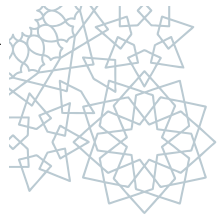


# The Culture and Urban Civilization in Syria during the Early Bronze Age

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## A CULTURA E A URBANIZAÇÃO DAS CIVILIZAÇÕES NA SÍRIA DURANTE O PERÍODO DA IDADE DO BRONZE

O artigo trata do processo de urbanização das civilizações no período da Era do Bronze. Mostra como a agricultura, com seus métodos próprios de irrigação, foi o principal fator responsável pela constituição da civilização urbana na Mesopotâmia por volta de 3000 a.C. O autor cita aldeias como Jezira, rica em minérios, que sofreu um forte impacto pelo processo civilizatório; essa característica fez com que essa aldeia deixasse de buscar serviços e mercadorias fora de seus territórios e desenvolvesse ali tudo aquilo de que necessitasse.

## LA CULTURA Y LA URBANIZACION DE LAS CIVILIZACIONES EN SIRIA EN EL PERIODO DE LA ERA DE BRONCE

Muestra como la agricultura, con sus métodos propios de irrigación, fue el principal factor responsable por la constitución de la civilización urbana en Mesopotamia hacia el 3000 a.C. El autor cita aldeas como Yezira, rica en minerales, que sufrió un fuerte impacto por el proceso expansivo de la civilización, esa característica hizo con que se dejara de buscar servicios y mercaderías fuera de su territorio y desarrollara allí todo aquello de lo que necesitaba.

## الثقافة و الحضارة الحضريّة في سوريا خلال العصر البرونزي الاول

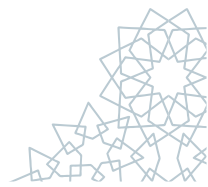
يتناول المقال مسلسل تحول الحضارات الى المجال الحضري في مرحلة العصر البرونزي، كما يظهر كيف ان الفلاحة بأساليبها الخاصة في السقي كانت العنصر الاساسي المسؤول عن تأسيس الحضارة الحضريّة في الهلال الخصيب منذ حوالي ثلاثة آلاف سنة قبل ميلاد المسيح عليه السلام. ويشير الكاتب الى مدينة جزيرة التي كانت بمثابة غنية بالمعادن وتأثرت كثيرا بمسلسل التحول الى حاضرة. فقد أدى هذا المسلسل الى أن تتخلى هذه المدينة عن البحث عن الخدمات و السلع خارج حدودها و العمل على تهيئة و إنتاج كل ما تحتاج إليه فوق ترابها.

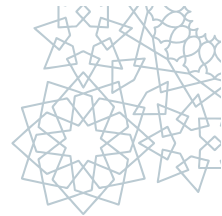
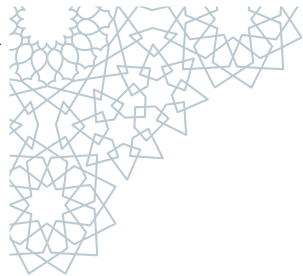
## LA CULTURE ET LA CIVILISATION URBAINE EN SYRIE AU DÉBUT DE L'ÂGE DU BRONZE

L'article met en valeur le processus d'urbanisation des civilisations dans la période de l'Âge du Bronze. Il montre comment l'agriculture, avec ses propres méthodes d'irrigation fut le principal facteur responsable de la civilisation urbaine en Mésopotamie autour de 3000 Avant J.C. L'auteur cite des villes comme Jezira, alors riche en minerais, qui souffrit le fort impact du processus civilisateur. Ce qui poussa cette ville à renoncer à rechercher services et marchandises hors de ses territoires et à développer sur place tout ce dont elle avait besoin.

## THE CULTURE AND URBAN CIVILIZATION IN SYRIA DURING THE EARLY BRONZE AGE

This article deals with the urbanization process of civilizations during the Bronze Age. It describes how agriculture, with specially designed methods of irrigation, was the main reason for the genesis of the urban civilization in Mesopotamia around 3000 b.C. The author cites villages such as Jezira, rich in ore deposits, which suffered from the heavy impact of the civilizing process; this factor made it relinquish the search for services and trade outside its territorial limits and develop everything it needed within its own borders.





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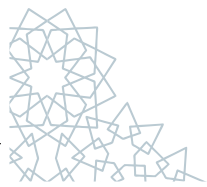
uring the past few decades, Syria has captured the attention of professional archeologists and the general public interested in the archeology of the Near East.


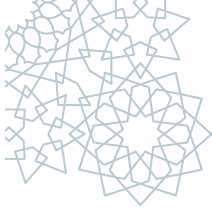
Both have been captivated by sensational discoveries made at sites of former large cities, state capitals, or political entities which played major roles in the history of this region of the ancient world in northern Mesopotamia during the third millennium B.C.

Focal points of this increasing interest include several sites which have become well known only in the second half of this century.

At Tell Mardikh (ancient Ebla), richly furnished multiple temples, royal tombs, and palace archives have proven extremely informative about the events of that time.

Another major site, Tell Hariri (ancient Mari), was a model city state strategically established on the banks of the Euphrates. The tablets found at Mari indicate that the city controlled the river trade and participated in extensive written correspondence with civil servants and princes in surrounding areas. Tell Leilan (ancient Shekhna), was a vast





fortified city of the third millennium with remarkably decorated temple and royal archives.

Tell Brak (ancient Nagar) boasted a secondary residence of the great Akkadian conqueror, Naram-Sin, and later became an important urban center with impressive architectural installation at the time of the Hurrians.

Tell Mozan, which has just been identified from its cylinder and coneiform tablets as ancient Urkesh, served as the first capital of the Hurrians. Alongside these spectacular and well publicized archaeological discoveries, in a quieter manner, several archeologists have been trying to explain the cultural phenomena linked to the socioeconomic evolution of the various civilizations which succeeded each other in Syria over time.

The third millennium B.C. is of particular interest because this was the area in which cities and city states, or, in fact, urban civilization thrived.

However, civilization is not based solely on cities, even if they are essential, but also on villages and the countryside.

