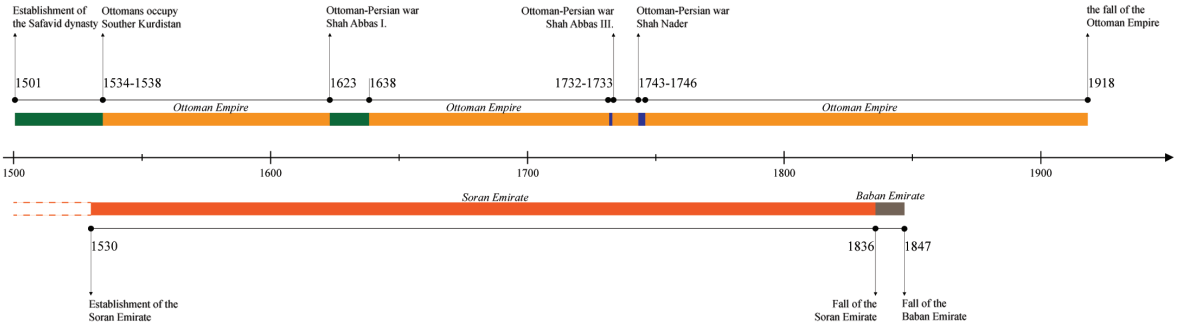

Fig. 2. Chronology of major historical events in the region.

Topographical studies in this region face several challenges, the greatest of which is environmental change. In recent decades, rapid development, investments, construction, and site destruction in Kurdish territories have significantly altered the landscape,[12] complicating the reconstruction and interpretation of the historical environment. The lack of information is worsened by historical sources being largely silent about this remote mountainous area, with no known written records

6 Ball *et al.* 2003; Mühl 2010; Altaweel *et al.* 2012; Ur *et al.* 2013; Nováček *et al.* 2016; Mühl – Fassbinder 2015; Nieuwenhuyse *et al.* 2016; Mühl – Fassbinder 2016; Nováček 2016; Nováček – Melčák 2016; Nováček *et al.* 2016; Ur – Osborne 2016; Mühl *et al.* 2018; Marsh – Altaweel 2020; Ur *et al.* 2021; Nováček 2022.

7 Çelebi – Hammer-Pugstall 1834; McCarthy 1984.

8 Otter 1748; Ross 1841; Rich 1836; Fraser 1840; Layard 1887; Bishop 1891; Galletti 2001; MacLean 2004; MacLean 2019.

9 Al-Soof 1970; Eidem 2015; Eidem 2016; Skuldbøl *et al.* 2021.

10 Thevenin 2011; Giraud 2013a, 38–40; Thevenin 2019; Thevenin 2020a; Thevenin 2020b.

11 I used version 3.14.16 of the QGIS application for visualising geographical data.

12 Skuldbøl – Colantoni 2014, 41–43; Skuldbøl – Colantoni 2016, 411; Skuldbøl – Hald 2017, 6–7; Skuldbøl *et al.* 2017, 149–150; Skuldbøl *et al.* 2021, 160–161.

mentioning it. Additionally, the digital elevation models (DEMs)[13] available are not sufficiently accurate, as some information remains out of reach for research or commercial purposes due to the ongoing military activity in the region. Research is further hindered by the fact that extensive study of the region only began in the last decade, which means a lack of reference works to help contextualise and verify the findings.

Geographical position of Kurdistan

The territories inhabited by Kurds are currently divided among several Middle Eastern countries.[14] The region, which now falls under the jurisdiction of Iraq, Iran, Turkey, Syria, and Azerbaijan, has historically been a crossroads where multiple cultures converged and blended. As a result, by the 19th and 20th centuries, a heterogeneous cultural unit had emerged. While the Kurdish language and religion are primarily rooted in Persian and Arabic traditions,[15] the socio-political structures and tribal organisation of the Kurds reflect strong Turkmen and Tatar influences.[16] In addition to local traditions dating back to antiquity, their material culture shows significant Ottoman and Syrian elements, with parallels extending as far as Palestinian territories.[17] Furthermore, the cultural imprint left by the Christian and Jewish minorities, who were present in significant numbers during the Middle Ages and the early modern period, is notable,[18] as are the effects of increasing European influence in the 19th and 20th centuries.[19]

This long-standing cultural diversity is attributed mainly to the region's geographical position and natural features. The first empires in the Iraqi regions already launched military campaigns in the Zagros Mountains to conquer the emerging local states as early as the 3rd millennium BC.[20] The military aspect remained a defining characteristic throughout the region's history, as the Zagros Mountains served as a natural border and a buffer zone between neighbouring great powers, which had a major influence on its turbulent past. Military conflicts were exacerbated by the difficult-to-reach areas becoming core territories for minor autonomous or semi-autonomous states governed predominantly by local tribal leaders, emirs, and princes. Exercising full control over these remote areas was nearly impossible, and any administrative effort faced significant challenges.[21] This situation led to the emergence of the Kurdish emirates in the 15th and 16th centuries, which played a crucial role in Ottoman-Iranian border disputes until the mid-19th century.[22]

Alongside its clear border function, the passes through the Zagros Mountains were a constant link between the Mesopotamian Plain and the Iranian Plateau. This role as a connection and transit zone facilitated the diffusion of Iranian and Mesopotamian cultures in the isolated valleys. The Tigris River also played a crucial role, as it has been one of the main travel and transport routes between

13 For modelling and data visualisation, I utilised digital elevation models available at https://www.ngdc.noaa.gov/mgg/topo/gltiles.html, which represent the terrain with a precision of 30 meters (accessed: 12 October 2024).

14 Bruinessen 2002, 2.

15 Bruinessen 1992, 21–22; Knappert 1993, 67; Limbert 1968, 41–46; Hennerbichler 2012, 64–65, 76–78.

16 Bruinessen 2002, 4.

17 Spaer 1988, 54–59; Spaer 1992, 48–55; Taxel 2008, 42–43, 46; Shapiro 2016, 98; De Vincenz 2017, 126–127; Shapiro 2021, 83–85.

18 Fischel 1944; Aboona 2008; 1–89; Omarkhali 2014; Zaken 2018, 181–195; Tezcür 2021, 19–59.

19 Barth 1953, 131–135.

20 Reade 1976, 98–102, 104.

21 Altaweel *et al.* 2012, 17; Eppel 2018, 39; Mofidi 2021, 1–3.

22 Özoğlu 1996, 58–63; McDowall 2007, 28, 49; Eppel 2008, 243, 255–257; Ghalib 2011, 47–48; Altaweel *et al.* 2012, 17; Bajalan 2012, 800–801; Eppel 2018, 37–45.

northern and southern Mesopotamian zones since antiquity. It provided a nearly uninterrupted waterway from Jazira to the Persian Gulf and through it to India. Water transport proved safer than land routes, especially during the Ottoman Period when the rise of nomadic raiders due to a decline in urban lifestyle made overland travel more perilous than ever before. The importance of the river was further enhanced by the presence of ancient and medieval power centres along its banks, such as Assur, Nineveh, Baghdad, and Samarra.

This northeastern region of Mesopotamia was considered the most fertile due largely to the numerous springs and streams abounding with water in the Zagros Mountains. These natural water sources eliminated the need for irrigation systems in the valleys and mountainous plains.[23] This region was also the heartland of the Kurdish population, who originally led a mountain-based lifestyle. Their way of life revolved around exploiting the local natural resources, focusing on animal husbandry, and nomadism.

Ottoman Period history of the region (16th–20th century)

By the turn of the 15th and 16th centuries, the Iraqi and Kurdish territories were in decline following the devastation caused by the campaigns of the Mongols and Timur Lenk, accompanied by internal conflicts and the dominance of constantly fighting tribal alliances[24] (Fig. 2). During the Middle Ages, the development trend toward urbanisation on the plains came to a halt, and many settlements became depopulated. A significant part of the population returned to a nomadic or semi-nomadic lifestyle, while peasants concentrated in small, underdeveloped villages and a few remaining major cities.[25] Shah Ismail I founded the Safavid Empire, which became the dominant political entity in the region until the 18th century, in this historical setting in 1501. The southern Kurdish territories fell under Safavid control in 1509 when the Shah captured Baghdad and established Baghdad Province.[26]

Shortly after that, Selim I, the Ottoman Sultan, launched a campaign to conquer Mesopotamia, Syria, and Palestine, annexing the northern part of the Kurdish region into the empire.[27] Under Sultan Suleiman I, the southern region came under Ottoman control when he captured Erbil (هەولێر, Hawler) in 1534, and by 1538, the entire southern area had been organised as the Shahrizor (شارەزوور) Eyalet, with Kirkuk (کەرکوک) as its centre.[28] This wave of conquests marked the beginning of the long series of Ottoman–Persian military conflicts, which profoundly shaped the history and development of the Middle East until the 19th century[29] (Fig. 3).

The establishment and consolidation of the Kurdish emirates in the mountainous region also date from the 16th century, although their origins stretch back to the Middle Ages.[30] These vassal principalities, led by Kurdish noble families, managed to retain partial autonomy from central authority by creating a dual tribal-state administrative system.[31] By exploiting the conflicts between neigh-

23 Giraud *et al.* 2019, 89; Viczián 2020, 143.

24 Bosworth 1996, 51; Manz 1999, 101–113; Hillenbrand 2000, 513–527; Özoğlu 1996, 46; McDowall 2007, 24; Aigle 2008, 72–74; Altaweel *et al.* 2012, 17; Jackson 2017, 128–129, 167.

25 Nováček *et al.* 2016, 183.

26 Özoğlu 1996, 47; McDowall 2007, 26–27; Roemer 1986, 215–219, 229–232.

27 Allouche 1983, 120–123; Streusand 2011, 135; Bajalan 2012, 803–805.

28 Çelebi – Hammer-Pugstall 1834, 97, 107; Allouche 1983, 100–103; Newman 2006, 21, 28; Streusand 2011, 48–49; Roemer 1986, 222.

