

THE URBAN REVOLUTION

INTRODUCTION

The emergence of the first urban centers was one of the most obvious consequences of a socioeconomic transformation whose first manifestations took place in the center and east of present-day Turkey and the western Iranian area at the end of the 5th millennium BC, later developing in the middle of the 4th millennium BC in Mesopotamia.

Various theories have tried to explain the reasons and processes that caused some small Neolithic villages to become properly urban centers, as well as when they would have occurred. Other issues under study are the preconditions that must have existed to trigger these changes, why it originated in certain geographical areas and what is understood as an urban center.

This article will present some of the most relevant hypotheses about the origin and development of the urban phenomenon, its relationship with the first state manifestations and its main consequences in the Mesopotamian area.

1. WHAT IS A CITY?

In 1950, G. Childe expressed the difficulties to propose an adequate definition of the term “city” (1950: 3). Childe was the creator of the concept of “urban revolution” which, in Liverani's opinion, understood it as a logical consequence of the primary accumulation of capital (1998: 6). On the other hand, authors such as Mumford think that the city was the result of the need for human beings to protect themselves from an environment not yet well understood and controlled (1966: 11).

For Liverani, through the term “revolution”, Childe referred to some changes that, over the centuries, profoundly modified the socioeconomic structures of the Neolithic communities, although currently the term “transition” is preferred (1998: 2 -3). Childe approached the study of Prehistory from the postulates of Marxist historiography¹,

¹ The historical vision of Marxism left its mark on the historiography of the 20th century, being especially evident since the Russian Revolution, although its true impact emerged after the Second World War. According to Marxist historiography, the evolution of human beings occurred throughout various stages of progress, defined by the relationships between those who take an active part in the various productive processes. Each historical stage generates a series of internal contradictions that arise as a

giving his theories a more social than technological approach that, according to Fernández and Hernando, could only be applied to the Ancient Near East (2011: 41).

According to Childe, cities arose, in addition to the accumulation of capital, due to commercial needs derived from obtaining large surpluses, and the evolution to an urban nucleus was proposed through the formulation of ten criteria in which the appearance of sociopolitical institutions such as the monarchy and bureaucracy played an essential role. Although Childe never referred to the formation of state structures, understood as political changes that appeared as a result of the "urban revolution", starting in the 1970s, evolutionary anthropologists such as Spencer and Redmond began to use it in that sense.

From a perspective applicable to all regions of the world, the criteria enunciated by Childe to explain the development of the urban phenomenon would be closely related to the first manifestations of state structures. For Beltrán, Childe's criteria do not specify or mention² the urban principles present at the time of the configuration of the first urban societies, and that is why they cannot be applied to all places (2013: 263).

In a similar way, and referring to Mesopotamia, Yoffe emphasizes the difficulty in establishing the causes and consequences of these changes, mainly due to the academic tendency to homogenize different historical stages (1995: 526). Adams (1975) believes that the birth of cities was due to several factors, as well as possible social innovations or an increase in the production of goods, as well as the importance of geographical location and the environment (Fernández and Hernando, 2011: 141).

result of the exploitation of some social classes, which in the long term would provoke a new mode of production.

² These criteria bring together a series of factors of common application to all the places where the urban phenomenon appeared and developed. A city, as it is currently conceived, is formed according to the following elements: a demographic increase that would cause greater pressure on the environment and the need for technological innovations that allow an increase in food production and greater environmental exploitation ; the development of trade and the opening of new commercial routes, and finally, the emergence of individuals not engaged in productive activities (for example merchants, officials, artisans ...). All of them make up a hierarchically structured society.

2. ORIGIN AND DEVELOPMENT OF THE URBAN PHENOMENON IN MESOPOTAMIA

Cowgill has stated that one of the criticisms that can be made of the majority of published works on this issue is that none of them attempt to offer a conceptual definition of terms such as "city", "urban society" or "urbanization", assuming that all readers know its meaning, when it is not. Cowgill conceives the city as a permanent settlement in which a society occupies an environment in which it carries out different activities, that has an identity and attitude different from other human beings who inhabit and perform their tasks outside the urban nucleus, those called the "rural" (2004: 526).

Focusing on the Mesopotamian realm, and more specifically on the lower reaches of the Tigris and Euphrates rivers, Matthews argues that the first phases that led to the establishment of urban life took place in the middle of the 4th millennium BC, during the Uruk period³, characterized by complex and significant social changes that can be called the "birth of civilization", confirmed by archaeological evidence (2005: 433).

As Algaze⁴ indicates, during the IV millennium BC. that area of Mesopotamia enjoyed exceptional environmental conditions that made these transformations possible (2001: 202). Three factors played an essential role in the socio-economic and political development of the Middle East at that time, which are:

- a climate characterized by warm winters and cool summers, more humid than in later historical periods.
- the behavior of the Tigris and the Euphrates, which due to their proximity in various places gave rise to a single river system.