The contribution of more peripheral regions to socioeconomic changes has often been overshadowed in favor of the large urban centers which have been considered, until recently, more vital to the development of complex organized societies. The results of the research described here illustrate a change in methodological approach.

This conceptual framework has evolved in order to grasp more securely the multiple facets of human evolution in this region of the Near East during the era pre-dating, or contemporary with, the first use of writing.



## MESOPOTAMIA IN THE THIRD MILLENNIUM B.C.

Studies of third millennium urbanization in the Habur region are, therefore, beginning to enhance understanding of ancient eastern history. The well known Sargonic intrusions upon this region seem now to be but a response to the prior development of large centralized urban forces which may be associated with the somewhat later Hurrian inscriptions. The Habur region and the fertile dry farming region around Aleppo and Tell Mardikh may have represented similar threats to the urban forces of southern Mesopotamia. (Weiss, 1983, p.50)

The early history of Mesopotamia must unavoidably begin with a reference, however brief, to the prehistoric age. By the middle of the fourth millennium B.C., the people known as Sumerians (probably indigenous to the area) developed a highly advanced and successful culture in the lower section of the Mesopotamian alluvium. This culture was dubbed Uruk after the name of their largest and most important city. With the achievement of urbanism and the invention of writing, the Uruk people also succeeded in establishing a network of commercial enclaves in the neighboring territories, including the upper section of the alluvium.


The degree of influence these enclaves exercised over the periphery was uneven, ranging from outright colonization, as was clearly the case in the upper section of the alluvium, the Diyala region, and the Susiana, to cooperative ventures with the local population as may have been the case in upper Mesopotamia and Anatolia. (Freedman, 1993, p.724)

The Uruk expansion came to an end during the last phase of the Uruk IV period or at the beginning of the Uruk III (=Jemdet Nasr) period, at the very latest (ca. 3100). At that



time, the enclave network completely collapsed and the southern influence waned in the periphery. Concomitant of this development was the reassertion of indigenous traditions throughout that area and the emergence of local power structures.

As a result of these momentous changes, sometime during the Early Dynastic I period (ca. 2900-2750), a completely new power structure developed on the Mesopotamian alluvium. In this new picture, which was to remain largely unchanged for over a millennium, the Sumerian influence was confined primarily to the lower section of the alluvium, the historic land of Sumer or south Babylonia.



The upper section of the alluvium, the land of Akkad or north Babylonia, extending north of Nippur as far as modern Baghdad, became the home of the Semitic Akkadians, although the Semites (but not necessarily Akkadians) may already have lived in north Babylonia for centuries, coexisting peacefully with the Sumerian settlers. It was probably only in the Early Dynastic (ED) I period that this region, like other peripheral territories impacted by the Uruk expansion, saw the development of a native political and economic system. Significantly, this system was largely independent, sharing markedly a different structure from the ones existing at that time in south Babylonia.

The difference in the organization of the south and north proved very enduring, and it will not be an exaggeration to say that the subsequent history of Babylonia, down to at least 1500 B.C., was shaped to a large extent by the contrasting nature of the two systems. It is therefore necessary at this point to draw a brief sketch of both systems, with an implicit understanding that what is offered is a simplified ideal model. The

real picture involved much shading and overlapping, especially in the middle area of the alluvium where the southern and northern influences met, although it is clear that the origin of the city state must have been exceedingly ancient, certainly going back to the Uruk period.

The city states bordered contiguously on one another, and there was little, if any, neutral space between them.

The society was envisaged as a single temple community, with all its members standing in the same subservient relationship toward the god.

Class and social distinction were comparatively unimportant with the stratification being based on wealth rather than on origin.

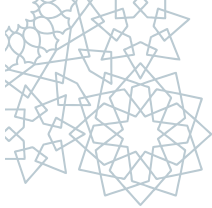
These features, and the fact that the level of social mobility was surprisingly high, gave the south a distinctly egalitarian character.

Very significantly, chattel slavery was virtually unknown. For its economy, the city state depended on the decentralized system of self-sufficient temple households, which controlled most of the state's resources, most notably nearly all of its agricultural land.

Private ownership of land was insignificant and seems to have been confined to orchards.

In fact, the private sector as a whole was weak and poorly developed. The organization of north Babylonia and the growth of civilization in that region was viewed basically as a process of aculturation by which the seminomadic population of the north was brought into the orbit of the superior Sumerian civilization.

Hence the view, still common in literature, of the north as a somewhat belated extension of the south.



The discovery of the Ebla archives emerges as a phenomena in its own right, for Ebla's development was contemporaneous with and largely independent of that of its southern neighbor.

This development was part of a much larger picture which also involved north Syria, the Diyala region and perhaps even upper Mesopotamia. (Freedman, 1992, p. 725)

Efforts of the early Sargonic rulers were primarily towards the task of territorial expansion.

Already, Sargon Akkades counted among his possessions west Iran, north Syria, most of north Mesopotamia, and, probably even Cappadocia.

The regions of Sargon and his two sons Rimush and Manishtushu constituted the formative stage of the Sargonic empire. During that period, the empire acquired its physical shape, but not much effort was made to turn it into an articulated system.

These early Sargonic kings also failed to develop a comprehensive imperial policy.

The task of creating such a policy and of consolidating the empire fell to Naram-Sin.

During Naram-Sin reign, the Sargonic empire reached the zenith of its power and influence, becoming a paradigmatic model that was to be emulated by future Mesopotamian rulers. It seemed that the sun would never set on Akkad, its quays overflowing with exotic products and materials, its streets teeming with foreigners.

The arts and literature flourished, achieving unprecedented heights of artistic expression. (Freedman, 1992, p. 728)

## THE CULTURE AND THE URBAN CIVILIZATION IN THE SYRIAN JEZIRA DURING THE EARLY BRONZE AGE

The archeological site in Jezira in earlier and more recent years has yielded artifacts and building structures which clearly point to a rather dense settlement in the rain-fed plains and the river valleys of the Jezira.

The textual evidence of early southern Mesopotamian texts: the era we should call upper Mesopotamia is approximate to Arabic Jezira.

The northeastern territory, was an urbanized and socially developed region already in the early 3rd millennium. The basic method of subsistence was agriculture, but the fact that it depended on rainfall in due quantity and at the right moment added an aspect of insecurity to the production of livelihood and permanent settlement.

