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Understanding the Past

Papers offered to Stefan K. Kozłowski

edited by
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Preface

In his Bίος καὶ γνώμαι τῶν ἐν φιλοσοφίᾳ εὑρηκότων καὶ καταγράφων (5,1,18) Diogenes Laertius reported Aristotle as saying: "The roots of knowledge are bitter, but the fruit sweet." It is as if he had in mind the scholarly life of our friend and associate, Stefan Karol Kozlowski. "Bitter" were the difficult years of his study at university in the 1950s and 1960s, when despite the difficulties he shaped his own, unique, scientific profile. But "sweet" the fruits of that effort - now when he looks back at a lifetime of achievement, the results of his work, his many students, now outstanding scholars in their own right...

From the start he had two scholarly fascinations - the European Mesolithic and the Neolithic in the Near East. Both are reflected in countless studies, books and articles. Yet it should be kept in mind that many of his general works on prehistory are now considered a foundation of our knowledge of the prehistory of Poland. They are not only prominent and innovative as works of science, but they are an inexhaustible and still informative source for the younger generations of archaeologists. It will not be too bold to say that somewhere along the way Stefan Karol Kozlowski established his own scientific school.

Two aspects of this school merit special emphasis. On the one hand, it is an in-depth and well-conceived analysis of artifacts and cultural change, on the other an open and clear presentation of results which are intelligible not only to a narrow group of dedicated specialists, but also to archaeologists of other specialities. Iron logic, clear conclusions, well formulated research objectives - this is what makes his works so popular and current despite passing time and new discoveries.

Academic lecturing has always occupied a special space in his life. The number of students as well as the number of listeners at his lectures, always interesting and intriguing, an eye for new talent, a fatherly - severe but understanding - attitude to his students have come to fruit in the scholarly works of a new generation of researchers and in grateful memory of their Teacher and Master.

Last but not least, there is his deep involvement in administration, as deputy dean of the Faculty of History of the University of Warsaw, deputy director of the University's Institute of Archaeology, since 1976 president of the Mesolithic Commission of the International Union of Pre- and Protohistori-
A Persian Response. The Organization of Defence in Mesopotamia under the Parthians and Sasanians

The main aim of this text is an attempt to analyze how the border zone between both supreme powers of Persia and Rome was functioning, particularly taking into consideration the Persian point of view. The history of conflicts between Persia and Rome is commonly known, both from ancient sources, and from modern scholars’ analysis, so I decided to omit the historical background, but political events and historical process should be kept in mind.

According to the historical sources and testimonies we have in our disposal some information about important cities or towns in northern Mesopotamia which were playing crucial role in every conflict in that region. Edessa, Nisibis, Dara, and Singara with no doubt were belonging to the most important cities in the region.

The cities were the most important and strategic points in the region, eastwards from the Khabur River, and for a long time were in any case of invasion main defensive points. Northern Mesopotamia was a terrain without small and fortified towns or even posts controlled and protected main routes along the border zone. In Ammianus Marcellinus testimony (Rerum gestarum libri), for instance, who described Julian’s expedition against Persians in 362, we can find several fortified towns and fortresses: Anatha (XXIV 1.6; 1.12), Tialta (Thilaita) (XXIV 2.1), Achasia (XXIV 2.2), Diakria (Diacia) (XXIV 2.3), Ozogardana, the city where a tribune of Trajan was erected (XXIV 2.3), Praisabora – a fortified city under the command of Mamensydes (XXIV 2, 2.9, 3.3), Maozamalcha, which probably was located on suburbs of Ctesiphon (XXIV 4, 4.2, XXV 8.18), Hukumbra (Hucumbra) – unfortified land property where Julian’s army had a rest for two days (XXV 1.4), Sumer – a fortification on the Tigris (XXV 6.4), Dura – a city on the Tigris (XXV 6.9), and fortified city of Ur with many storages of food supplies (XXV 8.7). These cities and other sites were besieged and most of them were finally captured by Roman troops. The main target in that war, similar to the earlier and later conflicts with Persia, was still Ctesiphon.

Since the capital city of Mesopotamia was very often threatened by enemies’ attacks, a question arises how the city was protected and how the defensive system of Persian Mesopotamia was organized. If such a system here was functioning, a question is legitimate: what part of Mesopotamia could be effectively protected?