³ This period has its antecedents in the Ubaid period (6500-3800 BC), a transitional stage from the final Neolithic to the beginning of the urbanization process. At the beginning of the 5th millennium BC It is known as Ubaid I or Eridu, lasting until the 4th millennium BC. The Uruk period ran from 3500-3100 BC. and was succeeded by the Djemdet Nasr period (3100-3000 BC).

⁴ Antequera (2005) considers that the environmental changes that occurred in that region between the V and IV millennium BC. Provoked considerable desiccation, the decrease in sea level and less rainfall, causing less flow in the Tigris and Euphrates. Due to this, a region that had been swampy became suitable for the establishment of human groups.

- the influence of the Persian Gulf⁵ on the fluvial dynamics of the aforementioned rivers.

In 1966, Wittfogel proposed as the origin of the urban phenomenon the development and use of large irrigation systems that resulted in the appearance of the first state structures. Other authors consider that it was due to conflicts caused by the population increase and the demands derived from it (Fernández and Hernando, 2001: 141).

Nissen (2005) considers that cities appeared as a result of several decisions taken by a political elite that favored the construction of artificial irrigation systems, much needed in the Mesopotamian area. In turn, it led to the emergence of state structures and a hierarchical urban society led by an elite that organized the construction of various hydraulic works. Nissen's approach has suggested that Childe's criteria should be revised and reformulated. Wittfogel had already exposed such a possibility by showing that Childe had not made any reference to the presence of these hydraulic infrastructures.

Liverani thinks that technological progress in that region of Mesopotamia was due to its great agricultural potential, which made it possible to obtain large surpluses that were used by certain individuals not engaged in productive activities for other purposes such as financing new irrigation systems or the construction of temples, which served as centers from which the distribution of surpluses among the community was controlled (1998: 7).

As Matthews has expressed, the ability of these elites to establish mechanisms for the distribution of wealth through strong moral codes, became progressively more complex thanks to ideological principles based on hierarchy and control of the means of production, which made it possible for these elites to become royal dynasties around 2900 BC (2005: 438). Another element for the development of the urban phenomenon⁶

⁵ Due to the variation in sea level, a greater number of sediments surfaced, producing an increase in the salinity of the land, which could be solved through irrigation systems (Muñoz, 2014: 126).

⁶ For Marcus and Sabloff, the size of a population center does not determine its status as a city. To be considered as such, it must have a series of minimum infrastructures and services, as well as an internal diversity that distinguishes it from other smaller nuclei such as villages or towns (2008: 20). Cowgill argues that the size and complexity of sociopolitical structures are not determining factors for considering a certain nucleus as a city, although they are useful as a reference (2004: 527).

was the increase in population. Among its most obvious consequences, it is worth mentioning a progressive and greater hierarchy of society and the emergence of an official body dedicated to administrative tasks, as well as individuals specialized in specific activities. Lower Mesopotamia was not characterized by its wealth of resources such as mineral, stone or wood elements, which led to the development of long-distance trade, which coexisted with local trade, destined for agricultural products and handicrafts. The palaces⁷ performed similar functions to the temples, establishing a commercial network of merchants, artisans and priests located in urban centers to be in charge of the transformation, exchange and administration of goods and products, as well as offering other services to society. This organization required a greater number of officials who, in order to maximize their work, would end up originating writing systems around 3200 BC.

The population dedicated to food production spread throughout the territory to continue with their tasks. According to Redfield, it would be convenient to definitively replace the dichotomy between urban and rural by another called “continuous popular-urban” that highlights the interdependence between the city and the rural environment (Marcus and Sabloff, 2008: 23). For Mumford, this dichotomy would be the receptacle of all the information that circulates in a society, which serves as a differentiating element to consider a population nucleus as a city (Antequera, 2005).

The archaeological studies carried out in this area of Mesopotamia have confirmed the presence of three different types of urban nucleus from which various social transformations took place. Those population centres are:

- the urban center.
- intermediate centers where semi-decentralized administrative bodies were established.
- small settlements dedicated to agricultural activities.

⁷ Until the mid-20th century, the temple was considered to be the only place from which authority emanated, but today it is clear that power was shared by both temples and palaces (Schoep, 2010: 227).

Yoffe considers that the appearance of paid work occurred when the temples began to reward those individuals who carried out certain tasks continuously and exclusively for them, rewarding them with the usufruct of lots of land owned by the temples (1995: 298). This right of usufruct, as well as the position associated with the functions performed by those subjects in the temples, would become hereditary, producing a tendency to concentrate in a few hands, and consequently, an increase in their power (Muñoz, 2014: 128).

Regarding the structure of these urban centers, Cowgill thinks that they must have been made up of three different sectors (2004: 538):

- one where there was the political authority that could be located even outside the cities themselves.
- another for lower-ranking authorities and middle and upper layers of society (priests, wealthy merchants, governors, local nobility ...).
- a third for the rest of society, who due to their position were not considered part of the elite.