Therefore, agriculture was always closely connected with pastoral life, responding more flexibly to changing natural conditions. Normally, both peasants and herdsmen belonged to the same group of people, from an ethnic or linguistic point of view.

It was a division of labor, or better: gaining livelihood with different intensity according to the season. The pastoralists were closely related to the sedentary part of the group; the clear division between the sons of the desert, the Beduins and the sedentary people was the result of a much later development. Another method of subsistence was craft, and, when the level of production and social organization was high enough, it could even serve as the basic livelihood.

This was especially true for the urban centers, which fostered a specialized hand-

icraft, serving not only the needs of a local group. Specialized craftsmen did some trade but in a different way from that of full time merchants who mediated goods between the producer and the consumer. (Klengel, 1997, p. 1) During the late 4th millennium the Jezira came into the economic horizon of centers in central and southern Mesopotamia which emerged in a period we could call the first urbanization. In archaeological terminology it is mostly linked with the name of the city of Uruk and typical products of this culture, such as building structures, pottery and sometimes clay tablets with numbers, appear at several places along the middle Euphrates, among them Habuba Kabira and Jabal Aruda, but also in Jezira and even in southeastern Anatolia (G. Algaze, 1993, p. 20)

With exaggerated terminology it was therefore called “the Uruk world system” meaning a network of excavation sites certainly connected by trade routes and extending from the gulf to the area of the Taurus. During the early 3rd millennium, routes of communication crossed the Jezira and brought some of its centers into the textual evidence of Mesopotamian and north Syrian (Eblaic) tradition. But, as far as we know, there are no important local resources which could have attracted the merchants, except for basalt, wood, or some local agricultural products.

No deposit of precious stones or metal ore are known so far, but the copper ores of Ergani, not far away from the Jezira, could also have attracted the city states of central and southern Mesopotamia. The economic and political centers of middle Mesopotamia, in the line of kish, especially had traditional ties with upper Mesopotamia and north Syria. Their social structure and orientation was clearly different from the

Sumerian city-state of the south but closer to that in the northern area. (Steinkeller, 1993, pp. 107-129)

In those cases, that trade became a possibility of subsistence, making some profit from the passing of caravans, by guiding, accommodating and providing them with supplies.


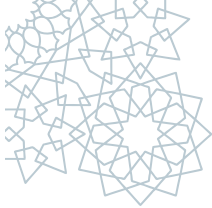
Thus, it seems that the role played by the Jezira in the economic system of this period was mainly based upon its position in the inter-regional network of communication. The artifacts unearthed at several sites could reflect some influence exercised by the contact brought about by this geographical situation.

The cuneiform archives of Ebla, dating from about the middle of the third millennium B.C., demonstrate another direction of upper Mesopotamian contacts. Based mainly on trade goods that were moved along routes mostly following the valleys of the Euphrates and Habur but also running through other areas where water was abundant enough for the animals of the caravans.

The orientation of economic documents of Ebla towards the east, the Euphrates valley and beyond (J. W. Meyer, 1996, pp. 132-145) indicate another chance for the centres of the Jezira to make some profit from trading routes: a commercial treaty handed down by the archives of Ebla was closed between Ebla and a town called Abar-Qa/Sal, possibly located somewhere in the Euphrates/Habur region.

Mari and Ebla were partners (and sometimes also rivals) in trade, and military expeditions were undertaken to gain control of trade routes in the western Jezira or in northern Syria.

In the Habur triangle cities like Nagar, Tell Brak and Urkish, Tell Mozan obviously



played a dominant economic role, being at the same time door-like stations on the road to the copper mines of Ergani.

It could also be suggested that goods coming via Iran, like lapis lazuli and carnelian, arrived at the Jezira via the city of Ashur.

Ashur, not very relevant as a center of agriculture, grew in importance mainly because of its position in this trade. From here, a route ran through the northern Jezira to Habur and the Euphrates or crossed the rain-fed areas from upper Mesopotamia to southeast Anatolia.

The presence of non-local materials such as gold, rock, crystal, lapis lazuli and carnelian in the archaeological evidence of various sites of the Jezira could indicate that these places were touched upon by this trade and made some profit from it.

During the period of the first territorial states of central and southern Mesopotamia, the political conditions of the Jezira changed.

As far as the geographical extension of the kingdoms of Akkad and the third Dynasty of Ur can be made for certain, the trade routes obviously also served as a guideline for military expansion.

Tell Brak and its administrative role for the Mesopotamia territorial states is certainly only one of several possible testimonies.

The emergence of urban society in the middle Euphrates is (ca. 2500 B.C., Early Bronze III) slightly later than that of the Khabur (ca. 2600 B.C., Leilan III-d), if Leilan can be used as an index for the latter area.

The urbanization of Ebla appears to have occurred sometime thereafter, in the Early Bronze Age (ca. 2400 B.C., Mardikh B 1). If this conception of the

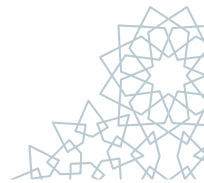
gradual east to west pathway of urbanization is an accurate one, one might consider whether this sequence of early urbanization in Syria reflects proximity to southern Mesopotamia.




It is clear that the elite of the Syrian Jezira and Ebla were very much in contact with those of southern Mesopotamia, emulating their artistic styles and adopting their administrative technologies. (Schwartz, 1997, p. 2)

Long distance trade, perhaps involving southern Mesopotamian, was an important factor in the development of complex societies in the middle Euphrates, and there the elite of western Jezira based their ascendancy on a system of wealth finance, as opposed to the staple finance of the Khabur and northern Mesopotamia. (Schwartz, 1997, p. 3)

While staple finance entails the mobilization of subsistence goods distributed as payment for services to the elite, wealth finance involves elite acquisition of objects of symbolic value and their distribution to supporters, with such objects defining an individual status and economic capabilities. Craft specialization and long distance exchange tend to assume considerable importance in systems of wealth, finance, and the significant development of craft specialization, mainly of copper and bronze metallurgy, is evident in the early third millennium middle Euphrates (the weapons in Cachemish graves). Also evident is the importance of the role that intra- and inter-regional trade might have played in the economic development of the Jezira urban centers. (Schwartz, 1994, p. 5)

The development of the urban civilization in Syrian Jezira had already started by the early third millennium B.C., but





this urban bias has ignored a large proportion, if not the majority, of the population of early urban Syrian Jezira: those people living in the small villages and towns in the hinterland. V. Gordonchilde was among the last to suggest an integral role for the countryside in the development of a complex society, noting that the priests, officials, artisans, and other specialists working and living in the cities had to rely on agricultural surpluses produced in the countryside for their daily subsistence (Curvers, Schwartz, 1990, pp. 3-6). But the precise nature of the urban-rural relationship remained untested. Were diagnostic features of early urban civilization such as economic specialization, labor specialization, and social stratification primarily urban based, or might the hinterlands have played a larger part in the development of urbanization?