Taking into consideration that our knowledge on Mesopotamia in Parthian and Sasanian periods is relatively inadequate, the study on the settlement density, and particularly on development of defensive systems is rather difficult, but in my opinion not impossible. How problematic is searching for such evidence, clearly shows scanty information we have in our disposal to understand properly the Ctesiphon fortifications (Ruther, 1929; Fiey, 1967; Kröger, 1982). Moreover, when analyzing the Ctesiphon fortifications, it should not be forgotten that in Ctesiphon the area was grounded by not only one city. Ctesiphon was a part of much bigger meropolis which later created one of the biggest agglomerations in the Middle East.

Consequently, other cities and suburbs belonged to that part of agglomeration. That huge urban structure was situated on both banks of the Tigris river, and included, besides Ctesiphon, Seleucia on the Tigris, Veh Ardashir (Koche), Port of Vologesia (Vologesocerta), Better Antioch grounded by Khorsow in ca. 540 A.D., or a small fortified settlement on Tell Dahab, which was situated south-east of Veh Ardashir – Ctesiphon-Koche (Schmidt, 1934; Kröger, 1982: 40–43). Certainly, some of the mentioned cities were grounded at different periods, but anyway they established a part of agglomeration. However, it cannot be forgotten that Ctesiphon was actually grounded two times. The city from the Parthian period was almost totally replaced by new Ctesiphon (Veh Ardashir) estab-
lished by Ardashir I about 230 A.D. (Kröger, 1988). The old Ctesiphon was located north of the new one. Recently, ruins of the Parthian city have been cut by course of the Tigris.

The agglomeration localization and its strategic and defensive significance need to be firstly discussed, because the area of Ctesiphon was probably the most important part of the Parthian and Sassanian Mesopotamia. The localization on the so called Baghdad isthmus was perfectly chosen. On the western bank of the Tigris since Seleucid period the position of Seleucia clearly indicates how Seleukos I well understood the strategic significance of the region (Hadley, 1978; Invernizzi, 1994). The area of the diabola was the.UndefOr dot in the Parthian period when Mithrydates I on the opposite side of the Tigris grounded Ctesiphon, according to the testimony of Strabo (16.1.16), Parthian troops could not enter the Greek city; consequently there was a need of a new city on the eastern bank of the river.

Moreover, such location made possible to control a relatively important road into the Jebel Hamrin direction running through the area of Diyala valley. The result of McAdams' survey clearly showed how densely the Diyala region was inhabited (McAdams, 1965: 61-68). Besides small villages, small and medium towns can be found, which indicates that the region was definitely a natural economic hinterland of Seleucia/Ctesiphon. Some of them for sure had their own defensive structures. It gives an assumption that along the Diyala River was located defensive system of cities which ran east of Ctesiphon, up to the hilly region of Jebel Hamrin. In other words, even if Seleucia on the western bank of the Tigris could be besieged, Diyala still remained under Persian control as far as Jebel Hamrin and the Zagros mountains. That gave a possibility of safe communication with central Persian territories situated behind the mountains. The whole Seleucia/Ctesiphon agglomeration controlled both sides of the Tigris but the isthmus, located nearby. The localization of Seleucia/Ctesiphon was the key in the Mesopotamian defensive strategy. A breaking through and capturing of so called Al-Madā'in (Ctesiphon/Seleucia) metropolis could open a way to the southern Mesopotamia. It seems to be seductive theory that a settlement network with some fortified towns could also be a part of the Mesopotamian defensive system. The core of the system was formed in the vicinity of Ctesiphon (McAdams, 1965: 61-83). (The cities or towns like Karastel which was identified with ancient Artemita, Abu Hal; large towns: Tell Amleh, Tell Al Dimi, Tell Umm al Tarish, Tell Jima, Tell Salama, Tulul Mi'd Muratali, Abu Suqa, Tulul Bawli, and several others unnamed known only under the nomenclature number 218, 301).

There were also small towns which also could have been protected by defensive walls (McAdams, 1965: 135-166). Here the following sites should be listed: Tulul Hamnoudi, Tell Quabla, Tulul al Jaffar, Tell Tayan, Tulul Darbasi, Tulul Wadidayah, Tulul Mi'd Mheaisin, 'Alaw Husaynian, Tell Abu Yugar, Medar, Lamele, Tell Seraij, Tulul Mi'd Salmak, Tell Mawailbi, Abu Yebisa, Tulul Mi'd Beayir, Tell al Hewashi, Tell Abu Dal'ai, Tell Thahab and Tell Abu Saybah.