29 Allouche 1983, 69–82; Özoğlu 1996, 47; Polk 2006, 60; Roemer 1986, 211–215.

30 McDowall 2007, 28; Ghalib 2011, 47–48.

31 Eppel 2008, 237–240; Ghalib 2011, 50–52; Eppel 2018, 38–39.

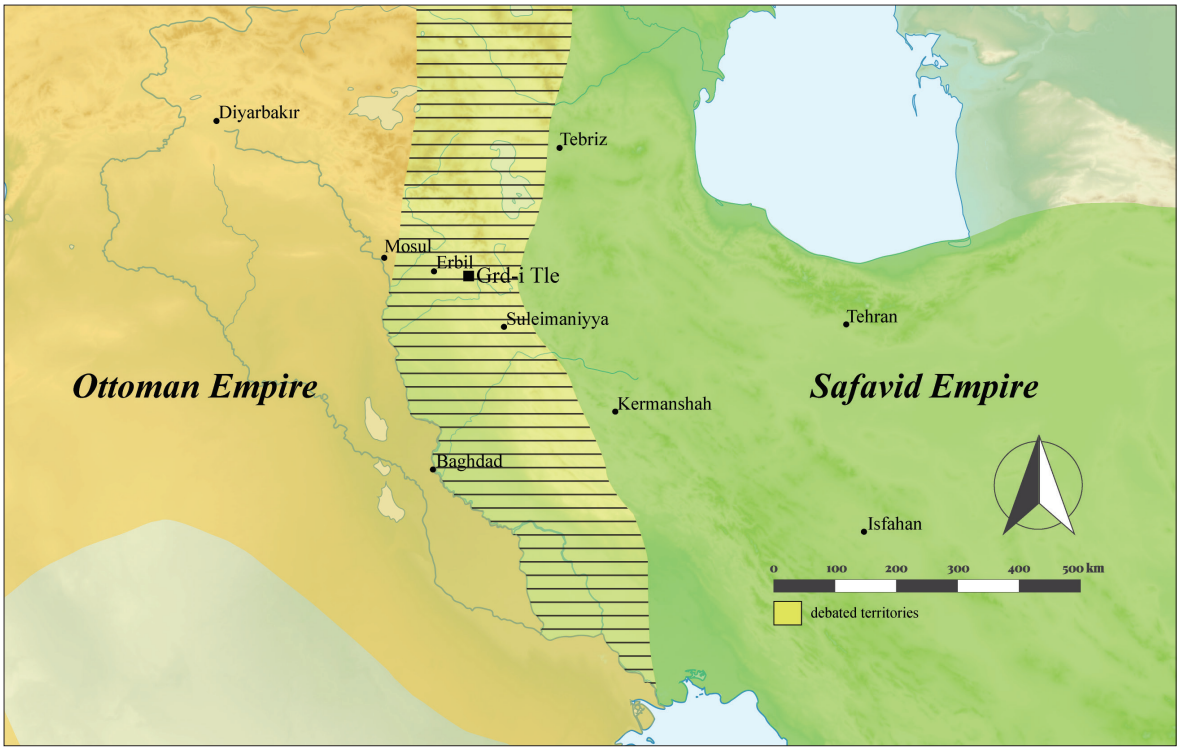

Fig. 3. The Zagros border region of the Ottoman and Safavid empires.

bouring powers and the strategic importance of their territories, these emirates were able to preserve their original tribal structures and mountain-based Kurdish culture, laying the ideological foundation for the nationalist movements of the second half of the 19th century.[32] Taking advantage of the weakening Ottoman central authority, several emirates embarked on significant expansion in the early decades of the 1800s. However, by the mid-19th century, these movements had been suppressed, the emirates dissolved, and a centralised administration was established with a reorganisation of the previous system.[33] At that time, southern Kurdistan and the Rania Plain were placed under the jurisdiction of the Mosul (مووسڵ) Vilayet, where they remained until the end of the Ottoman rule in Kurdistan in 1918.[34]

The Rania and Bngrd Plains today

The Rania Plain is located in the eastern part of the Autonomous Region of Iraqi Kurdistan, near the Iranian border, in the Raparin (ڕاپەڕین) District of Sulaymaniyah (سلێمانی) Governorate. The geographical region encompasses the districts of Rania and Dokan (ڕاپەڕین), with Lake Dokan dividing the previously continuous valley into the Rania and Bngrd plains (بنگرد) (Fig. 4). The predominantly Kurdish population speaks the Sorani Kurdish dialect and practices Sunni Islam. While most of the population leads a settled lifestyle, a small semi-nomadic community is also present.[35]

The valley serves as an important connecting point between the Mesopotamian Plain, the inner ranges of the Zagros Mountains, and Iran, which can only be accessed through the Peshdar Valley (پشدەر), accessible via the Rania Plain. The two most significant cities in the area are Rania,

32 McDowall 2007, 50–53; Masters 2009b, 70.

33 McDowall 2007, 49; Eppel 2018, 42–43.

34 Masters 2009a, 526; Altaweel *et al.* 2012, 17.

35 Giraud 2013b, 38–40.

founded in 1789 and the seat of the local Ottoman governor from the 19th century, and Dokan. The region is connected to the surrounding areas by Qaladze (قەڵادزێ) in the east on the Peshdar Plain and Koya (کۆیە) on the hilly terrain of the Erbil Plain in the west. The latter is especially important because it is situated at one of the crossroads of the major routes connecting the three key Kurdish provinces of Erbil, Sulaymaniyah, and Kirkuk,[36] facilitating the integration of the Rania Plain into the regional transport network.

Currently, four main roads can be observed in the area, which provide clues for reconstructing historical routes. The most significant of these runs between the western mountain ranges, connecting Erbil and Mosul in the north and Sulaymaniyah, Kirkuk, and Shahrizor in the south. This route is connected to the Peshdar Valley by the Rania Road, the only connecting point through which, the Tigris Valley, can be accessed from Qaladize and the surrounding settlements. The Bngrd Road, which runs along the eastern side of Lake Dokan, also leads toward the Peshdar Valley, connecting the northern and southern entry points of the region. The northern route, passing through narrow valleys, leads to the city of Rawanduz (رواندوز) and the mountainous core area of the Sorani Emirate (سۆران), which, during the Ottoman Period, allowed passage to one of the most dominant local power centres.

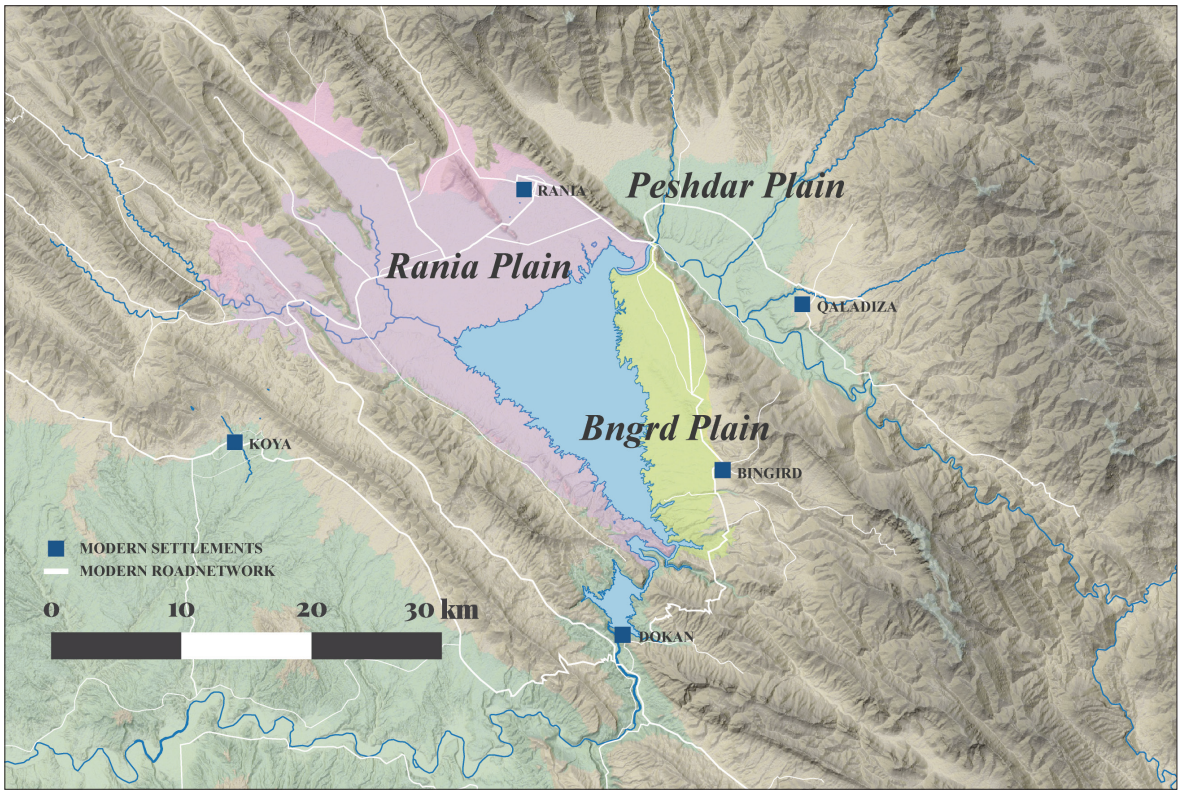

Fig. 4. The state of the Rania Plain today.

Much of the plain is now covered by Lake Dokan, which was only created in the 1960s by constructing a dam on the Lower Zab River.[37] Once a fundamental organising element of the historical landscape, the river has lost its previous role, altering the region's internal structure and relationships. The reservoir created covers about two-thirds of the previously habitable and cultivated areas, destroying many of the archaeological sites discovered in the early 20th century. The fluctuation

36 Zakaria *et al.* 2013, 958.

37 Eidem 2011a, 13–19.

in the water level of the lake and the extensive floodplain mean that the destruction of historical heritage continues to this day.[38]

The creation of the lake fundamentally transformed the urban structure and economic relations of the area. The previously unified zone was divided into two administrative regions, with looser cooperation between them than before due to the significant water surface separating them. Additionally, the disappearance of the Lower Zab's riverbed eliminated the main route through the valley; it was replaced by the Rania and Bngrd Roads running on the two sides of the lake. The inhabitants of the destroyed settlements relocated to larger cities, sparking a wave of urbanisation in the latter half of the century. Simultaneously, the area of cultivable land decreased drastically, shifting the previously heavily agricultural local economy toward industry and trade.[39]

The urbanisation of Kurdish territories began in the 19th century, parallel with changes in the Ottoman administration, when new cities, becoming the seats of Ottoman governors, were founded in many areas that previously were under the control of emirates. The industrial activities and trade in these cities attracted the tribal, village-based population, leading to the dissolution of the tribal social structure. Having been given up for a settled lifestyle, the proportion of nomadism also decreased significantly. From the 19th century onward, external influences and globalisation started to impact the previously isolated Kurdish culture, leading to significant changes, with much of the earlier social system dissolving.[40]

The geographical characteristics of the Rania Region during the Ottoman Period

The Rania Plain is located within the high ridges of the Zagros Mountains in a rather isolated setting, making its access and supervision challenging prior to the 20th century[41] (Fig. 5). For this reason, and based on ethnographic observations documented in the first half of the 1900s, it is assumed that the region during the Ottoman Period was primarily self-sufficient.[42] Nevertheless, it is notable that the thinner and lower southwestern ridges, along with the numerous narrow valleys running from northwest to southeast and the gorges carved by the Lower Zab River, provided several 'entrances' to the area, five of which were clearly suitable for permanent, long-distance transportation.

The northeastern and southwestern gateways of the valley were carved by the Lower Zab, which connected the Inner Zagros and eastern Iranian regions with the Mesopotamian Plain and the upper course of the Tigris. The eastern gorge opens up to the Peshdar Plain and leads beyond to the lands of the Ardalan Emirate (اردلان), which served as a vassal of the Safavid Persians during the Early Modern Period. The Zab exits the valley at its southwestern corner, near the town of Dokan, continuing its flow toward Kirkuk and then on to Altun Kupri (ئاڵتون كۆپری).