The urban centers of the Jezira are indicated by archaeological evidence.

The excavation of the small rural sites has finally begun in recent years, largely fueled by the necessity for salvage operations in regions threatened by economic and industrial development.

The excavation of archaeological sites doomed by the dam where such rescue projects have been located are, more often than not, far from the traditional sites of urban agglomeration, thus compelling archeologists to turn their attention to smaller rural sites.

The excavations at Raqai, in the middle of the Khabur river valley of northeastern Syria, were explicitly planned to investigate the social, political and economic organization of a village of early urban northern Mesopotamia, examining its relationship to the developing urban societies around it. (Schwartz, 1993, p. 121)

The excavation results indicate that Tell Raqai was not a self sufficient farming village, but a specialized community with probable economic links to larger centers elsewhere. (Schwartz, 1994, p. 24)

The rounded building with its platforms and silos in levels 3 and 4, as well as the complex of silos outside it, attest to specialized production and bulk storage at the site, and the seal impressions and numerical tablet indicate the administrative technology employed to assess the degree of specialization and the segregation of activities at Raqai 3. (Schwartz, 1993, p. 122) Richness refers to the number of artifact types present in an assemblage, such that areas with low richness values (e.g. the eastern industrial zone and the temple area) are likely to have had a small number of activities taking place, thus specialized and/or segregated activities.


Evenness refers to the relative proportions of each artifact category represented such that areas with small evenness values (e.g. the temple areas) imply a small number of activities predominating. (Schwartz, 1997, p. 4)

Variation in assemblage diversity at Raqai tends to correspond with the observed variation in architecture, each area apparently being the setting for a particular group of activities. (Schwartz, 1997, p. 5)

A consideration of evidence from nearby contemporaneous sites allows us to comment more specifically on the nature of the specialized activities at Raqai.

Excavations at adjacent sites in the middle Khabur reveal that Raqai was part of a complex of small specialized sites distributed along the river. (Schwartz, 1994, p. 24)

At Atij, 2 km downstream from Raqai, the high mound was comprised of facilities interpreted as grain storage emplace-



ments, associated with administrative tools, such as clay tokens or calculi.

Kerma, 2 km upstream from Raqai, provides conclusive evidence that grain storage was a primary concern of these small communities. Here the site was dominated by a fortified storage facility filled with a thick deposit of carbonized barley still in situ. Differentiation in the nature of botanical remains found in the various rooms of the structure suggests that the facilities consisted of a central grain storage surrounded by rooms for grain processing. (Saghieh, 1991, pp. 171-181)

A few kilometers downstream on the other side of the river at Tell Ziyadeh, recent excavation has uncovered an early third millennium structure with doorless cubicles reminiscent of the Raqai silos. This building has been interpreted as a grain storage installation. Tell Bderi was a small urban center which may have controlled access to this series of third millennium specialized rural villages of the middle Habur valley.

A massive fortification wall, a glacis and a monumental gateway, flanked on each side by a square tower, defended the site. (Pfalzner, 1990, p. 63)

In contrast, no wall protected Tell McLebiya, another large site.

Moreover, its excavators found no traces of either storage or preparation of agricultural products although the level corresponding to the first half of the third millennium was only barely reached in a sounding at the foot of the hillside. (Lebcau, 1993, p. 83)

The upper layers of Tell Gudedu were exposed sufficiently enough to allow the interpretation that the occupants engaged in small-scale production activities. The presence of several plaster basins and

ovens suggested the preparation of food from the reserves at the neighboring sites (e.g., Atij). Ceramic production, and even metal making, as fragments of a crucible were found near a oven.


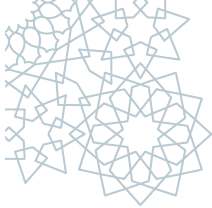
Tell Mulla Matar in the middle Habur valley produced several levels of third millennium occupation.

At Tell Ummqseir and Tuneinir, sites more strongly representative of other periods, the few traces of third millennium that have been unearthed also do not allow us to interpret their function at this time. The evidence of architectural change in the successive levels of third millennium in Tell Rad Shagra provides a rich data base with which to derive and to test hypotheses on household composition and social organization. Tell Raqai level 3 (ca. 2600 B.C.), probably contemporary with Red Shagra 3 middle phase of two-room houses, has a pattern of differentiated neighborhoods: in the west were two-room houses probably accommodating nuclear families, in the north was an enclosed temple area, to the east were small rooms, ovens and a brick platform in a kind of industrial zone, and in the south was the large rounded building.

From the architectural evidence at Tell Rad Shagra, we understand that the site was a small third millennium local urban system on the Habur plains. (Bieli ski, 1992, p.p. 77-85)

In a review of storage facilities in traditional societies, it has been argued that large scale centralized storage of staple goods can be interpreted as a material correlate of staple finance in this system, characteristic of complex chiefdoms or early states, where staple mobilized from the population is stored and used to pay personnel providing services to the elite, emphasizing the tendency for central





authorities to collect grain to store the materials in centralized, bureaucratically managed facilities.

The scale of the facilities at Raqai and the other middle Khabur specialized centers relative to the small local population indicates that the goods processed or stored in the middle Khabur were intended for consumption elsewhere.

The Ninevite V period sites in the middle of Khabur valley are very small settlements, the largest probably being tell Bderi, perhaps 5h in area, and no significant contemporaneous occupation is attested for the steppe zone on either side of the river valley.