Most of the numbered, especially small towns, were localized in the Ctesiphon hinterland, and for sure were a part of big economic structure supplying Ctesiphon. The towns protected the vicinity of the capital against direct and unexpected attack. Moreover, in case of a direct threat, but not a permanent siege, the city could be supplied directly from the east. That is why, from the strategic point of view, the most important were these cities and fortified towns which functioned in the middle course of the Diyala River. The towns such as Tell Saad, Tell Abu Idregh, Tell Ad-Idregh and Tell Sana (or Sana), Abu Jalal, and others were crucial, and protected Ctesiphon because they controlled roads between the Tigris and the Diyala River.

The only weak element of the southern Mesopotamian defense seems to be a region along the Euphrates. We have not got any evidence which could be helpful for better understanding the social, economic and strategic organization of that region. It seems to be justified, however, to propose some archaeological sites which could be elements of the Mesopotamian defensive strategy. According to Isidore of Charax (Schoff, 1914) our attention should be focused on the sites located south of Anata (Anatho), a fortified island on the Euphrates. He mentioned the following sites: Tilhabus – another island on the Euphrates, where a treasure of the Parthians was deposits, Iran (modern Bidjan island), Apollos (the city of Is) which probably could be identified with modern Hit. In Apollos were beautiful springs, similar as in Hit. Besides Apollos, a city named Beshechana is mentioned, where a temple dedicated to Atargatis was functioning. Then appeared a city Neapolis by the Euphrates, and Macepracta mentioned by Ammianus Marcellinus. Roman troops could recognize partly disintegrated ancient city of Macepracta city walls, where a large canal Naarralch was functioning, to run reaching up to Seleucia on the Tigris and Ctesiphon (Amm. Marc. XXV, 2, 6-8; moreover the Naarralch canal is mentioned by Ammianus Marcellinus later in XXVII, 6, 1-3) (Gawlikowski, 1976; 1979). The Naarralch canal had functioned several centuries before Roman invasions. During Roman campaigns against the Persian the strategic significance of the water route was perfectly understood by Roman troops using the canal for army and supply transportation. It reached up to the Tigris. Consequently the strategic localization of Ctesiphon could be strongly questioned, taking into consideration the possibility of easy access to the heart and keystone of the Mesopotamian defensive system. Here a question arises, why the Roman army was functioning as the capital city. The attacks leading via the Naarralch canal could reach the city easily.

Because the distance between Neapolis and Seleucia was only 9 schoeni (around 50 km), possibly fortified city of Neapolis by the Euphrates needed to be localized near so called Baghdad isthmus. The localization of the Neapolis was probably so important because the city controlled a strategic way along the canal leading to the heart of central Mesopotamia. The Neapolis was located between Dijalma and Seleucia. The distance given by Isidore of Charax is equal to 171 schoeni (940.5 km) (Gawlikowski, 1987, 1988). If the assumption that Neapolis by the Euphrates was the last defensive element on the Euphrates, the vision of Parthians and Sassanians defensive strategy seems to be clearer and more understandable. Because the region west of Seleucia on the Tigris, and the region adjacent to the Euphrates were never well surveyed, they remain not well recognized. Those circumstances make almost impossible to reconstruct fully the archaeological settlement's pattern and its role in the defensive system of Mesopotamia.

In our disposal we have only the results of researches conducted by Finster and Schmidt mostly along the western banks of the Euphrates (Finster and Schmidt, 1976). The Sassanian defense was focused relatively late on the region. Several fortified sites appeared during the late Assyrian period between modern towns Ramadi and Kuba. Actually only two forts recognized here should be taken into consideration: Dabia (Finster and Schmidt, 1976: 47-49), and Qussir (Finster and Schmidt, 1976: 49-54). Obviously these forts were used also after the Arab conquest during the Umayyad period, but, anyway, the origins of these fortifications were deeply rooted in Sassanian times. Their construction seems to be a reflection of the political situation.

The forts Dabia and Qussir were probably erected for the protection of south-western part of Mesopotamia against Arabs. A nomadic threat materialized here during the 6th century A.D. In my opinion, the localization of the forts on the western banks of the Euphrates clearly shows a strategic configuration, where Ctesiphon was the main element of the defensive system of Mesopotamia. Additionally, the defensive system protecting central Mesopotamia was extended along the eastern part of the Diyala River. Because the vast territory west of the Euphrates was mostly a deserted area without any economic and strategic significance, it seemed to be relatively good solution to keep the enemy forces for away back from the Euphrates. The east coast of the river formed fertile land of central and southern Mesopotamia. The protection of the south-western part of the isthmus was relatively late conception, strongly associated with political events that appeared in the late Antiquity, when Arab tribes, formerly allied with Persia, became a new enemy, threatening the vital part of Mesopotamia (Butcher, 2003: 70-78).