An important route runs parallel to the axis of the plain, between the ridges to its west. The southeastern entrance to the region lies at the southern end of this route, opening toward the Shahrizor Plain and the capital of southern Kurdish territories, Sulaymaniyah. The same route leads northwest toward Erbil, which in the 19th century was a key centre of Ottoman military administration and one of the most important cities of the Soran Emirate. Today, Erbil serves as the capital of the region.

38 Skuldbøl – Colantoni 2014, 41–43, 48.

39 Barth 1953, 132–134.

40 Bruinessen 2002, 1; Barth 1953, 131–135; Masters 2009a, 526; Altaweel *et al.* 2012, 17.

41 Bruinessen 2002, 4.

42 Bruinessen 1992, 18–20.

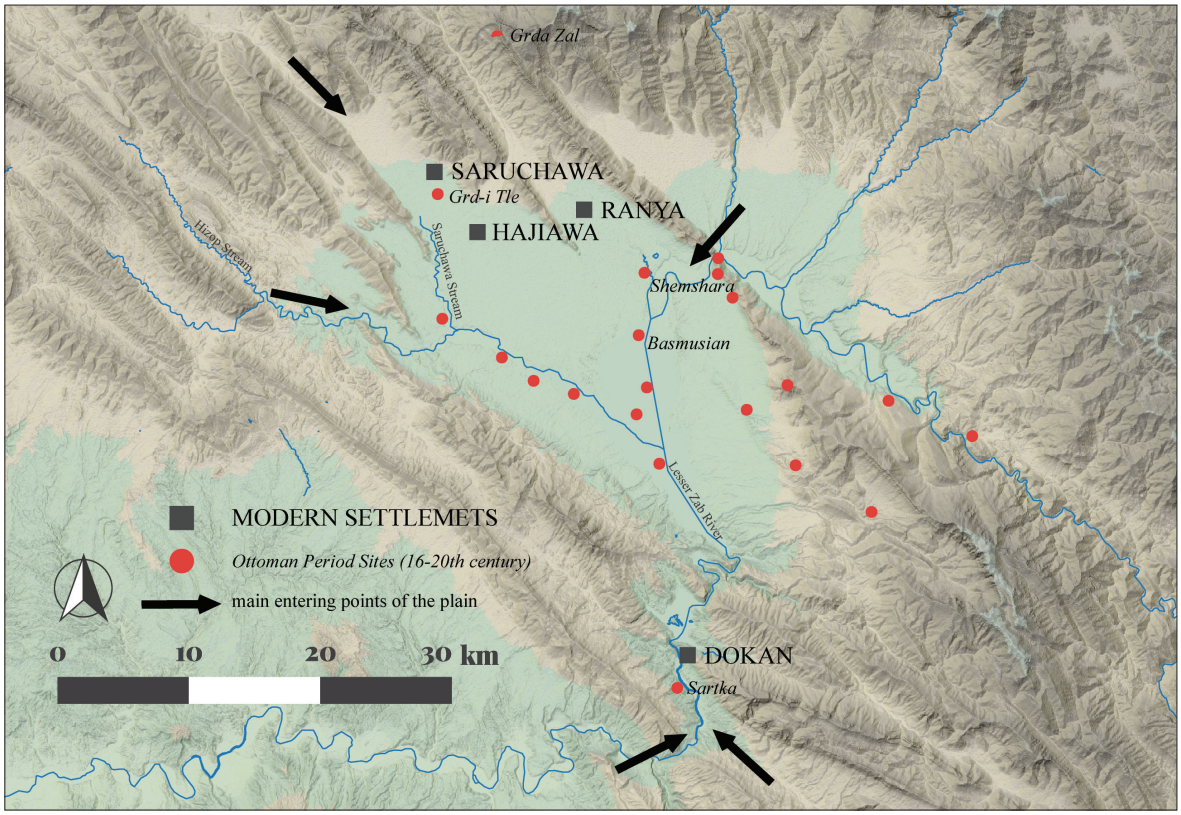

Fig. 5. The plain and its settlements in the Ottoman Period.

The fifth gateway to the region is located in its northeastern corner and leads northward toward the core Soran territories and Rawanduz. These areas could be accessed without traversing the Mesopotamian Plain, thus avoiding the empires that exercised military control there. The role of this connecting point is the least clear, as the usability of the steep passes and narrow mountain roads was strongly influenced by weather and seasonal changes, making it unlikely that this route was a primary axis for trade or military movement. It is more plausible that local nomadic populations used it, especially during seasonal migrations between summer and winter pastures, for communicating with settled members of the tribe or trading with locals.

The Rania Plain and the surrounding mountain slopes are sprinkled with springs and streams that crisscross the smaller gorge valleys. The region belongs to the watershed of the Lower Zab, springing from Iran and discharging into the Tigris.[43] The river played a vital role during antiquity, as indicated by the numerous settlements along its banks.[44] From the 6th century onward, no written record exists on the usage of the Zab, so there is no information about whether it was suitable for navigation or supplying irrigation systems with water. However, a modern description suggests that by the 19th century, the area had become heavily marshy, implying that the river was not regulated.[45] By contrast, 20th-century surveys and data reveal that the river played a significant organising role in settlement structure, which only ended with infrastructure investments starting in the 1950s.[46] Due to these developments, agricultural activity is limited today to the northern side of the area. Before the creation of Lake Dokan, however, much more land is presumed to have been cultivated.

43 Viczián 2020, 140, 143; Mustafa *et al.* 2015, 52.

44 Al-Soof 1970, 66; Eidem 2011b, 85–91; Eidem 2012, 5–12; Skuldbøl – Colantoni 2014, 47; Eidem 2015, 5–6; Eidem 2016, 2–9; Uildriks 2020, 131–135; Dezső 2021, 12–15.

45 Wilson 1895, 324.

46 Al-Soof 1970, 66–67.

The valleys and streams interlacing the region formed natural communication routes, both within the plain and beyond. The terrain greatly restricted these routes between the mountains and along their slopes, determining the precise locations of possible roads. Even so, these paths were often dangerous and difficult to pass, likely leading to lower traffic levels. Elevation differences are negligible on the alluvial plains in the central part of the valley, meaning that there was little variation in energy expenditure between possible paths, which may resulted in a more diverse network of connections between settlements.

Archaeological data

The history and archaeological heritage of the microregion are primarily known through field surveys that began in the mid-20th century, preceding the creation of Lake Dokan (Fig. 6). In the planning phase of the project, it became clear that the then-future reservoir will destroy several important archaeological sites and modern settlements within the valley. Consequently, the central Iraqi archaeological and heritage protection authorities, led by local archaeologists and in collaboration with European researchers, launched a large-scale project to survey the area, document the endangered sites, and excavate the most significant ones.[47]

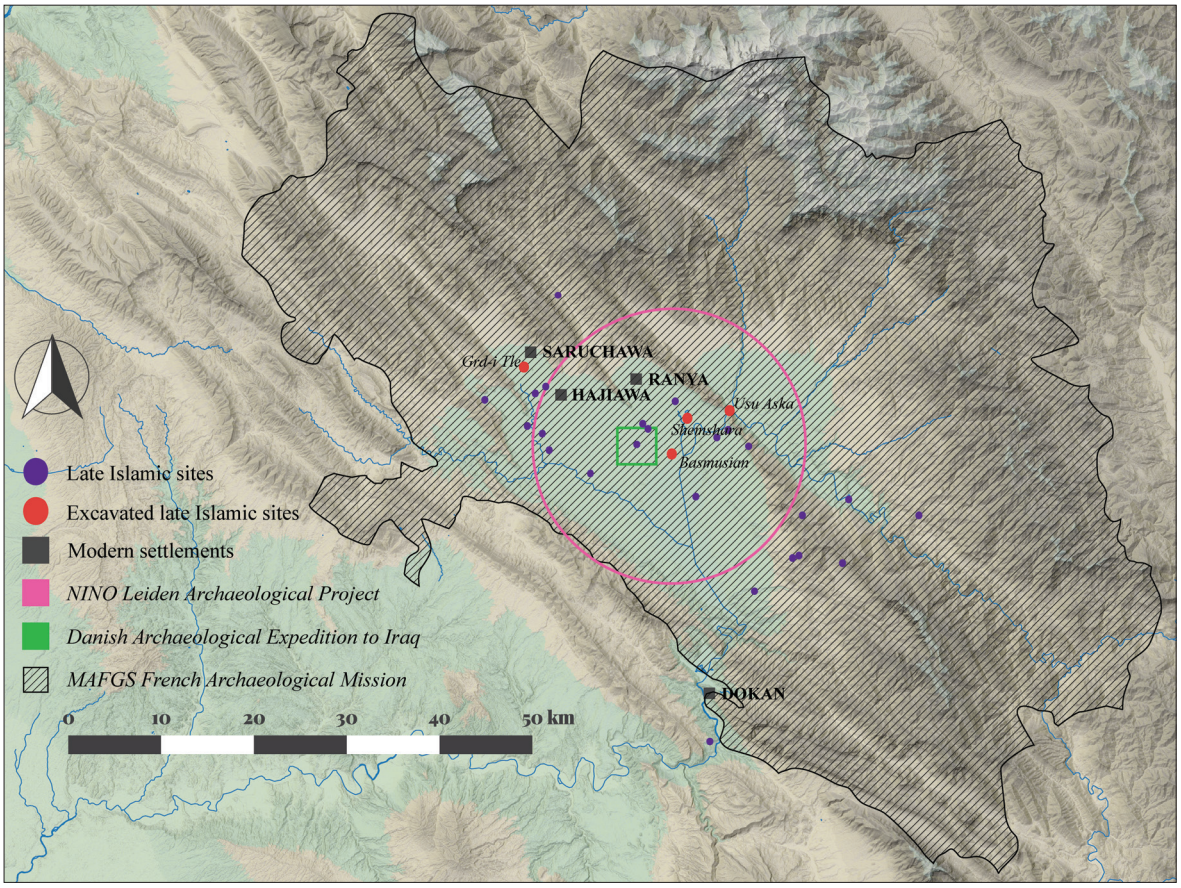

Fig. 6. Archaeological research and excavated late Islamic sites in the Rania Region.