Given this conclusion, Earle and Daltroy's discussion of staple finance, and the administrative technology associated with the middle Khabur facilities (cylinder seals and sealing, numerical tablets, clay tokens), offers us the following working hypothesis: the specialized activities of the middle Khabur sites were conducted for the benefit of the elite based at larger centers outside the middle Khabur, who collected agricultural surpluses to support their dependent personnel.

If we consider the grain processing and storage activities at Raqai to have been conducted in the service of an elite group, for example, the Raqai temple could be interpreted as evidence for a legitimizing staple collection, a well documented phenomenon elsewhere. (Schwartz, 1994, p. 28)

A further argument in favor of the association of the middle Khabur complex with the polities elsewhere is the dense settlement of the area in the third millennium. Sites were observed in a surface survey, and Ninevite V period occupation has been confirmed on at least ten of the twelve excavated third

millennium sites. Available evidence indicates that the settlement at Tell Raqai and associated specialized sites along the middle Khabur were founded in the early to middle Ninevite V period.

These data seem to indicate a mass settlement or even colonization of the region in the third millennium, perhaps under auspices of developing political units in adjacent regions. (Schwartz, 1994, p. 29)



Perhaps also analogous is the recently discovered system of outposts dating to the early third millennium B.C. in the Hamrin region of central Iraq (Tell Razuk, Tell Gubba, Tell Madhkur, and others), which is roughly contemporary with the middle Khabur system and is also composed of a set of small specialized communities in a marginal area probably associated with a complex polity elsewhere.

These sites include large circular buildings with vaulted architecture curiously reminiscent of the Raqai rounded building. The Hamrin sites can be interpreted as military outposts of city states in the lower Diyala, such as Eshnunna, whereas a review by Trümpelmann maintains that the Gubba VII round building was used primarily for grain storage. (Schwartz, 1994, p. 31)

The extensive loam plains of the northern Jezira provide an excellent example of a three-tiered settlement hierarchy. Here there is a pre-existing pattern of dispersed smaller settlements developed into a ranked EBA hierarchy dominated by Tell Al Hawa. Detailed sampling at this site allowed David Tucker to delineate a total later third millennium occupied area of some 66 ha.

At distances of 9-12 km were secondary centers at Tell Samir (19 ha), Khraba Tibn (17 ha) and Abukula (10






ha), below which, occupying the base of the hierarchy, were satellites and other sites with areas of 1-5 ha.

Most sites of lowest rank were 3-5 km from their nearest centers, although several smaller sites of uncertain affiliation were recorded during the early third and early second millennia B.C. during the Ninevite V and Khabur periods.

A distinctive ring of satellite settlements developed around Tell Al Hawa. These were virtually extinguished during the maximum urbanization of the mid- to late-third millennium, perhaps as a result of the extension of Tell Al Hawa land use zones, when most farming was conducted from the center. (Wilkinson, 1994, pp. 487-488)



During the following Ninevite V period the development towards urbanization apparently did not progress much in centers such as Ninevite, Kirkuk and Erbil, where the most ancient periods have been almost obliterated by the continuity of settlement. They could well have already reached urban status during this period, as well as Tell Brak (which up to now shows levels of the Early Dynastic period) and some still unexplored centers in the area of Tell Afar, but it is also true that we have no clear evidence of the existence of any real urban center. This is particularly remarkable if we consider the phenomenon of urbanization as linked to the problem of the emergence of proto-statal, structures which had their centers in the cities, from which the cities exercised a control over the surrounding countryside by means of a complex administrative apparatus.

The Ninevite V period remarkably lacks monumental buildings, which should be present in any urban society. (Rova, 1988, p. 191) If this may be par-

tially due to the chances of discovery, the lack of written texts and the limited distribution of the cylinder seal as an administrative tool are even more remarkable, although the use of metal gradually increased and personal ornaments show a certain variety, the presence of specialized craftsmen was still very limited, and the stratification of wealth was not very developed as far as we can understand from burial goods and dwelling structures. (Rova, 1988, p. 192)

During the Ninevite V period, however, the model followed in the north seems to be still a pre-urban one.

The territory was most probably organized as a network of villages acknowledging the authority of leaders residing in the main centers, some of which controlled not only the surrounding countryside but also the main trading routes. Since we have no evidence that authority was exercised by religious or military leaders (neither monumental temples nor considerable fortified centers have been found) and as the only known public buildings are granaries and storerooms, the authority was mainly a civil one, based on the control of agricultural production and of trade.

Although even at some sites of very small size like Tell Raqai and Tell Atij, a few valuable objects (metal seals, beads) have been found, no accumulation of wealth is attested anywhere, which points, moreover, to a rather uncentralized society. The Ninevite V settlement gives one the impression of widespread prosperity.

The reasons are to be looked for, first of all, in the agricultural nature of the territory. The whole area in the Ninevite V culture is included in the limit marked by the Isohyet, representing an average of 200 mm of annual rainfall.



The latter is considered the lowest limit for cereal dry farming in this area .

A glance at the map published by D. Oates in 1968, clearly shows that the limits of distribution of the Ninevite V pottery to the south and to the south-west exactly correspond to this Isohyet while to the north and to the east they are marked by the extremities, respectively of the eastern Taurus and Zagros mountains. The whole area is relatively homogenous in its resources, in spite of obvious local variation caused, for instance, by the presence of perennial watercourses and low lying hills. This topography must have been a considerably cohesive element in the development of the Ninevite V culture.

The hypothesis that the Ninevite V economy was essentially agricultural is further confirmed by the presence at several sites of rather complex structures for storing cereals, as well as of large numbers of querns and sickle blades.


As is still the case, cereal farming was certainly integrated with the breeding of smaller livestock, such as sheep and goats, the latter especially in the areas where the scanty rainfall made cereal farming more difficult, like the region south of Jebel Sinjar, which lies very near to the 200 mm Isohyet.



Animal husbandry may have in part been performed by people belonging to nomadic or seminomadic tribes, whose relationships with the inhabitants of the villages may have varied according to circumstances.