The question still arises, why the isthmus was so important for the protection of southern Mesopotamia. For many years Persian Empire and Parthian, and then Sassanian states was set along the Euphrates, as far as the Taurus Mountains which run in east-west direction. At a first glance, it seems to be very easy to answer the question. The northern Mesopotamia was a buffer region, and both sides tried to extend their influence on the region. Moreover, there were two organisms: Osrhoene and Adiabene, which played a crucial role in the defensive policy of both imperial powers (Kennedy and Riley, 1990). The third so called buffer organism – a city of Hatra – cannot be omitted (Drijvers, 1977: figure 7). The supreme acr power which was able to control Adiabene, Osrhoene, and Hatra could have kept not only supremacy on the northern Mesopotamia, but also strategic domination in that part of the Middle East. The significance of northern Mesopotamia control had been visible when Anastasius ordered to construct a fortress Dara just nearby Nisibis, controlled by Persians (Butcher, 2003: 69-70). It was a clear provocation and break of an agreement signed in a treaty between Theodosius II and Bahram V in 422 (Butcher, 2003: 70). According to the treaty, both sides promised not to build any more fortresses in the frontier region. Consequently, it was not surprising that the construction of a new fortress in Dara caused tension between Persia and Rome.
The situation in the northern part of Mesopo-
tamia, anyway, was not particularly clear and sta-
bile since the times of Trajan's expedition against
Parthia. The province Mesopotamia was designed
by Trajan as the easternmost limit of the Roman
Empire. Even if the personal decision of Hadrian
forced Roman army to retreat back in the west
of the Euphrates River, the region remained still
a crucial and strategic territory, and had never
been omitted in the Roman eastern strategy till 363 A.D.,
when they finally lost their interest in controlling
the northern Mesopotamia (Ball, 2007: 24-26).

It seems necessary to focus our discussion on
the explanation how the strategic defensive
system of northern Mesopotamia looked like.
Without analyzing the strategic situation in that
region it would be difficult to understand properly
the organization of the defense in the central part
of Mesopotamia. The most important was Hatra
and its strategic localization. The results of the
survey conducted by Ibrahim in the vicinity of Hatra
showed relative big density of settlement located
in the Hatran state (Ibrahim, 1986: 43-88). Mostly
it meant small settlement with no military significance.
Nevertheless, there were distinguished several so-called urban centers.
These relatively large cities, no doubt fortified, cre-
ated both the settlement and defensive network of Hatra. All along small wadi
which runs from the east and joins the main Wadi Tartar's bed. During the Parthian period such sites as:
Qalat Shirqat — former Assur (Andrac and Len-
zen, 1933), Tell Aijir, Tell Tamri, and Tulul Sukari
were fortified and were probably important for the
city of Hatra (Ibrahim, 1986: 55-56). Entire abando-
donment of these sub-urban centers was associated
with the collapse of Hatra. This process shows how
closely this system was associated with the capital
city functioning, and its fortune.

Relatively different seems to be arrangement of
the northern Hatran territories. Remains of sev-
eral forts recognized during the survey seem to be a part of the Hatran defensive system protect-
ing the road approaching the capital city. In our
disposal now we have only remains of the follow-
ing forts: Kirkbet Zazia, Kirkbet Bashmaneh, Kirk-
bet Al Naddas, Kirkbet Qbr Ibn Naif, and Kirkbet
Jadalalah (Ibrahim, 1986: 49, 53, 87, 88, 112-144,
141-169, 194). The strategic localization of these forts should have been part of the defensive sys-
 tem even if Kirkbet Jadalalah and Kirkbet Qbr Ibn
Naif were originally fortified residences of Hatran
noblemen. Both of them were grounded almost in
the same period. Kirkbet Jadalalah, according to
an inscription found on the site, was grounded in
141/142 A.D., and Kirkbet Qbr Ibn Naif was a bit
older because its construction was dated to 137/138