These efforts began in the late 1950s and resulted in the identification of forty sites, many of which were multi-period *tell* settlements. Based on surface observations and collected artefacts, researchers attempted to date the settlement mounds, though the focus remained primarily on prehistoric

47 Al-Soof 1970, 65–104; Eidem 2011a, 13; Eidem 2011b, 79; Eidem 2020, 1–4.

and ancient remains, leaving medieval and Ottoman Period relics less understood. Additionally, questions about the modern use of these sites often remained unanswered.[48] Excavations confirmed the findings at five locations, two of the most important being Basmusian (باز مسيان)[49] and Shemshara (گـردی شـمشـاره),[50] where a significant Ottoman Period archaeological record was uncovered. The results of these investigations, along with an additional sixteen archaeological sites, were included in Iraq's first archaeological atlas, published in 1957.[51]

Since the 1950s, Dutch researchers involved in the NINO project have continued documenting the sites endangered by the fluctuating water levels of Lake Dokan. In addition to continuing with the excavations at Shemshara, the project's primary goal has been to gather as much archaeological data as possible on periodically or permanently submerged sites. The research foci have been mapping satellite settlements around Shemshara, determining their chronology and characteristics, and outlining the settlement history and site hierarchy in the surrounding area. During this work, over thirty more sites were identified in the northern and northeastern basins of Lake Dokan.[52]

Parallel with the NINO project, researchers from the University of Copenhagen initiated a project in 2012, working closely with NINO to document endangered sites. While their scientific inquiries have focused on early urbanisation patterns in the region—primarily in the Copper, Bronze, and Iron Ages—they have devoted many field seasons to documenting and surveying the archaeological sites made accessible by changes in the water level.[53]

Numerous additional sites have been identified beyond the Dokan watershed by the MAFGS Archaeological Survey Project, which began in 2012. This Iraqi–French collaboration aimed to compile all proven and suspected archaeological sites within the Suleymaniyah governorate. The need for such research arose from increasing infrastructure development, intensive construction and agricultural activity, and the threats posed by illegal excavations and artefact smuggling. A central inventory of sites would greatly aid in monitoring and protecting them, and such a collection could also serve as a starting point for international projects studying settlement patterns and their changes.[54] After initial remote sensing and a satellite image analysis, field surveys were conducted to verify the existence of potential sites and help determine their functions and main chronological phases. Over the three-year research in the Rania Region, 366 sites have been identified, 244 of which could be linked to specific historical periods.[55]

The archaeological sites known from the microregion can be classified into four major groups: single-period settlements, *tell* settlements, fortifications (fortified settlements, watchtowers, small forts), and cemeteries. The Islamic Period, which began with the Muslim expansion in the 7th century, is divided into three main phases, each with its distinct architectural traditions and material culture: the Early Islamic (6th–11th centuries), Middle Islamic (11th–16th centuries), and Late Islamic or Ottoman (16th–20th centuries) Period. Evidence of settlements from the latter has been found on 29 sites in total.[56]

48 Al-Soof 1970, 66–67.

49 Al-Soof 1970, 66; Eidem 2011b, 85–91; Eidem 2015, 5–6; Eidem 2016, 2–9.

50 Eidem 2012, 5–12; Uildriks 2020, 131–135.

51 Iraq. Al-ʿĀmmah, M. Ā. Q. 1967.

52 Skuldbøl *et al.* 2013, 47; Eidem 2014, 7–9; Skuldbøl – Colantoni 2014, 7–9.

53 Skuldbøl *et al.* 2014, 145–157; Skuldbøl – Colantoni 2016, 411–414; Skuldbøl *et al.* 2021, 178–180.

54 Giraud 2012, 10–15.

55 Giraud 2012, 10–15; Giraud 2013a, 7–13; Giraud 2013b, 3–13; Giraud *et al.* 2020; Dezső 2021, 16–18.

56 Giraud *et al.* 2020.

Microregional connections

Field surveys revealed that 29 sites were in use between the 16th and 20th centuries; this number is higher than that of either the Early or the Middle Islamic periods. The increase is likely due to a shift towards a more settled way of life, and only the most recent phases of many sites could be identified by surface data collecting.

Most sites were established near streams, rivers, or springs. The waterways with connections to areas outside the valley, such as the Lower Zab River or the Yalejiz (یەلەجێ) Stream, enjoyed particular advantages. However, some types of sites, primarily cemeteries, watchposts, and fortifications, were located on mountain slopes due to their functions.

Ethnographic data suggest that Kurdish settlements in the 19th and 20th centuries were largely self-sufficient. Most industrial activities were carried out at the household level, as communities usually produced their own tools and goods. The highest level of cooperation was typically realised within the village, with little evidence of regular cooperation or trade between different settlements.[57] This self-reliant lifestyle aligns with the strong local character of the find material and the limited number of imported items. Most non-local objects were made by craftsmen in major Kurdish cities, their products reflecting Ottoman-Arab influence.[58] Long-distance trade goods appear in very small quantities; these were likely looted or personal items.

In addition to the sedentary population, it is essential to mention the nomadic camps and living spaces revealed through topographical investigations. Until the 20th century, a significant proportion of the population practised a nomadic lifestyle, establishing temporary villages, seasonal settlements, and camps in the valleys. These groups frequently interacted and cooperated with the settled agricultural population, with whom they often shared resources, crops, and land.[59] Reconstructing the locations of the camps, shelters, and territories used by nomadic tribes is often challenging,[60] but their influence on settlement patterns and road networks, as well as the impact of their frequent raids on trade and travel routes, was significant.

The accessibility and reconstruction possibilities of road networks

Reconstructing historical road networks in the absence of written sources is only feasible through examining the settlement network and modelling the natural environment, as these factors determined the routes that emerged between specific sites. Least cost path analysis is a GIS tool that allows for the modelling of the route requiring the least energy expenditure between two or more points based on certain predefined factors including, typically, a topographic map of the region, onto which the points of interest are projected, allowing the calculation of potential routes connecting them. The program examines the elevations of the terrain in defined cells, assigning a predefined difficulty level to each, based on which the most accessible routes can be calculated.[61] In addition to elevation data, other factors such as natural obstacles, route types (e.g., built roads, dirt roads, paths), and distance from certain landscape features or resources can also introduced as influencing factors during the modelling process.[62]

57 Bruinessen 1992, 18–19.

58 Bruinessen 1992, 18.

59 Giraud 2013a, 38–40.

60 Thevenin 2019, 4.

61 White 2015, 411–413; Surface-Evans – White 2012, 2–4.

62 Surface-Evans – White 2012, 4–6.

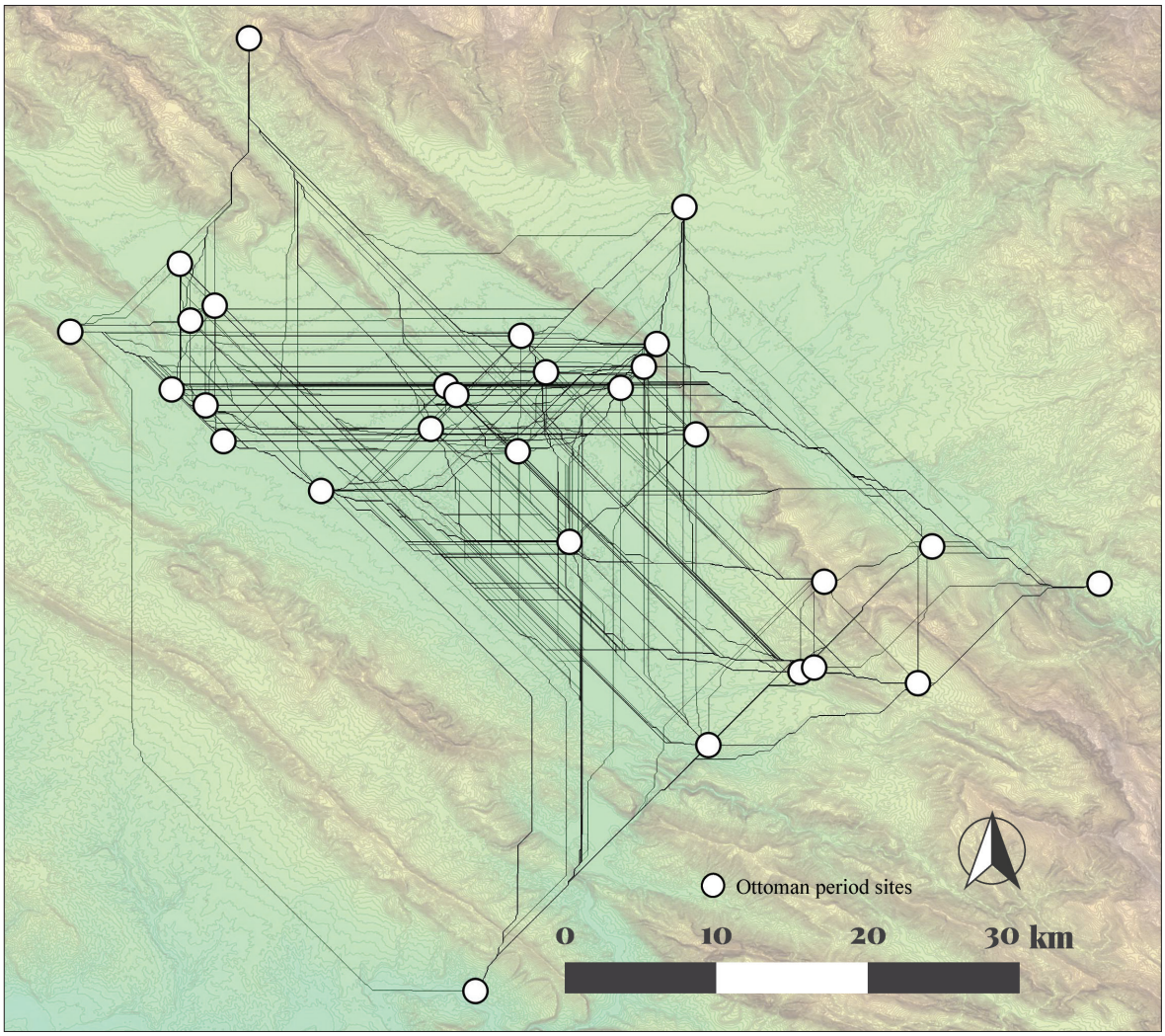

Fig. 7. Crude model for least cost path analysis.

For the modelling, I used a freely accessible online SRTM DEM (Shuttle Radar Topography Mission Digital Elevation Model) file with one known coordinate every thirty metres. I projected on this base map the precise GPS coordinates of the 29 certainly Ottoman Period sites identified during the field surveys.[63] Using the least cost path tool, I created routes connecting these points, representing the easiest paths according to topographic data. This yielded a complex network model with many possible routes containing several characteristic elements of the region's probable historical road network (Fig. 7).

Based on the density of settlements and roads, three focal points emerged in the model (Fig. 8). The first is located at the northeastern gate of the valley, near Darbandi Ranja (رانیە دربەندی), at the passageway leading toward the Peshdar Valley, where the Lower Zab River enters the area. The settlements here likely played an important role in trade with Iranian cities, integrating the Ranja Valley into the flow of goods. Additionally, the watchtowers and fortifications[64] built in this area might have been intended to strengthen the borders between the nearby Safavid and Ottoman empires and the local tribal emirates.

63 Bruinessen 1992, 15–17; Thevenin 2011, 3–11; Thevenin 2019, 2–5; Giraud *et al.* 2020.

64 Giraud 2012, 44–49.

The second focal point emerged in the northwestern corner of the valley, where a road led toward Erbil through the narrow valley, making accessible the Erbil Plain in the north and the Shahrizor Plain in the south. This could have been another key point on the eastward trade route, where goods and travellers arriving from the west could be monitored. Additionally, these settlements provided the quickest access to the Mesopotamian Plain.