If these groups existed, however, they have not left any material evidence of their presence. As attested, the Ninevite culture, in fact, was totally sedentary. The agricultural exploitation of the mid-

dle Khabur area might have been conducted by polities in the upper Khabur, for example, in order to maximize the production of agricultural surplus. The upper Khabur triangle of tributary Wadis was the site of large third millennium urban centers, such as Tell Mozan, Tell Brak, and Tell Leilan, with Tell Chuera located to the west of the triangle.

All of these centers were occupied to some extent in Ninevite V times and presumably underwent expansion and, at least in some cases, circumvallation toward the middle of the third millennium. (Weiss, 1990, pp. 193-218) These communities, most likely the administrative centers of developing advanced chiefdoms of early states, are the closest to large centers to the middle Khabur settlements and appropriate candidates for the sites associated with that complex. It is difficult to explain, however, why the centers of the rainfall farming plains of the upper Khabur would have exploited the marginal agricultural land of the middle Khabur, where irrigation was required, when there would have been ample rain-fed fields in the area. One possible explanation is political circumscription: the expansion of a polity located in the southern part of the upper Khabur may have been impeded by competing powers in the north, leaving only the marginal lands of the middle Khabur specialized sites, founded in early to middle Ninevite V times (=Leilan III A or III B), in operation well before the urbanization and circumvallation of the best dated Khabur center, Tell Leilan, at the end of the Ninevite period (=Leilan III D). (Schwartz, 1994, p. 29) Tell Leilan is one of the three large third millennium cities on the Habur plain. These cities occupied 75 to 100 hectares at maximum





size and were dominated by 15 hectares, Tell Leilan became a major center in the mid-third millennium B.C. and the political capital of the region in the early second millennium B.C.

From the first settlement in the sixth millennium B.C. until the 26th century B.C., Tell Leilan was a small agricultural community, typical of disperse settlements in the rain-fed north Mesopotamian plains.

During the Tell Leilan III D period (2600 to 2400 B.C.), settlement patterns on the Habur plain and the Assyrian steppe were radically altered with the sudden emergence of an indigenous state level society, as seen in the large planned city at Tell Leilan and the reorganization of settlements across the region. The settlement at Tell Leilan expanded more than six-fold within 2000 years, the city grew from a 15-hectare acropolis-based settlement, to 100 hectares consisting of the Tell Leilan lower town, and extended settlements to the west and the east. Excavations on the Tell Leilan acropolis reveal that the simple village economy was based on central collection and storage, and redistribution.

In an area previously occupied by small scale domestic architecture, a block of rectangular storerooms (larger than 200 m) was constructed.

The receipt and distribution of stores was in the hands of a central administration, as reflected in 188 broken door and jar sealings of clay retrieved within the store rooms.

The cylinder scale impressions on the sealings are local Subarian imitations of the Early Dynastic II-III. A iconography of banquet scenes of contemporary southern Mesopotamia.

These suggest that northern states emulated southern administrative iconography to legitimize nascent state administrative and redistributive power.


This north-south cultural contact followed a 300-year period of estrangement from each other. The reasons for the period of estrangement and the sudden reestablishment of contact remain to be determined. The centrally administered urban economic and mixed land use strategies that developed in period III D may have presented adaptive advantages by facilitating maximum agricultural production under increased variability of rainfall.

The sudden growth of Tell Leilan, Tell Mozan, and Tell Brak, each 75 to 100 hectares, transformed the Habur plains into an urban landscape dominated by three equidistant centers with approximately equivalent territory for each center.

A three-tier or four-tier hierarchy of settlement optimized agroproduction and transport in the Tell Leilan region. These changes in settlement and political organization at Tell Leilan were part of the region-wide process of state formation and urbanization. Centers such as Tell Mozan, Tell Leilan, Tell Al Hawa, Ninua, and Tell Taya developed 50 to 80 km apart, at locations where rainfall and soil fertility were most favorable.

In the south, summer was also transformed simultaneously by interaction with Subir.

The first Sumerian palace appeared at this time, in the Late Dynastic II to Early Dynastic III A periods, in at least seven major cities. The transition from temple to secular rule marked radical realignment of internal political structures, and was perhaps in part a response to reductions in the water flow of the Euphrates.



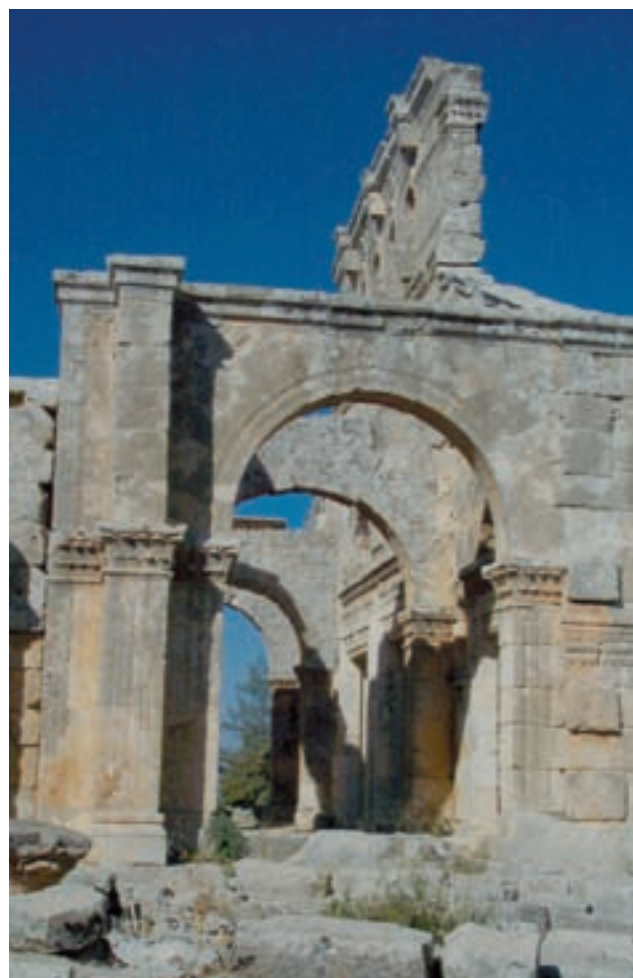
The model for this transition may have derived from Sumerian contact with Subir. (Weiss, 1993, p. 998). The consolidation of a complex state administration in the cities of Subir is marked at Tell Leilan during the II A period (2400 to 2300 B.C.) by the construction of a 2-meter wide defensive wall around the Tell Leilan acropolis, its storerooms and administrative building, and by the appearance of numerical notations based on circles and vertical lines upon the rims of large cereal storage vessels.