The fortifications near the northern border of
the Hatran territories seem to protect not only a border
itself but could be an answer to the role of the
route controlled by Oshroene and Adiabene running
along the line connecting Carrhae or Nice-
phorion on the Euphrates, via Alain, Singara, Za-
guare (Ain Sinu), Ad Pontem (Tell Aafar), Abdesae,
Ad Flumen Tigris and Assilin. That strategic role
of Adiabene (Oats, 1968, 1956). Consequently,
during the Parthian period when both buffer states
Oshroene and Adiabene were under strong Ro-
man influence, the protection of the border terrains
of Hatra, which was in the Parthian period influ-
ence, seems to be crucial from the strategic point of
view. The areas west and north-west of Wadi Tartar
and Hatra are literally desert region, and even the
settlement pattern of the Hatran colonization was
relatively rare. Consequently, any attack seemed
to be impossible without preparation. Moreover, other
possibilities was that only possibility was an attack directly from the
north. That is why a control on the river valley
and the most important island site Ana seemed to be
crucial for Hatra's protection, as well as for the
central geopolitical situation of Assilin and Zeisophon. That strategic po-
 sition confirmed the excavations conducted during the
Hadiitha Salvage Project which took place in the
mid-eighties. The fieldworks carried on Kirkfin (Bec-
cufray — Invernezzi, 1983, 1986a, b; Valta, 1987;
Gregory, 1993, 1995), and Bijan (Izad) (Gawlikowski,
1983, 1986) proved the importance of the Euphrates
River north of the modern Hit (Aeipolis).
The Euphrates valley nearby Kirkfin was very im-
portant during the Sasanian period. An interesting
situation is observed on the northern border zone
of the former Hatran state. Both states, Oshroene and
Adiabene, during the early Sasanian times remained
under strong Roman influence. Con-
sequently, Sasanian doctrine of defense seemed
to have been partly constructed on earlier, post-
Hatran fortifications. In the times just after incor-
poration of Hatran state into the Sasanian Empire,
forts in Kirkbet Zazia, Kirkbet Bashmaneh, and Kirk-
 bet Al Naddas still functioned. Possibly on the other bank of wadi just opposite to Kirkbet Jadal-
alah there was newly established fort known as Tell
Unas Jadalalah.
The northern Mesopotamia region was con-
trolled till 363 A.D. by two supreme powers: Per-
sians and Romans. Strategic situation of Sasanian
Persia in Mesopotamia after the Romans retreat from
the northern Mesopotamia was radically im-
proved. That event gave Persians military control
on such cities as Nisibis and Harrana belonging
to the most important and strategic cities of that part
of the Middle East. Nevertheless, another question arises:
how the re-integration of Cesi-
ophon and other cities being a part of the Ctesiphon
metropolis was still important and significant in
strategic policy and defensive strategy? In other
words, the question remains, if Diyaal in the Sasa-
nian period was an important element of a de-
fensive strategy? Moreover, it is necessary to ask
why Ctesiphon in spite of its location threat by Ro-
man campaign still was a capital city of the Persian
Empire? Evidently, the location which was strategi-
cally justified, needed to be supported by additional
smaller and larger forts and towns' network.

The results of the McAdams's survey showed with
out doubts that during the Sasanian period in the Di-
 yala region the settlement network density reached
an apogee (McAdams, 1965: 69-83). The most im-
portant city was Esfahan which were fortified construc-
tions were erected in the city. The only requirement
in the region need to be mentioned, taking into
consideration their strategic position (McAdams,
1965: 72). In the middle Diyaal we have in our
 disposal at least four large towns, but all of them were
separated and presented by a network of small forts, consequently
only their numbers: 167, 219, 290 and 467, can be
given. In other words, altogether at least 13 big cit-
ties, or large towns were situated in the Diyaal river
valley. All of them seem to create relatively effec-
tive defensive system which could protect fertile and
wealthy southwestern Mesopotamia. Moreover, among these big fortified cities and regional town centers
were some interpreted as small towns. If these sites
are properly interpreted, each of them should have
had its enclosure walls. In the upper part of the Di-
 yala valley there were other small towns of the sites
were functioning (McAdams, 1965: 135-160).

It seems possible that similar settlement density
should have been formed between the Tigris and
the Euphrates, but till now no reliable survey was
conducted and finally published. West of the Eu-
  phrates, several fortified foundations were erected
in the late Sasanian period. Such a solution was pro-
voked by political events in that region. The Arab
tribes were not friendly to the Sasanian throne any-
more, consequently, it seems that better protection
of the Sasanian cities from the west was
strongly needed. Moreover, forts Dab'a and Qusair
effectively closed the defensive line which started
in the upper Diyaal region (south-west of Jebel
Hamrin). Altogether they formed a kind of limes,
or fortified cities which protected Mesopo-
tamia against the direct attacks of Romans, and
then Byzantines. In other words, the thesis present-
ed by Dillemann, who suggested that in Mesopota-
 mia did not exist any limes frontier, seems to be still
accepted, but in my opinion only for the northern