The third and most important focal point emerged from the 19th century in the northern region near the Lower Zab River, where a concentration of settlements could be observed, which connected the two previously mentioned focal points on the right bank of the river and could monitor the traffic passing through the region. Furthermore, this hub provided access to roads and paths leading to the mountainous areas. Presumably, due to these advantageous characteristics, the city of Ranja was founded there in 1789 to become the seat of the *kaymakam*, the Ottoman district governor and, later, the centre of the entire valley and the Raparin Region.

Most roads are oriented northwest-southeast, with the historical course of the Lower Zab River forming a perpendicular axis. At many places, parallel lines running close to each other can be observed on the model, indicating possible paths of a route due to the homogeneity of the terrain. By merging these dense areas, frequently used routes pop out on the map, but it is also possible that several parallel secondary roads or paths existed.

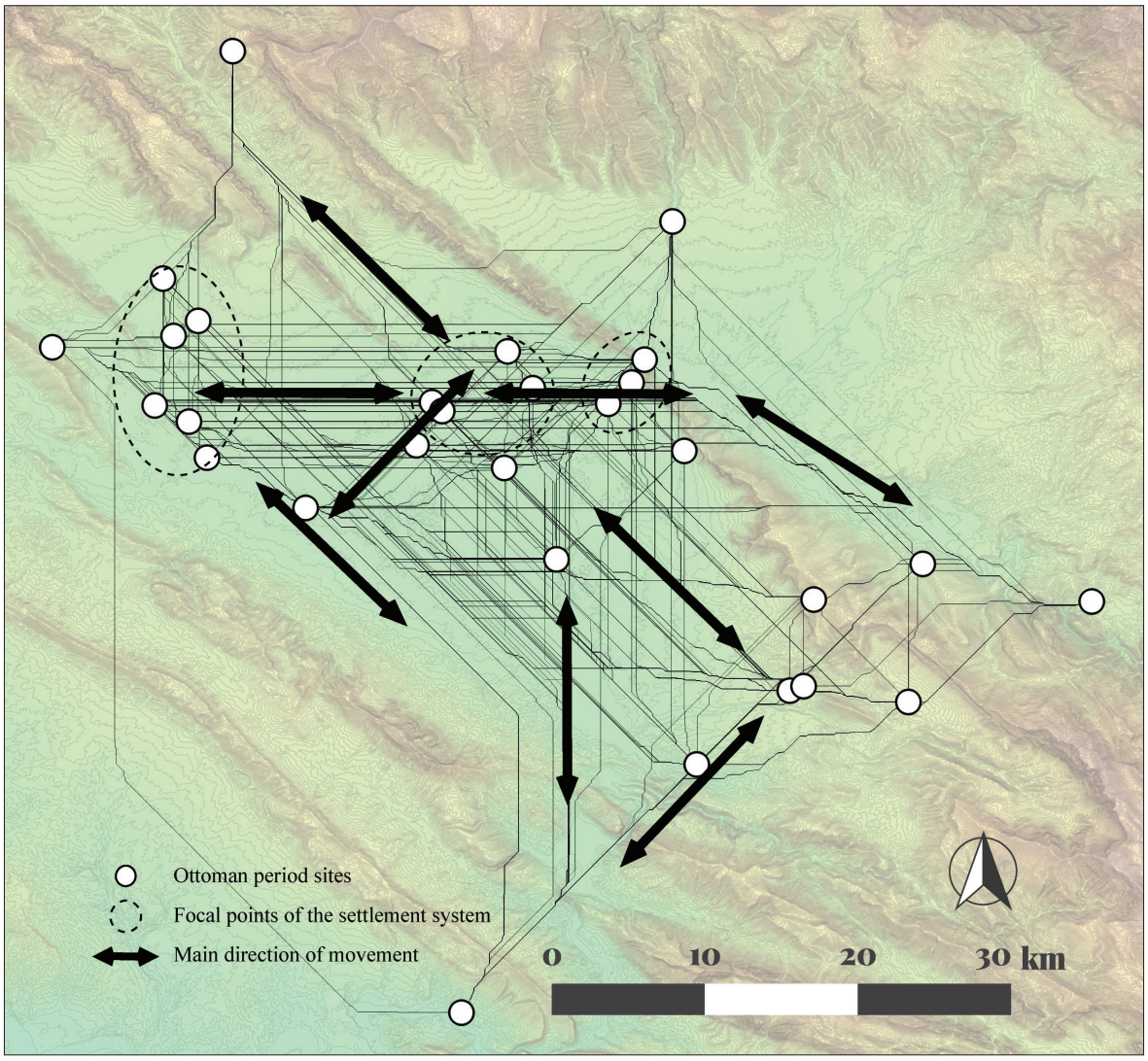

Fig. 8. One possible interpretation of the least cost path model.

No settlements or routes appear in certain areas due possibly to agricultural use, as these areas still serve similar purposes today. However, it is also possible that natural phenomena, such as swamps, rendered these areas uninhabitable, impassable, and unsuitable for agriculture or that these areas belonged to nomadic tribes whose archaeological traces have not yet been identified.

This type of modelling, however, includes several errors and shortcomings. It is important to mention that due to a strong military presence in the region, significantly less accurate than usual maps, and fewer recordings and datasets are available for research and commercial use. The 30-m-resolution elevation model is significantly less accurate than European data and is unsuitable for detailed analysis of smaller areas within the microregion. This is further complicated by the fact that much of the terrain is almost entirely flat as consists of plains, and an analysis based on elevation data often cannot yield convincing results in such cases, in contrast to mountainous areas, where the significant elevation differences allow outlining a much clearer picture. Furthermore, interpreting data is made more difficult by our lack of knowledge of the historical topography of the area of Lake Dukan, as a result of which the software interprets it as a completely flat surface at the current water level, rendering modelling impossible for most of the plain.

Further gaps in the necessary body of data also hinder any analysis. We have minimal information on the natural environment and its seasonal or permanent changes, including a lack of information on historical riverbeds, floodplains, marshy and swampy zones, pastures, and areas suitable for cultivation.[65] Furthermore, the identification of unknown or incompletely recorded sites raises additional questions. In many cases during previous field surveys, sites were registered without coordinates,[66] and with the transformation of the settlement system and the changing of placenames the recorded archaeological remains have become unidentifiable. Another issue is the presence of nomadic populations, as their temporary settlements and constantly moving campsites, as well as the seasonal routes they used, could have played a significant role in the development of the valley's road network. However, these routes could have regularly shifted due to changes in water levels, floods, cultivated areas, and land ownership.[67]

Despite the numerous errors and shortcomings, the model for the Rania Plain can essentially be cross-referenced with two datasets that simplify and clarify the outlined road network. The most important of these is the water network, which, according to my initial hypothesis and climatic conditions, may have fundamentally determined the developing settlement system. High summer temperatures and aridity required villages to be located near natural water sources, which was paramount not only because of the agricultural water demand but also because of the role of ritual washing in Islam. In addition to supporting the population and agriculture, streams also served as natural communication routes connecting the plain with the more inaccessible mountainous areas and, in the case of larger watercourses, even as a means of transportation of people or certain goods.

The second reference dataset is the modern road network. Although significant changes took place there in the 20th century compared to earlier periods due to environmental changes—such as the disappearance of the Lower Zab River and the creation of Lake Dukan, which forced traffic to reroute on the edges of the valley—the main focal points have remained strongly integrated into the region's traffic lines. We can assume that at least part of the modern roads was used before the 20th century and that only some sections of these were relocated or their path shifted after the 1950s, while they maintained their original directions, starting-, and endpoints.

65 Viczián 2020, 140, 143; Mustafa *et al.* 2015, 52.

66 Al-Soof 1970; Iraq. Al-ʿĀmmah, M. Ā. Q. 1967.

67 Thevenin 2019, 3.

The comparison of the model created with the least cost path analysis and hydrographic conditions with the modern road network has yielded a simplified diagram. Although this is only a hypothetical model, the basic directions of connections within the valley and the primary organising principles influencing them can be identified (Fig. 9). There are several data collecting and modelling possibilities for refining this reconstruction.

The first step would be to create a more detailed elevation model where elevation differences can be represented more precisely. This could possibly be achieved, even if only for certain subregions, using drone or LiDAR (Light Detection and Ranging) imagery. Our fragmented data related to physical geography and resource utilisation could also be supplemented with certain predictive calculations and visualisations, which could outline zones of agricultural use, pastures, and areas under nomadic control, as well as potential floodplains and marshy zones, and even outline the possible locations of yet-unknown sites (e.g., site catchment analysis).

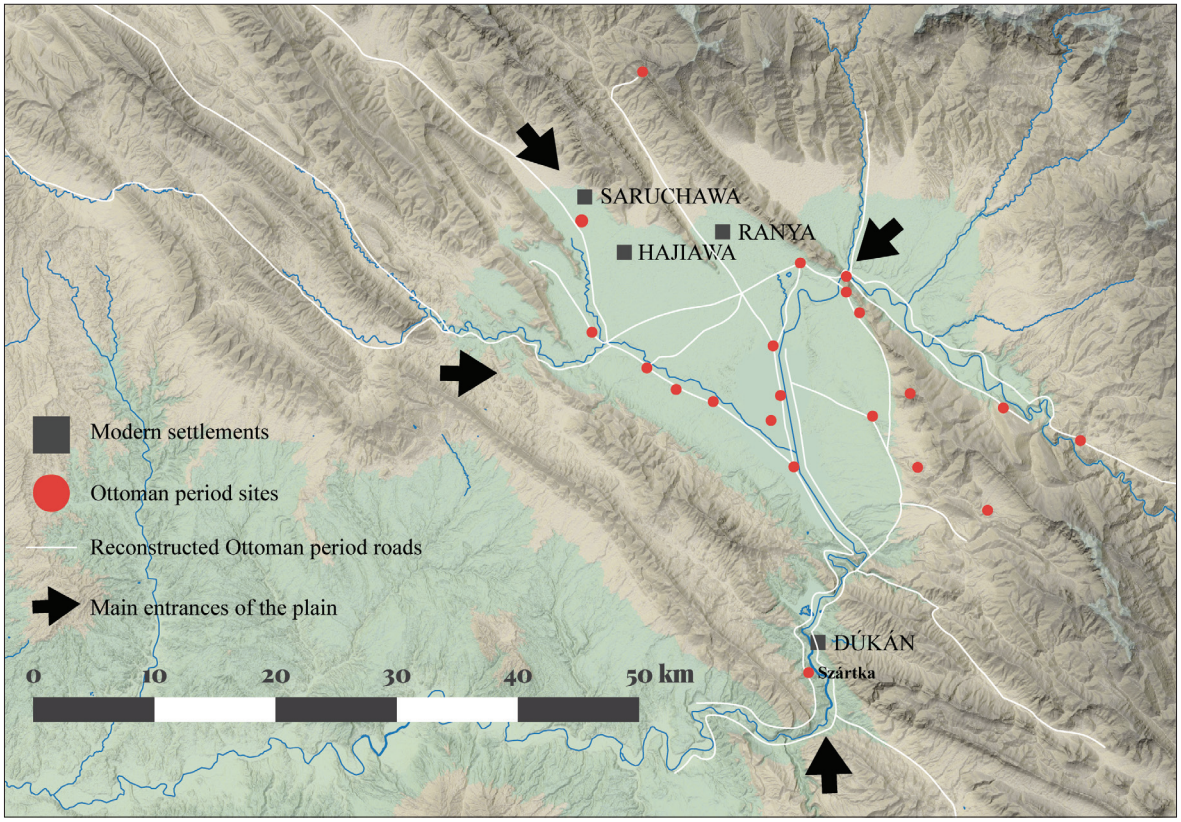

Fig. 9. A hypothetical reconstruction of the Ottoman settlement and road network.