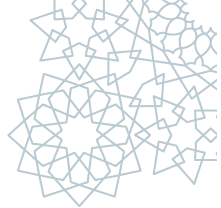


State organizational change in this period is also documented by the retirement of fine craft incising on ceramics, which is labour intensive, and the first appearance of mass-produced ceramics. Horse, mule or large onager are documented in the contemporary lower town south street. These animals were probably used for wheel drawn transport of the cereal harvest.

During this period the military power of the Subarian countryside was apparently united and could have joined forces with states in south-western Iran (Elam) and the central Euphrates region (Mari) in attacking Sumer, which was dominated by one city, Lagash.

From approximately 2300 to 2200 B.C. period II B, southern Mesopotamia was united under the rule of Sargon of Akkad and his dynastic successors.

Akkadian rule imperialized irrigation based agricultural production in southern Mesopotamia and expanded into adjacent rain-fed agricultural regions where production could also undergo intensification. Documents and monuments retrieved from Tell Brak indicate that the Akkadians controlled Tell Leilan and Tell Mozan through their imperial emplacement at Tell Brak. (Weiss, 1993, p. 998)





Some features of Akkadian control have been identified at Tell Leilan during period II B:

1. Population redistribution from sites apparently centered within Tell Leilan seems to have been directed at removing local second centers and the elite from the administration of production. Villages appear to have been maintained in place to sustain imperialized production. A similar pattern of settlement during the Akkadian period is documented at Tell Al-Hawa, 80 km east of Tell Leilan. (Wilkinson, 1990, p. 56)

2. Stacked kiln wasters from period II B document production of standard size 0,33 and 1,5 liter vessels. These vessels and their equivalent non-wasting rims and base shards only occur during this period at Tell Leilan. These observations suggest that they were used to distribute Akkadian standardized worker rations of barley and oil, which have been documented epigraphically. (Weiss, 1992, p. 16)

3. A city wall was constructed for the first time. The rock-hard calcitic virgin soil was excavated from depths of 0.5 to 1.5 meters. Then two concentric walls of mud brick, or casemate, were set into these excavations.


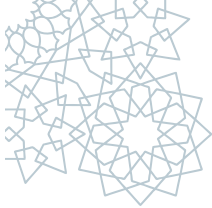
The inner and outer walls were 8 meters thick, a middle wall, perhaps a walkway between the two, was 1m wide. On the northern side of the city, where a natural depression and a rise afforded protection, an earthen rampart was constructed by excavating a 10m wide by 10m deep ditch and then mounding the excavated virgin soil. A city wall was also constructed at Nineveh, the regional center on the Tigris river, 150 km southeast of Tell Leilan, where a son of Sargon established Akkadian control. (Weiss, 1993, p. 999).

4. Apart from the Akkadian reorganization of production, and in response to the continuing reduction in water discharge and siltation that began in period III B, water courses were stabilized by channelization and repeated clearing.

These constructions may also reflect Akkadian expertise in canal management developed in southern Mesopotamia. In trench D this managed water is recorded within a 4m sequence of repeated entrenchment into calcic virgin soil, embankments of large basalt blocks, and masses of water-borne silt and pebbles that were cleared from the channel on the western side of Tell Leilan.


Occupations during the late Akkadian period at Tell Leilan, Tell Brak and other dry farming sites, as well as late Akkadian period texts from dry farming sites and sites in Sumer, document a thriving imperial economy sustaining long distance trade and construction of monumental building and massive agricultural projects. (Liverani, 1993, pp. 138-139)

The imperialism of this period created the ideology of economic ethnic, and regional unification that legitimized all subsequent Babylonian and Assyrian imperial structures. At approximately 2200 B.C., the Akkadian dominated period II B occupations of Tell Leilan and Tell Brak were suddenly abandoned. The subsequent remnant occupation at Tell Brak was limited to one-half of the area formerly occupied. (Mallowan, 1947, p. 22) At Tell Leilan, an occupational hiatus extending until reoccupation, historically dated at the beginning of period I (1990 to 1728 B.C.) has been documented at each sounding in the site.



Similar abandonments are evident at almost all excavated sites of this period across the Habur and Assyrian plains, including the excavated sites of Chagar Bazar, Arbid, Germayir, Mohammed Diyab, Tell Bderi, Kash Kashuk, Abu Hgeira 1, Melebiya, Tell Taya, and Tepe Gawra.

Surface surveys across the Habur plains have failed to identify ceramic assemblages for this period. Surface reconnaissance of Tell Al Hawa, east of Tell Leilan, also indicates an occupational hiatus. To the west, in the adjacent Balikh drainage, Tell Chuera and Jidle were abandoned, the Hammam el Turkmans occupation was reduced, site occupation in the northern Balikh drainage was reduced by 36% and settlements along the Euphrates north of Birecik were reduced or abandoned.



The extant epigraphic documentation from southern Mesopotamia suggests that only remnant occupations remained at Urkish, Tell Mozan and Nineveh. We label this abandonment period "Habur hiatus". (Weiss, 1993, p. 999)

## CONCLUSIONS

Finally, the upper Jezira is one of the most favorable parts of the fertile crescent suitable for settlement. The level topography, the deep, brown fertile soils. The high annual rainfall, the perennial streams and shallow ground water induced den settlement patterns as early as prehistoric times.


Particularly the broad syncline between the Abd-Al-Aziz-Sinjar and Tur Abdin-Karachok Dag anticlines have been the scene of dense occupation for several millennia. In the area south of the Abd Al-Aziz-Sinjar hills, permanent settlement was mainly restricted to the Habur valley.