In central Mesopotamia some elements of an ef-
fective defensive system, which can be called limes,
can be detected. The question still remains, if the
system was the effect of the strategic conception
developed during the Parthian and Sasanian period,
was it a result of gradual developing of the
settlement network and its strategic significance,
which appeared accidentally and unexpectedly? The
settlement network was strictly associated with
changes of the landscape, and changes of the Di-
 yala river watercourse (Nüzel, 2004: 154-156). Such
a situation involved creation of several new settle-
ments which needed to take over a strategic impor-
tance of former cities and towns. The system, even
if it was formed by accident, could be, and probably
was used for the protection of some select areas. Our
Tra-
jan expedition was able to reach southern limits of
Mesopotamia, the rest of struggles in Mesopotamia
were focused on the central Mesopotamia, and no
military forces were able to cross the Diyaal—Ces-
iphon line. The factors mentioned above, in my
opinion, show Ctesiphon and its localization as the
key point in the defensive lines. Of course, the rank and the function of Ctesiphon, as one of the capital
cities of Persian Empire, made the city very special,
but the strategic position and the most significant
effective localization of the city should be taken
into consideration.

The strategic position of Ctesiphon provokes a
question, why its localization was so important,
and, moreover, what was the reason to keep so
  tightly the capital and its defense on the Baghdad
isthmus? It seems to be surprising that even in such
good times for the Parthian State, after Dura Euro-
pos capturing, which took place in late 2nd century
B.C., until the 160 A.D., when it was recaptured
by Roman troops, they did not change their strategy
(Millar, 1998: 474). During this time border line
was based on the Euphrates. Even this political fac-
tor did not involve any improvements of the defen-
sive system. All the time the forts and fortified cities
functioned in the Parthian, and later Sasanian ter-
ritory, as single strongholds controlling important
roads leading to the central Mesopotamia.

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A similar problem was also visible when the northern Mesopotamia just after the Trajan Mesopotamia campaign had been changed into a Roman province. Of course, the province functioned for a relatively short period, but the most striking is why Parthians did not even try to re-conquest those lands. Probably they accepted such a political situation, which in a further perspective was a good policy, since the Romans finally retreated from their territory. Similar situation repeated once more after 363 A.D., when Romans finally lost their interest in strategic protection of the northern Mesopotamia. Thatultan further immediately provoked Persian control on the abandoned territory, and opened strategic control. Moreover, it opened a way to penetration and potential raids on northern Syria after 502 A.D., when a new conflict started again (Buhlau, 1963).

The terrain situated farther to the south, i.e. the area around Ctesiphon, as well as the Diyala River need to be analyzed in a historical and economical context. Since the Early Bronze Age here and in the neighboring very intensively a settled settlement network where several large cities functioned, for instance Khaftadja, Tell Asmar or Tell Agrab (Hour, 1990: 60–73). During that early time the discussed region with no doubt played an important role in the Mesopotamian economy. The location of a city and settlement along the route leading to Jebel Hamrin seemed to be a significant factor.

It is possible that the strategic, and consequently military significance was not so important during these periods including Early Iron Age when direct military confrontation between Assyria and Babylonia, and even Elam was taking place. But on the other hand, there were two routes which served for Assyrian troops as strategic ways leading to southern Mesopotamia. The first one via Wadi Tartar, chosen in 824 B.C. by Assyrians, was described as a difficult route (Barnett, 1963: 22). The other possibility, much more effective and frequently used, was the route via the city called Turnat. This route was leading along eastern banks of the Tigris River because marching along western banks was impossible. Similar information can be found in Polibius (V.51.6) testimony. He described the march of Antiochus III to relieve Seleucia in 220 B.C. Similar situation was probably during the Achaemenid period when the so-called Royal Route was running into the Kermanshah direction via Behistan, and consequently forming the shortest way from Babylon to Ecbatana (Hammad, see Brient, 2002: 357–358).

According to Diodorus (XIX, 19.2), the journey from Susa to Ecbatana via Babylonia lasted 40 days. The almost only information which we have in our disposal, describing military activity, can be found in Anabasis by Arrian (Arr. Anab. 3: 6–7). He mentioned Alexander’s activity along the Zagros Mountains. A better supply of the army and the march organization in much better, mild climate was not doubt a significant element of Alexander’s strategy. The route chosen by Alexander and his troops was not an accidental maneuver. Alexander, before he started his campaign against the Achaemenid Empire, probably had to know all the sources describing the East. Consequently he had to know the text of Anabasis written by Xenophon. “The way of 10 000” was describing a route along the eastern banks of the Tigris river, from Opis to Nineveh, i.e. from the south to the north. It means that the Greek army needed to cross the Diyala River. According to Xenophon, north of the river Physkos (Diyala) they crossed almost uninhabited land, and marched through so called Media (Exped. Cyr. II 4, 1–25, 27–128). Alexander chose the same route in his other decisive campaign, a decision shows his good reconnaissance and knowledge of sources describing the area of conflict with Persians.