More accurate calculations can be obtained by adding further criteria to specify the paths of potential routes. The main characteristics that could make a route favoured over another include distance from natural resources, inhabited settlements, nomadic camps, and areas of cultivation. Additionally, it is worth considering the energy investment required to use a given route, influenced not only by topographic features but also by their design, width, and road surface. Seasonal changes in weather also likely had a significant impact on the transportation network: besides floods, snowfalls in winter could render certain roads completely impassable. Time was also an important factor, possibly overriding considerations of safety or comfort. For each road section, it is essential to consider what means of travel they were best suited for and which were the most cost-effective solutions available for the users at the time, as there could have been significant differences between the roads suitable for carts and those intended for horseback or pedestrian use.

In lack of data on the intensity of road use, one can only make inferences in this regard. In addition to determining the main connecting routes (e.g., the directions of trade and population movement), identifying site clusters and cooperating sites can also help. Greater cooperation is likely between settlement clusters, implying more frequent and regular communication. Higher-scale population movement was necessary for the flow of information and goods, which may have increased road usage between these locations and, thereby, the importance of these sections compared to less frequently or seasonally used secondary routes.

Key connecting points and routes in Kurdish territories

We have only minimal data regarding the topography of the Ottoman Period in the Rania Region, and therefore, our conclusions are more akin to raising questions that involve numerous assumptions. Clarifying some of these issues can be facilitated by analysing the plain in context with the broader network of the area inhabited by Kurds and the eastern border of the Ottoman Empire.

We possess significantly more data on the medieval road and settlement network of the Kurdish territory, particularly the Tigris Valley and the plains of Mosul and Erbil. Records from the areas under a strong Ottoman influence (or even control), travel descriptions by Turkish and European travellers,[68] and not least, Ottoman and Western maps provide a wealth of information regarding the most important settlements, the land and river routes connecting them, stops and rest areas, commercial relations, and the overall experience of travelling through Kurdistan.

Numerous archaeological-topographical studies made an easier understanding and comparison of these to modern settlement structures possible. Surveys and rescue excavations in the second half of the 20th century, and more intensively in the 21st century, have provided a general picture of the distribution, hierarchy, and interconnectivity of sites (Fig. 10). One of the most important projects has been MULINEM (*Medieval Urban Landscape in Northeastern Mesopotamia*), launched by the Czech Scientific Foundation, to determine the characteristics, patterns, and extent of urbanisation, as well as the types and features of cities, and to reconstruct the settlement hierarchy and road networks in the Erbil Plain. Extensive archival material has been cross-referenced with remote sensing data and excavation results within the frame of the project to identify medieval sites and model their connections and networks.[69]

MAFGS (*Mission Archéologique Française du Gouvernorat de Souleymanieh*) has also compiled a substantial number of previously unknown sites in the Sulaymaniyah Governorate, specifically in the plains of Rania, Bngrd, Peshdar, and Shahrizor, significantly increasing the number of sites dated to the Ottoman Period. It also highlighted the importance of medieval, early modern, and modern monumental sites and landscapes, previously overlooked in historical-archaeological research.[70] Other detailed regional studies, such as the SSP (*Shahrizor Survey Project*), examining the settlement history of southern Kurdistan,[71] and the LoNAP (*Land of Nineveh Archaeological Project*), focused on the northern Mosul Region, have contributed to the picture.[72] Alongside these, numerous other

68 Otter 1748; Çelebi – Hammer-Pugstall 1834; Rich 1836; Ross 1841; Fraser 1840; Layard 1887; Bishop 1891; McCarthy 1984.

69 Nováček 2012; Nováček *et al.* 2016; Matoušková *et al.* 2015; Matoušková *et al.* 2016; Nováček 2016; Nováček – Melčák 2016; Nováček *et al.* 2016; Nováček 2022.

70 Giraud 2012; Giraud 2013a; Giraud 2013b; Beuger *et al.* 2018; Helms – Kerig 2018; Kerig *et al.* 2019; Giraud *et al.* 2020.

71 Mühl 2010; Altaweel *et al.* 2012; Mühl – Fassbinder 2015; Mühl – Fassbinder 2016; Nieuwenhuyse *et al.* 2016; Mühl *et al.* 2018; Marsh – Altaweel 2020.

72 Morandi Bonacossi 2013; Morandi Bonacossi 2014; Morandi Bonacossi – Iamoni 2015; Gavagnin 2016; Iamoni 2016; Palermo 2016; Iamoni 2020; Morandi Bonacossi 2020.

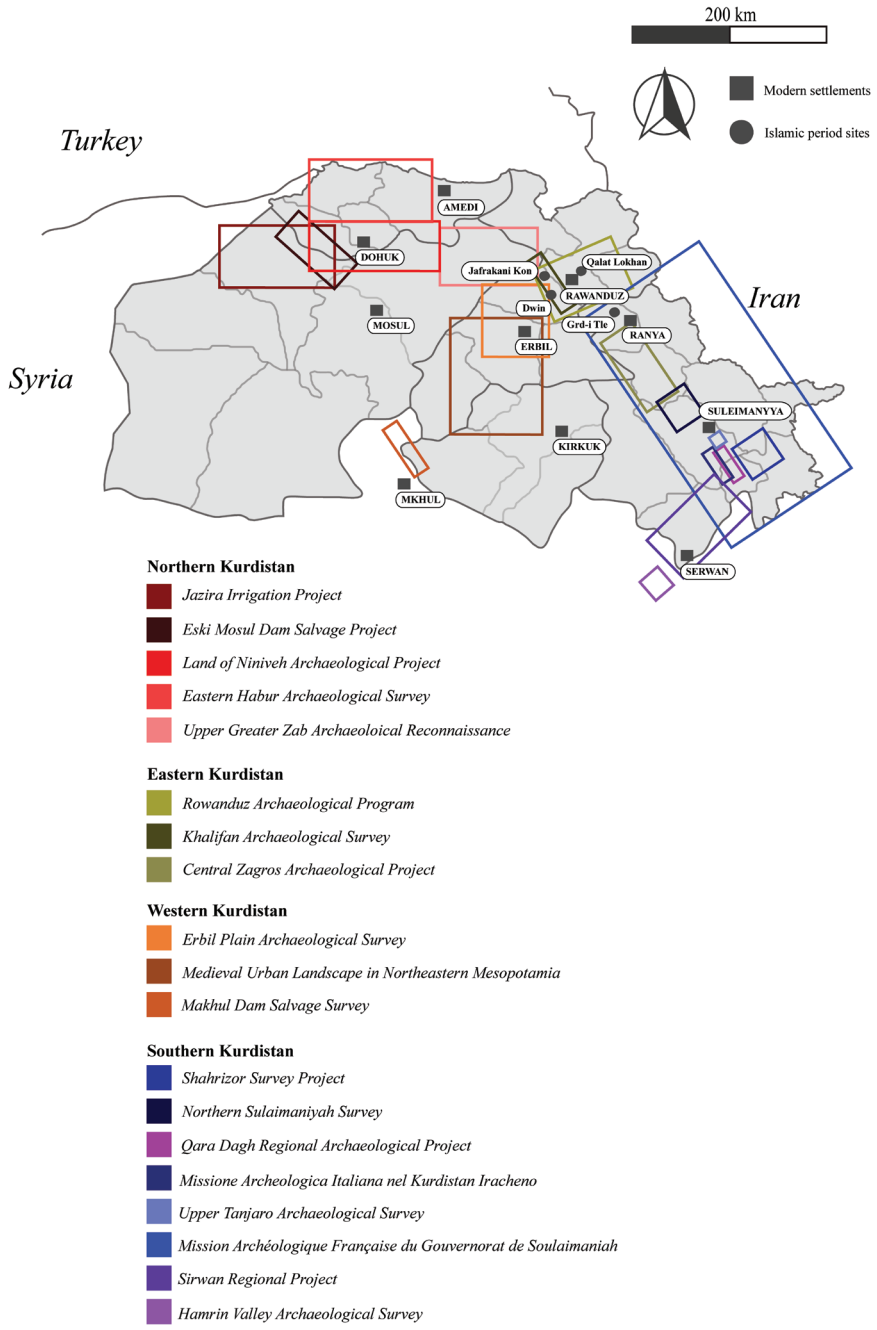

Fig. 10. Archaeological field surveys in the Iraqi Kurdistan Region.

projects and initiatives have been launched to more accurately map the archaeological topography of Iraqi Kurdistan, clearly showing that the period between the 16th and 20th centuries is rich in archaeological evidence.

Historical and archaeological data are supplemented by ethnographic studies started and collections established in the early 20th century. The tribal-social organisation, political structure, economic and commercial practices, settlement types, and lifestyle of the Kurds are known primarily from the publications of Martin van Bruinessen and Fredrik Barth.[73] Michaël Thevenin began to

73 Barth 1953; Bruinessen 1989; Bruinessen 1991; Bruinessen 1992; Bruinessen 1994; Bruinessen 2002; Bruinessen 2013; Bruinessen 2016; Bruinessen 2019.

study the lifestyle of the nomadic population and the character of the nomadism practised by the Kurds, examining the traditions of animal husbandry in the southern Kurdish region.[74] Sporadic ethnographic data made it possible to map the main areas and their zones of movement and suggest frequent and intense contact between the nomadic and settled populations, which fundamentally shaped the communication network of the Inner Zagros Region.

However, the two most important sources on the road network remain Ottoman maps and 18th–19th-century travellers' accounts. The interpretation of these, though, faces many challenges due to the lack of comprehensive and detailed local historical studies. One of the greatest difficulties is identifying the settlement names mentioned in the texts and appearing on the maps, as these may have changed significantly over the centuries. Furthermore, multiple name variations, or entirely different Arabic, Kurdish, and Turkish names, are known for many locations.[75] Similarly, identifying small streams, mountain ranges, and peaks is challenging, as these often had local names that either have not survived or exist in heavily altered forms today. Additionally, one must consider the distortion in these maps, which frequently result in inaccurate or disproportionate representations when compared to modern equivalents.

Regarding the Rania Plain, historical maps provide very little information,[76] as the region—likely due to its isolated geographical and political position—does not appear on maps from before the late 19th century[77] (Fig. 11). As a result, it is impossible to identify known sites with settlements mentioned in the sources. This situation is in contrast with the Mesopotamian Plain and the eastern side of the Zagros, where even smaller, less significant towns were often marked on the maps.[78] However, the body of available data on the core area of the Soran Emirate, around Rawanduz, is similarly scarce, as usually only the state capital, Soran, is represented on the respective maps. This lack of information can be attributed not only to the natural geographical features of the Zagros Region but also to the strong influence of local political powers and tribal leaders, which relegated the area to a secondary role within the Ottoman Empire. All this suggests that this remote, likely difficult-to-access border region between the mountains was excluded from the main lines of communication and was primarily accessible only to the local Kurdish population, which limited the amount of information imperial officials and cartographers could glean about the cities and towns, villages, and road network in the area.