Eiroa (2009) considers it very important to distinguish between an urbanism conceived as a way of life from another essentially physical, understanding the latter as the material expression of an urban way of life. According to this author, cities arose due to factors such as demographic growth, technical innovations that allowed a better use of the environment, the development of trade and the opening of new routes, as well as individuals specialized in activities other than food production. In his opinion, all these elements caused a need for a defined and hierarchical social structure (Fernández and Hernando, 2011:142).

On the question of whether Uruk came to exercise its hegemony as a “center”, Algaze (1993) believes that the so-called “Uruk colonies” of northern Syria constituted its “periphery”. All this was generated by a "global" system, necessary for the existence of a preponderant power in southern Mesopotamia. As Pérez points out, Algaze does not rule out the existence of several centers of power that coexisted in the same geographical area and that established a commercial flow between them that will lead to

the creation of the aforementioned colonies, in which Uruk's influence was felt (2007: 82-84).

3. CITIES AND THEIR CONSEQUENCES

The urban nuclei were progressively acquiring greater complexity, which suggests that the criteria exposed by Childe should be reconsidered, as well as the consequences that arose due to the development of the urban phenomenon. The confluence of a series of environmental changes and the incidence of various anthropogenic processes throughout the 4th millennium BC, caused a substantial alteration of the Mesopotamian region and its population, such as the separation of the Tigris and Euphrates courses after the period Uruk (Algaze, 2001: 203) or the adoption of certain decisions by the central and regional elites (Cowgill, 2004: 538).

According to Pérez, society demanded new forms of expression as a result of the changes, which caused, among other manifestations, a grandeur of architectural constructions. At the same time, the territories began to be precisely delimited, generating clashes of varying magnitude, as shown by some cylinder seals from the end of the Uruk period. Other possible triggers of conflicts were the desire to gain effective control of irrigation systems, or the coexistence of several independent political entities in the same geographic space (2007: 78). These rivalries led to the construction of enclosures and defensive systems, and the emergence of powerful leaders clothed with undeniable authority and the formation of the first armies. For Antequera (2005), the struggle for preponderance led to the emergence of privileged social sectors with exclusive prerogatives, in addition to the implementation of systems for the organization and storage of information. A good example is the tablets recovered from the remains of the temple of Eanna in Uruk, dated around 3500 BC.

To establish and guarantee the sustainability of urban settlements, the presence of some individuals specialized in mercantile matters was essential, and places such as markets served to connect the cities with the rural environment. It is also worth emphasizing the impact that human action had on the Mesopotamian environment. Ponting argues that agricultural exploitation caused the degradation of existing ecosystems, which were progressively replaced by another created by humans to satisfy their interests and needs. These alterations caused the land to be more exposed to inclement weather, which

caused its degradation by erosive processes that modified the recycling of nutrients (1992: 33-34).

Antequera believes that to maintain a greater number of individuals dedicated to organizational and defensive work, greater agricultural production was required to guarantee their livelihood, which caused an increase in the irrigation of the soils and their salinity, making cultivation unviable. Due to this, certain plant species were discarded and barley was planted as it was better adapted to the new soil conditions. Despite this, barley needed more nutrients for its proper growth and its yield was not as abundant as other cereals. The ability of a society to supply itself is essential for the consolidation and survival of an urban nucleus, and if it cannot guarantee a sufficient flow of resources, it can lead to its own destruction (2005).

CONCLUSION

The first author to offer a definition of “urban society” was Childe, although it must be taken into consideration that it cannot be applied to other urbanization processes that have arisen in other geographical areas. However, its classification brings together some factors common to all of them, regardless of geographic area, such as environmental variations and food production systems inherited from the Neolithic Revolution, based on the exploitation of various agricultural resources that developed in various alluvial plains of our planet⁸.

It was not a homogeneous process, since it presents significant geographical and chronological differences. For the most part, the population continued to be basically rural, spreading throughout the territory in small nuclei dedicated to agricultural activities, while those of an economic nature took place within the cities. The evidence seems to suggest that the origin of urban centers was in sedentary communities that had a sufficiently solid and developed economic base that allowed the progressive appearance of certain specialized activities, as well as a hierarchical authority and social

⁸ Some of the most important civilizations in history arose and developed in them, such as in the Nile basin, in the Yellow River (China) and in Mesopotamia.

structure where an elite took control of the means of production (Fernández and Hernando, 2011: 141).

In the Mesopotamian area, the presence of the Tigris and the Euphrates was essential for the sedentary lifestyle of human groups who, through the use of their waters and the construction of various hydraulic infrastructures, they achieved large food productions from which they obtained significant surpluses. All this entailed a division of labor, the emergence of commerce and a growing urban and architectural development promoted by the elites. From a social point of view, there was a gradual hierarchy of society that resulted in greater inequality among its members, but also the development of other areas of daily life due to the emergence of new activities and manifestations such as writing or astronomy.

All these advances were likely to provoke conflicts between the different political entities existing in Mesopotamia, as well as significant environmental degradation caused by its exploitation, which had consequences such as the gradual infertility of their farmlands. It is at these moments in the history of Humanity when “civilization” appears, which in later stages was configured in greater detail.

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