The route along the Zagros Mountains was used several times as a strategic way leading to the heartland of Babylonia, but only bravery ride conducted by Alexander stayed in minds. The deeds of Alexander could have had strong but indirect influence on the consolidation, and enforced the settlement network of the Diyala River during the Parthian and Sassanian periods.

During the Parthian and Sassanian domination the route along the Zagros Mountains still led to the southern Mesopotamia. Supposedly, the defensive system along this route became much more developed. In the times of Roman and Persian confrontation, a defensive line was not only based on Diyala, and on the so called Baghdad’s isthmus, but was shifted farther to the north, and was associated with Hatra. In other words, here can be distinguished much more sophisticated system which consisted of two main defensive elements. The first possible impact would have been focused on Hatra itself, and bounded potential enemies just near the northern borders. The second line was functioning along the Diyala River, and was because of the second line of defense, and aimed to keep further march of enemy troops out of the heart of southern Mesopotamia. Here, one coincidence is striking – the Hatra lader since 175 A.D. has been titled as a king, which possibly changed his position, and also made him one of the independent rulers, similar to those of Characene or Elymais (Hauser, 1998: 499–503). That, with no doubt, political gesture had very strong repercussions. On the one hand, the state of Hatra stood face to face with the Roman threat, and became a buffer space in case of any invasion from the north. On the other hand, Hatra still stayed independent that implicated strong and fast development and reinforced Hatra. As we can find in the ancient sources, during the Trajans times, the city was so important (Gaulkowolski, 1994: 147–184). Later Hatra became very rich and mighty city, which became a keystone in the Parthian defensive system. That is why during the Sep-tinmus Severus invasion and his double attempt of the siege of Hatra (Casius Dio, LVIII, 31, 1–2), the Roman troops had to fight in completely different military environment. In other words, Hatra became the first frontier which had to bind the Roman military forces, as far as it was possible from the heartland of Mesopotamia. Consequently, the next objective of the same road became the Bagh-dad’s isthmus, and the Diyala valley east Ctesiphon. The system of the southern Mesopotamia fertile lands protection still existed, even during the times of Sasanians, when Hatra was defeated, and its prosperity was parallel to the Sasanian conquests (McAdams, 1981: 175–214, 253–294). It is very important that no other Roman expedition, except for the campaign conducted by Trajan, reached the fertile regions of the southern Mesopotamia. All the activity focused on Ctesiphon and its vicinities, which might be explained as the limit of the Roman interests. The confrontations far away beyond the Roman borders in relatively difficult and well prepared to defend terrain were so exhausting that even after the capture of Ctesiphon, the Roman army was weak to continue the results of the success. The capturing of Ctesiphon by Julian’s troop, for instance, took place in May or in June when in central Mesopotamia temperatures usually are high (Amm. Marc. XXIV, 6, 8–16; Dodgeon and Lien, 1994: 235). Trajan and his army started to withdraw from Mesopotamia marching north in middle of June, along right banks of the Tigris, when the weather conditions became very difficult for Roman soldiers (Amm. Marc. XXIV, 6, 8–2, XVII, 1, 4; Dodgeon and Lien, 1994: 236). Consequently, Ctesiphon and Diyala functioned well and effectively, until the moment when other enemies appeared from the south-west.

Taking into consideration all above factors, there is still a question to be answered: why were Ctesiphon, and earlier Seleucia and Tigris so important in spite of the attacks during conflicts with the Roman Empire?

The strategic localization of these big cities was not accidental. Since the origins of the urban civilization in Mesopotamia, which started in the 4th millennium B.C., the most important cities were located in the vicinity of the isthmus between Euphrates and Tigris. Such big cities as Babylon, Borsippa, Kish and Nippur, Dur Karigalzu, or even Baghdad were crucial for the region functioning. All of the mentioned cities played an important role in the trade and economy of Babylonia. Moreover, since the times when these cities started to flourish, they have controlled the whole irrigation system that watered lower Mesopotamia.