74 Thevenin 2011; Thevenin 2019; Thevenin 2020a; Thevenin 2020b.

75 The international name for the capital of the Kurdistan Autonomous Region adopts its Arabic form, Erbil, whereas its Kurdish equivalent is Hawler. Similarly, many smaller settlements in the region have multiple, parallel name variants.

76 Maps from the mid-19th century do not depict the Rania Plain and its settlements. The nearest illustrated settlement is Koya, which appears to be an important commercial and communication hub, but no significant settlements are shown further east. This can be observed on the maps drawn by Robert Wilkinson in 1808 or Lallemand in 1853 (Lallemand 1853; Wilkinson 1808; Weiland 1857; Unknown 1881).

77 The earliest map I am aware of to feature the town of Rania was created by R. Huber in 1899; it is titled *Empire Ottoman. Division administrative*. Even on this map, only the most important settlement of the microregion is marked, and there is no indication of any other settlement (Huber 1899; Unknown 1920).

78 On early maps, numerous fortifications and settlements are marked, some of which are no longer known today, which makes their identification difficult. On maps by Franz Hogenberg (1576), Giacomo Giovanni Rossi (1679), and Nicolas Sanson (1650), the identification issues are compounded by distortion, making it challenging to pinpoint specific locations. Moreover, it is noticeable that Erbil, which would later become one of the region's most significant cities, is not marked on these maps (Hogenberg 1576; Ortelius 1579; Sanson 1650; Merian 1650; De Fer 1651; Janssonius 1655; Duval 1670; Allardt 1675; Rossi 1679; De Wit 1680; Jaillot 1686; Unknown 1688; Picaud 1763). In contrast, many now-forgotten sites appear. This can also be seen on a 17th-century map of the Ottoman Empire created by Abu Bakr Ibn Braham, where unknown fortifications dominate the landscape (Braham 1732).

Fig. 11. Supposed location of the microregion on the 17th-century map by Abu Bakr Ibn Braham. Bibliothèque nationale de France. https://www.europeana.eu/hu/item/9200517/ark__12148_btv1b5962220c (accessed on 15 October 2024).

Other important categories of sources include travel journals, travel letters, travel guides, and travelogues. These contain descriptions of the most used routes and numerous placenames and observations about the life, customs, political relations, major groups, and interactions of the Kurds. Since European travellers were typically provided with local escorts and protection by local leaders, they could make records of—primarily mountainous—areas that remained inaccessible to Ottoman bureaucrats. Additionally, they provide detailed information about precise routes, crossings, bridges, roadside stops, settlements, political actors overseeing the routes, the accessibility and safety of specific sections, and the primary users of these routes.

The earliest work of this kind is the *Seyahatname* or *Book of Travels* by the 17th-century Turkish traveller Evliya Çelebi, who recorded the political structure, history, geographical characteristics, and most prominent elements of the population's lifestyle in various regions of the Ottoman Empire, organising his descriptions by administrative areas. He mentions a total of twenty-two *sanjaks* in Sharazur province, but we cannot determine which of these the Rania Valley belonged to.[79]

Charles Wilson's 1895 travel guide is the most important work concerning the region; he presents a compilation of descriptions of the most significant routes across the Middle East, selected based on which major cities they connected. He lists a total of twenty routes within the area inhabited by Kurds, linking significant settlements in the region with each other and other eastern centres[80] (Fig. 12). Of these routes, only one, Route 114, connecting Baghdad (بغداد) and Tabriz (تبریز), passed through the Rania Plain. Rania Region could be accessed from the Iraqi capital either through Sulaymaniyah and the Shahrizor Plain or by travelling along the banks of the Tigris and Lower Zab rivers from the direction of Altun Kupri. In both cases, entry into the valley was possible through the Dokani Pass located at its southern corner; one than had to follow a road along the Zab River, passing through the administrative centre of Rania, and exit via the Darbandi Rania Pass into the Peshdar Plain.

79 Çelebi – Hammer-Pugstall 1834, 97–98; Bruinessen 2000, 2–3, 5–7.

80 Wilson 1895, 287–342.

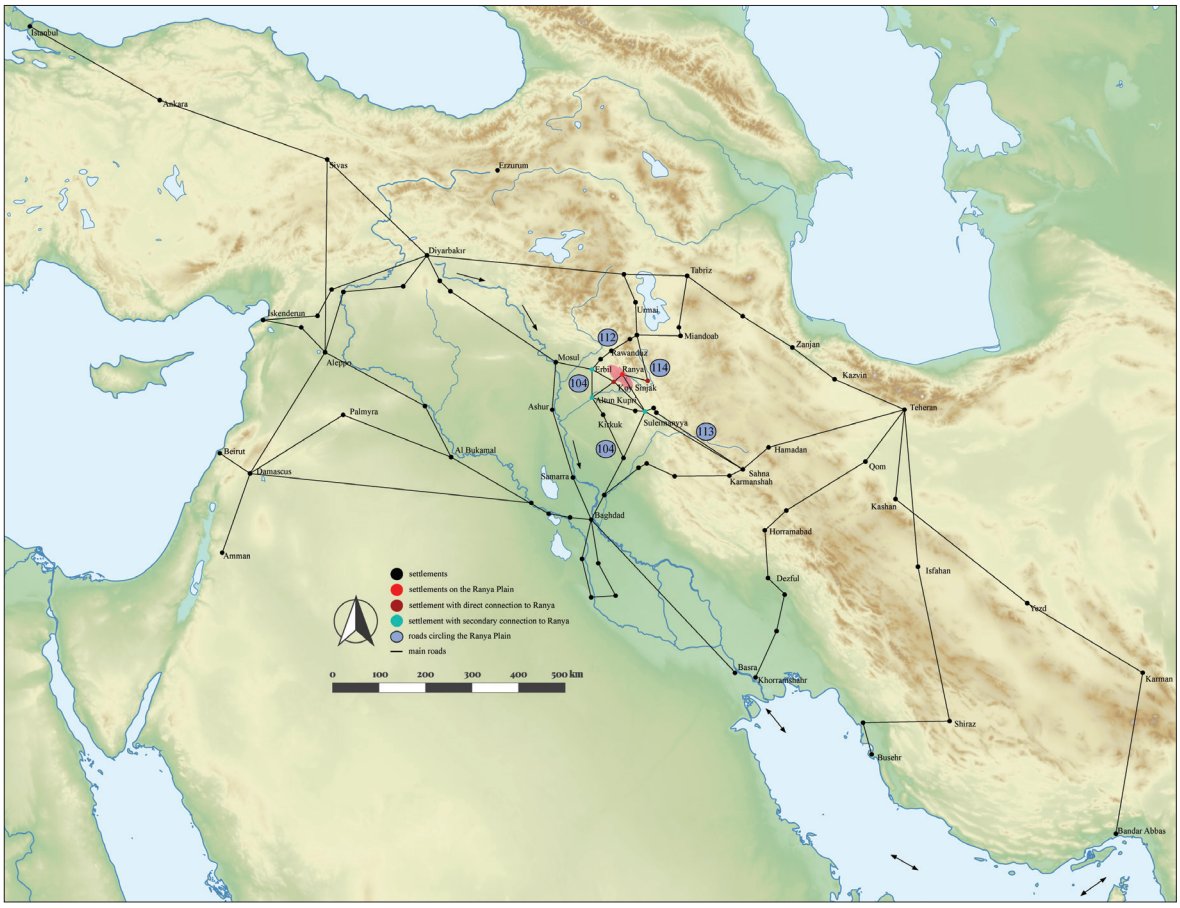

Fig. 12. Main routes through the Kurdish countryside (after Wilson 1895).

We have no data on a bridge over the river, but it is conceivable that there were ferry stations, crossings, or bridges at the larger and strategically important sites identified along the historical riverbed (e.g., Basmusian), providing connection between the two separated halves of the valley. The route connected the valley to Sardasht (سردەشت) in Iran through the Zagros Mountains in the east and to Koya on the Mesopotamian Plain in the west. In addition to housing an Ottoman fortress from the 19th century, the latter also served as a local administrative centre and a political seat. Beyond this, Route 114 connected Rania with the major Kurdish cities, Erbil, Sulaymaniyah, and Altun Kupri, and through these, with Mosul and Kirkuk as well. According to the author's description, despite being the most direct and shortest route from Iraq to Iran, it was less frequently used than the more northerly routes between Erbil and Rawanduz or the southern ones through Sulaymaniyah due to the difficult-to-cross passes, the danger posed by nomadic populations, and the poor general conditions in the swampy valley.[81]

Descriptions by other travellers indirectly support this observation.[82] After modelling these routes, the most frequently traversed areas, settlements, and directions of movement became evident (Fig. 13). These clearly show that European travellers did not traverse the Rania Plain during their journeys, nor did they use the routes passing through it. Their main axes of movement ran parallel to the Tigris River[83] on the eastern side of the Zagros Mountains,[84] through Sulaymaniyah[85] and

81 Wilson 1895, 324–325.

82 Otter 1748; Ross 1841; Rich 1836; Fraser 1840; Bishop 1891; Layard 1887.

83 Otter 1748, 235–264; Rich 1836, 1–27; Layard 1853.

84 Ross 1841, 121; Rich 1836, 185–263; Fraser 1840, 84–145; Bishop 1891, 78–381.

85 Ross 1841, 121; Rich 1836, 1–59.

Rawanduz,[86] and along the Mosul–Tabriz line.[87] The avoiding of the Rania Region in these cases can be due primarily to the narrow passes and the often barely passable, steep paths. Furthermore, safety also played a role: it would have been more difficult to ensure the safety of the travellers in areas dominated by marauding nomadic tribes than in the plains under a stronger Ottoman military influence (e.g., around Erbil and Sulaymaniyah) or the regions more effectively controlled by the emirates (e.g., Soran). Moreover, while the route provided a direct and relatively short passage to Iranian territories, it did not lead directly to major Persian cities such as Tehran (تهران) or Isfahan (اصفهان) but rather connected the area with Iranian-Kurdish settlements in the Zagros, suggesting that Route 114 and the parallel roads and passes through the mountain chains served primarily the movement and connections of the local Kurdish population.

Fig. 13. Routes taken by European travellers through Kurdistan (after Otter 1748; Rich 1836; Fraser 1840; Ross 1841; Layard 1853; Layard 1887; Bishop 1891).