Isolated basins with water resources have revealed occupation in several periods, with a lack of permanent settlement systems in the third and second millennium B.C. (Pfalzner, 1985, pp. 178-184)

In this fertile rain-fed zone, with a high dry farming potential, a multitude of city states seem to have flourished since the fourth millennium B.C. Local chieftains may have dominated their weaker neighbours which resulted in the rise of capital cities. However, such concentration of political power and consequent shift of population toward these centers may have been self-defeating, since the harvesting capacity of land under traditional dry-farming agriculture was rather limited.

The land may have become overgrazed and soils gradually depleted when cropping density becomes too high. The middle Habur valley south of Hasseke belongs to the zone which allows dry farming. The arable stretches along the Habur river, however, are situated on the southern margin of the fertile rain-fed upper Jezira with the lowest average annual rainfall.

Dry farming agriculture, the economic basis of the network of city states in the third millennium B.C. is possible with the annual rainfall of more than 250mm. At present the 200 mm Isohiyet cuts the valley at Shadadah south of the edge of the Abd-Al-Aziz-Sinjar anticline. The flat topography, fertile loamy soils and abundant ground water within reach of ancient technology also made settlement in this marginal valley possible. (Curvers, 1986, pp. 1-29) The available evidence from the middle Habur therefore indicates the presence of small specialized sites for the collection, processing, and distribution of agricultural products in the late Ninevite V period large scale centrally





placed storage complexes in association with a sophisticated administrative technology are generally indicative of the accumulation of resources by elite groups and hence signify the presence of a relatively high level of political complexity. The “staple finance” economics of complex chiefdoms and states are often characterized by such storage centers.

It would appear that the specialized activities performed in the middle Habur sites were being conducted for the benefit of the elite based in larger centers outside the middle Habur valley. The small size of contemporary settlement in the valley and the apparent low population of the area relative to the scale of the specialized complexes imply a destination outside the valley for the goods produced.

An exploitation of the middle Habur area by complex chiefdoms or states in adjoining areas may have been carried out in order to acquire a broader base for the production of agricultural surplus. The maintenance of complex political systems with dependant personnel and building projects to support requires an effective agricultural base, and these ever-increasing needs may demand intensification of agricultural production.

Such intensification could be achieved by maximizing yields per hectare or as is suggested in this case, by expanding territorial holdings.

But where would the associated polities and their centers have been located? To the north were such sites as Brak, Leilan, and Mozan in the upper Habur rain fall farming zones. Leilan, we are now aware, first achieved its 90 ha extent in the course of the Leilan III D period, roughly contemporary with Raqai 3.

It is difficult to explain, however, why the centers of the highly productive rain-


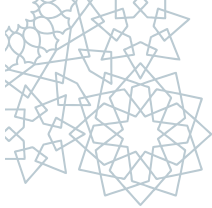
fall farming plains of the upper Habur would utilize the marginal agricultural land of the middle Habur valley, where labor intensive irrigation was required, when extensive rain-fed fields were available locally.

Vagaries in political boundaries between chiefdoms or states may be relevant: a southern polity in the upper Habur could have been circumscribed by other entities to the north, having only the south toward which to expand. Alternatively one might suggest that the middle Habur sites were associated with a large southern center, such as Mari. Thus far material culture connections between the middle Habur and Mari appear to have been no closer than those between the middle Habur and upper Habur triangle.

Another possible interpretation of the evidence would postulate Mari as a consumer of the products, the upper Habur plains as the cultivator, and the middle Habur complex as an intermediary storage area, port of trade, or gateway community. The 1983 survey of the salvage area presented data that are also important to our understanding of the developments of the middle Habur in the third millennium.

These survey results showed a drastic increase in the number of settlements in the region in the third millennium. It may be useful to view the mass settlement of the middle Habur in the third millennium with reference to the a previously mentioned thesis of the development of political complexity in neighboring areas and the resultant need to intensify agricultural production.

If this interpretation is correct and the specialized sites of the middle Habur were founded under the auspices of large centers elsewhere, the earliest occupations at



these sites should have close material culture connections to their associated larger centers. At present, data are not available to test this hypothesis, since early occupations have been sampled only in very limited exposures at Raqai, Atij, and Melebiya, all of which were founded on virgin soil in the Ninevite V period. These samples are too small to allow convincing comparisons to potential associated centers elsewhere. Likewise, precise data for these earliest Ninevite V occupations within the Ninevite V sequence cannot be established, although it is affirmed that they date to some point prior to the latest Ninevite V pottery. The excavations in the middle Habur sites are now yielding new data on the nature of rural hinterlands and their relationship to the urban sphere in early northern Mesopotamian urban systems.

The middle Habur sites attest to the existence of considerable economic specialization at rural sites and the integration of those sites into what appear to be urban-based networks, and evidence of a regional economic administration is also present in the sealings and tablets. (Schwartz, 1994, pp. 3-6)

The extent of economic specialization at rural sites in early urban Mesopotamia and the role of the hinterland in the development and maintenance of early urban societies are subjects that require much further investigation. It is worth noting, certainly, that the few excavations that have systematically investigated rural sites of early Mesopotamia complex societies have repeatedly encountered settlements that diverged considerably from the expected norm of an undifferentiated, self-sufficient agrarian community.

Also, economic specialization is considered a fundamental attribute of complex societies, although the reasons for this association should not be considered self-evident. The Red fields model of homogeneous peasant villages considers economic specialization to be uncharacteristic of rural settlements. The potential significance of village craft specialization in this community is that artisans and stores became so abundant that villagers had little need to visit larger towns for goods and services.

These rural craftsmen primarily manufactured basic goods intended for rural consumers, again with the result that peasants were only minimally dependant on the cities for manufactured goods. (Schwartz, 1994, pp. 2-6)

Finally the settlement and urban civilization in the early Jezira can be understood as a response to its location on the periphery of an urban economy whose center was to be found further south. The apparently sudden settlement on the middle Habur valley at this time may be related to the establishment of urban civilization in northern Mesopotamia.

However, it should be kept in mind that recent studies conducted on the edge of the valley indicate a possible continual occupation of the region by semi-nomadic populations. (Hole, 1991, pp. 17-22)

Thus, only the completion of the analysis of archaeological data will determine whether the settlement of this valley can be entirely attributed to a local urban revolution or is better considered a southern phenomenon explained by an economic trade pattern involving the valley as a specialized supplier of agricultural products. ●