In other words, localization of large urban centers, particularly such important as capital cities: Seleucia on the Tigris, and Ctesiphon, could help control the extremely fertile terrains of lower Mesopotamia. That is why both powers: Romans and Persians, tried to fought each other for keeping control on the central part of Mesopotamia. In the place when Diyala flows into the Tigris, the Euphrates is in the closest distance to Ctesiphon. Here was a place where the irrigation system started. The strategic management of the water carried by the rivers Tigris, Euphrates, and Diyala could have been strongly controlled by Ctesiphon. In other words, who had a control on the northern part or Babylonia or Arabistan, as that part of Mesopotamia was called during the Sasanian times, he could keep the whole Mesopotamia in check. The control over water supplies could provoke complete devastation of the agricultural region, and cause the hunger. In such perspective, it seems to be understandable why so dramatically the Roman forces wanted to reach Ctesiphon. The only problem is that even if Ctesiphon was captured and turned in ruins, the control on the terrain was only temporary, and did not result in longer occupation, which could provoke the ecological and economic disaster in the southern part of Mesopotamia. If the thesis were acceptable, it could explain not only the strategic position of Ctesiphon, but also answer the question why so desperately Ctesiphon was defended and was under the siege so many times? Ctesiphon and the smaller cities in its vicinity not only controlled the irrigation system, but we important from the economic point of view, because the main trade and strategic roads crossed.
there. Taking into consideration all those factors, it could be possible that in face of every threat Persians could not do anything more than only try to hold off the enemy forced back from Ctesiphon and the area around the capital.

Concluding: the border between Roman Empire and Persia was not fixed, but was being rearranged during several serious conflicts. According to Isidore of Charax witness, the border in his times was based on the line Sanaosata–Zeugma and Sura. South of this region all territories, and particularly the whole Euphrates valley were controlled by Parthian Empire. Situation dramatically changed when Trajan expedition brought a new political factor which manifested with the northern Mesopotamia effective control. After fall of Dura Europos in 164 A.D., the Roman control on the Euphrates valley was pushed farther south and based on Kifrin and Bijan islands. Roman control on these southern-most posts finished around 252 A.D. when Sasanian army pushed Romans back to Syria.

Cons of processes. I.e. Isidore of Charax and Anmiessius Marcellinus, on the first sight it is visible that military and strategic network density along the Euphrates dramatically changed. It shows that settlement pattern changed, and probably this process was a reflection of both military activity and general strategy development. The most important is that Romans between 40 B.C. and 252 A.D. were the most dynamic power, which manifested with strong military activity in Mesopotamia. This aggressive policy usually ended by the Ctesiphon city walls. In other words, the capital city always was a target for Roman troops. That is why passive defensive of the region was so important. Parthians were rather passive defenders in opposition to Sasanian dynasty. New established dynasty became much more dynamic, which involved new conflicts with Rome.

The last question still remains, why Parthians, and then Sasanians did not arrange the linear defensive system similar to those organized in the other parts of their territories. Large defensive systems based on the linear defensive walls, as the Gurgan wall, also called the Wall of Alexander (Kiani, 1982), or the wall of Merz (Grave, 1957) in the Central Asia, or other similar constructions known from the other parts of the Central Asia, clearly show that Persians perfectly knew how to protect even vast areas basing on the large military constructions. Even in Mesopotamia such constructions were also familiar. The last such construction built in Mesopotamia was so called Median wall which was constructed by Babyloniains against the Median threat from the north (Barnett, 1963; Killic, 1984). That is why it needs to be asked: why Persians (Parthians or Sasanians) did not use there any similar construction for protection of the most important part of Mesopotamia? The only answer seems to be adequate: such linear defensive systems were efficient in confrontation of the nomad tribes, or not well equipped and trained military forces. In conflict with well organized, disciplined and well commanded forces, such a linear system could have not been strong enough and efficient. Consequently, relatively expensive defensive system could have been completely useless in case of any military action.

That is why the defensive system based on several large and well fortified cities or strongholds could have been much more effective and more appropriate from military point of view. Probably the most important were the strongholds and fortified cities controlling water distribution, and whole irrigation system of southern Mesopotamia. Even a system was not of such a system of the military genius, and even if the analyzed system ever existed, the settlement network of the central Mesopotamia finally formed a structure which can be described as a defensive system which effectively protected southern Mesopotamia against a direct Roman military invasion and its devastations i.e. devastation of the fertile, rich and densely settled area, Ctesiphon, anyway, all the time was crucial in the defensive system. That is why Ctesiphon as the capital city was a main target in confrontations with the Roman Empire.

References
Dilleman, L., 1962, Haute Mésopotamie orientale et pays adjacents, Contribution à la géographie historique de la région, du V° s. avant lre chrétien au
V° s. de cette ére. Bibliothèque archéologique et historique 72, Paris.
Schoff, W.H., 1914, Parthian Stations by Isidore of Charax: An Account of the Overland Trade Route between the Levant and India, as the First Century B.C. Commercial Museum, Philadelphia.

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