86 Ross 1841, 121; Fraser 1840, 63–68.

87 Ross 1841, 121; Fraser 1840, 1–63.

We observe similar movement patterns and zones when examining military operations in the area in focus (Fig. 14). The Ottoman–Safavid conflicts, which became a constant from the 16th century onwards, were primarily concentrated in the Caucasus and southern Kurdistan. Two dominant northwest-southeast axes emerge in the latter area, corresponding to the region's natural geography: one parallel to the Tigris River between Baghdad and Mosul[88] and another on the eastern side of the main Zagros Mountain Range between Tabriz and Hamadan (همدان). The two routes are connected by one between Baghdad and Hamadan in the south[89] and the Tabriz-Diyarbakir (دیاربەکر)-Erzurum (ئەرزرۆم) axis in the north. According to our current knowledge, the Rania Plain in the area enclosed by these axes was also avoided by the primary routes of military movement. This is supported by historical sources, which do not mention any military conflicts in the microregion and align with the absence on Ottoman maps of any sign or mark referring either to the region as a distinct geographic unit or to any road, settlement, or fort. Archaeological evidence also points to a similar conclusion, as no significant fortifications or garrisons which could have played a role in a large-scale imperial conflict have been identified in the area. Nevertheless, the artefacts found in the fortresses and watchtowers excavated or surveyed include numerous traces of military conflict,

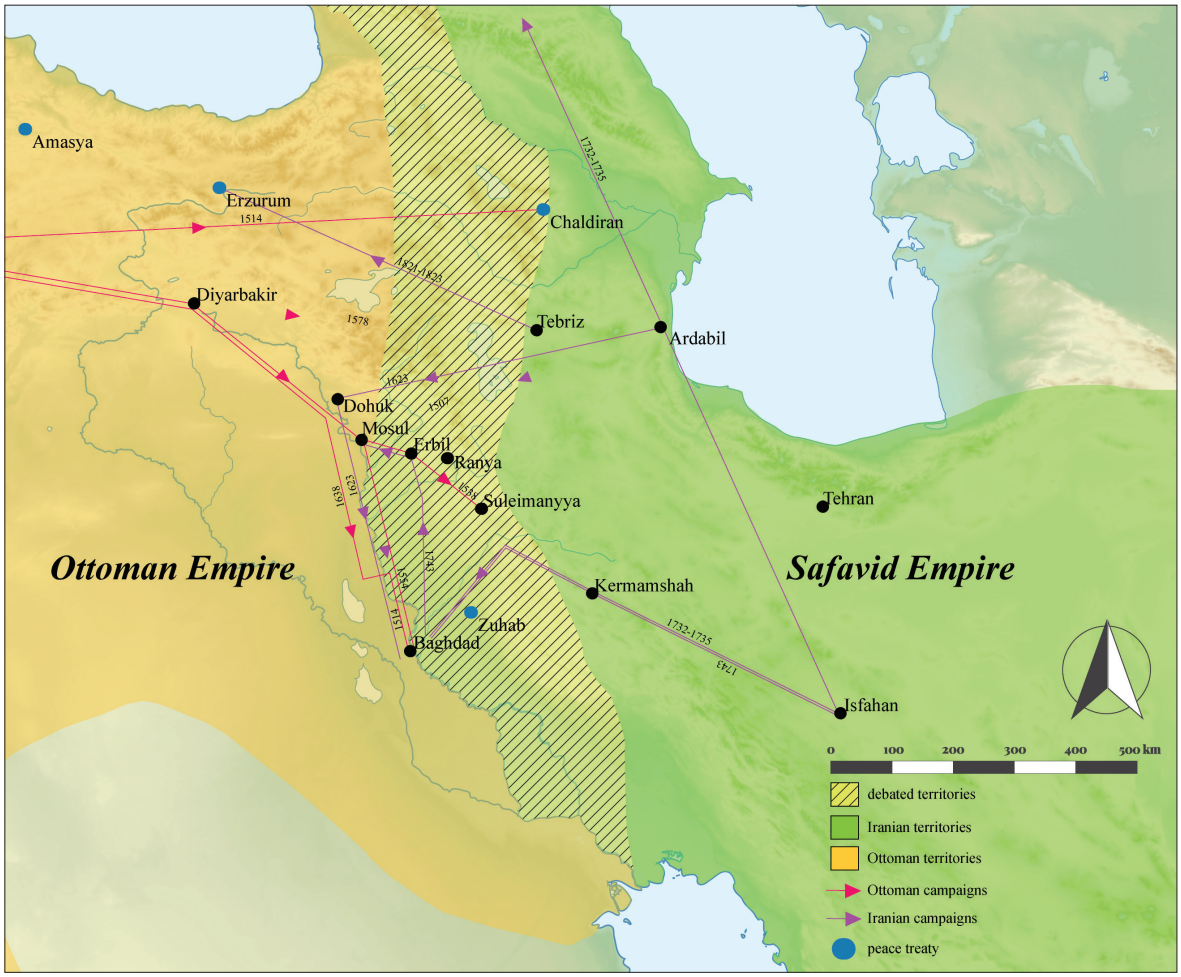

Fig. 14. Major conflicts and military movements of the Ottoman and Safavid empires.

88 Shaw 1976, 200, 243; Allouche 1983, 100–103; Imber 2002, 78–79; Axworthy 2006, 279–283; Newman 2006, 21, 28, 52, 73–76; Ágoston 2009, 280; Masters 2009c, 416; Streusand 2011, 48–49; Roemer 1986, 222, 244, 268, 285.

89 Shaw 1976, 243; Avery *et al.* 1986, 31–32, 35; Axworthy 2006, 148–169; Masters 2009c, 416; Streusand 2011, 158; Roemer 1986, 268; Newman 2006, 52, 126.

likely linked to local tribal-dynastic wars and skirmishes.[90] The natural geography of the area is also unsuitable for the moving and supplying of a large army, as the narrow passes and gorges would hinder and slow down the movement of any major military unit. Furthermore, since the valley was primarily under the control of the Soran Emirate, with the Ottoman administration exercising only limited authority, it was likely not a focus of expansionist wars but rather a significant venue of events related to the border disputes between the emirates and tribal elites.

Summary: Connection or isolation

The connecting role of the Rania Plain can be examined on two levels. First, we need to outline the internal relational system of the microregion to highlight the most important routes, hubs, and settlement groups used by the local population. For a comprehensive interpretation, it is also essential to position the area in the topography of southern Kurdistan to understand the actual role the valley played during the Ottoman Period, as it was a troubled borderland between the Turkish and Persian empires.

Regarding internal connections, it can be observed that the most frequently used routes, connecting the majority of the known archaeological sites, were likely established with consideration to even the smallest elevation differences and natural waterways. Additionally, the settlement system played a crucial role in shaping the related routes, as the constant and intensive cooperation between certain groups of sites required the using of various routes and side paths. Moreover, the examination of the settlements' positions revealed that they generally appeared in small clusters, with only a few mountain fortifications and watchtowers standing isolated, which indicates a higher level of cooperation between settlements. These observations also allow for the prediction of the locations of yet undiscovered sites, which could further expand our knowledge of the settlement history of the region.

Key focal points in the valley's topography emerge at the intersections of major routes and near settlement clusters. These are positioned primarily at the main entrances to the valley, likely for defensive, communication-, and trade-related reasons, as these points connected the presumably mostly self-sustaining communities inhabiting the plain with the outside world. We only have fragmented, secondary data on the use of the connecting routes, but the lack of sources indirectly suggests that they primarily served the movement of the local population. Their main function was to connect the zone's settlements and villages, ensure access to cultivated lands and natural resources, and maintain local trade. Although ethnographic data suggest that there were no vivid commercial relations between the settled communities and that they obtained most basic raw materials they needed locally, there must have been an active exchange of raw materials, goods, and information between the settlement clusters in the Rania Valley. There was also likely constant cooperation between the nomadic and settled populations. This is supported by the fact that, during the latter half of the Ottoman Period, it became common in Kurdish regions for only certain, typically younger, members of a family to live a nomadic lifestyle and migrate with the animals while other members of the same clan adopted a settled way of life.[91] Through these relationships, the nomads secured a share of agricultural produce and winter accommodations, in exchange for which they could offer protection, livestock, looted goods from raids, and/or money.

Regarding the external connections of the Rania Region, it is evident that official, private, and military travellers largely avoided this area, as its political and physical geography made it difficult to traverse. Both Ottoman officials and European travellers preferred the longer but safer and more

90 Dezső – Mordovin 2016, 247–250.

91 Giraud 2013b, 39–40.

easily navigable areas more tightly controlled by Turkish administration, where political conditions were more stable than in the border region, a venue of constant conflicts between the emirates and likely controlled by local tribal elites and clans. However, since the city of Rania was connected to all major Kurdish cities, we cannot underestimate the movement and migration of the local Kurdish population, for whom the area was an important connecting point between the Mesopotamian Plain, the interior of the Zagros Mountains, and the Kurdish ethnic and cultural population of western Iran.

Similar observations can be made regarding trade connections. Based on the partially processed archaeological records of various sites, it appears that local production was predominant, and there was little demand for raw materials and products not available locally. Nevertheless, as their production required higher expertise, some artefact types—such as clay pipes or glazed pottery—may have come from specialised workshops in major Kurdish cities, primarily Erbil, Sulaymaniyah, or Kirkuk. Artefacts from long-distance trade, such as porcelain fragments or metal objects, were found only in very small numbers, and these likely came into the local population's possession through the looting of travellers or caravans.

The Rania Plain was also a marginal military zone despite being part of one of the period's most important and active border regions. Since the valley was essentially outside the main direction of military movements, played only a secondary role as a crossing point, and had no significant cities or fortifications, it can be assumed that imperial conflicts largely bypassed it. However, the character of the archaeological sites and the identified materials clearly indicate that the region was a venue of the frequent local military conflicts between tribal leaders and emirates. Accordingly, the tension between the nomadic tribes and the settled farmers may have been a determining factor in shaping the region's historical development.

In conclusion, we can state that the Rania Plain simultaneously played a connecting and separating role throughout its history. However, due to the fragmentary character of the available sources and the lack of published archaeological material, any specific conclusion can only be hypothetical, drawn from a comparison of the available geographic, historical, archaeological, and ethnographic data with current conditions. Based on these, it seems likely that the role of the region changed depending on the ethnicity, lifestyle, and identity of the individuals moving in the area. The local population likely maintained an intensive and wide-ranging network of relationships and communication, traces of which can be seen in cooperating settlements and the relations of the nomadic and settled parts of the population as reflected by settlement structure. The movement of the nomadic tribes also connected the microregion with other, more distant areas, leading to the establishment of permanent cultural and economic ties, primarily between the Kurdish tribes living on both sides of the Zagros Mountains. These connections may have facilitated the emergence of the tribal alliances and local states that appear in historical records.

Conversely, for outsiders, the Rania Region was fundamentally a secluded area, an obstacle difficult to penetrate and to be avoided, acting as a barrier between the Mesopotamian Plain and the interior of the Zagros Mountains. As reflected by the scarcity of references in historical sources, another piece of evidence supporting their marginal status, these mountainous areas were difficult to control and often dangerous for Ottoman officials. The lack of merchants and caravans is indicated by the strong local character of the respective find material and the evidence of a self-sustainable economy, which made it possible for a microcosm independent of external resources and products to develop in the mountains. Based on that, the Rania Plain may have rarely served as a connecting route between Iranian and Mesopotamian regions, allowing the Kurdish culture to preserve its distinct character due to the lack of strong external cultural influences.

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