

*Sergey Solovyev, Viktor Vakhoneev*

## ARCHAEOLOGICAL RESEARCH ON THE ANCIENT CITY SITE OF AKRA IN EASTERN CRIMEA\*

The ancient city site of Akra, situated near the modern village of Zavetnoe 30 km south of Kerch (the Republic of Crimea), was discovered as recently as the early 1980s. The main problems of its localization before that time were connected primarily to the site's topographic features. Almost all Bosphoran cities were founded on high rocky capes or high ground. The ancient city site near the village of Zavetnoe was situated on a very low cape that stretched far out to sea. A small river flowed to the sea north of the site. This feature still calls into question the identification of this site with the city of Akra mentioned by Strabo (11. 2. 8) and by Pliny the Elder (*NH* 4. 86).<sup>1</sup> However, the discovery of a developed fortification system and the development of urban quarters clearly indicates that an important urban centre existed in this location. Nowadays, most of the cape has been flooded by the waters of the Kerch Strait (Fig. 1).

There are three main stages in the history of the site's exploration. The initial stage is connected to discoveries made by A. V. Kulikov, V. N. Kholodkov, and K. K. Shilik in the first half of the 1980s. After winter storms, Kulikov, who was a schoolboy at the time, compiled a representative collection of ancient coins, including a golden stater of Cotys II dated to 132 AD. He also made the first visual plan of the coastal territory with indications of discovered areas of urban development.<sup>2</sup>

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<sup>1</sup> Maslennikov 2023 [*А. А. Масленников, "Изнутри или снаружи? (О 'статусе' поселения на мысе Зюк, малых городах и 'внутренней' колонизации Боспора", Проблемы истории, филологии, культуры*] 177; Agbunov 1987 [*М. В. Агбунов, Античная лоция Черного моря*], 107–108.

<sup>2</sup> Shamray 2012 [*А. Н. Шамрай, "Следы античных построек на берегу пролива у села Набережное (к истории открытия Акры)", in: XIII Боспорские чтения*], 450.



*Fig. 1. General view of the Akra city site from the south-east.*

A key event in the localization of Akra was the creation of the Bosporan Underwater Archaeological Division headed by K. K. Shilik in the Sector of the Ancient Archaeology, Leningrad Department of the Institute of Archaeology AS USSR (now the Institute for the History of Material Culture RAS) in 1982. From 1983 to 1986, he discovered a defensive wall and towers of the flooded city site, along with an Early Hellenistic well.<sup>3</sup>

The second stage of Akra exploration took place during the mid-1990s. The expedition of the Kerch Historical and Cultural Reserve headed by A. V. Kulikov conducted work both on land and underwater from 1994 to 1997. The aboveground archaeological excavations of 1994–1997 in the coastal area at a part of the spill outlined prospects for research on the Akra of the Roman period. Unearthed areas of urban development from that period strongly suggest that Akra homebuilding in the first centuries AD was conducted according to planning principles developed back in the Hellenistic Age. In addition, it was established that Akra archaeological findings dated to the Middle Ages were not accidental at the site. They

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<sup>3</sup> Shilik 2013 [К. К. Шилик, “Античные города на дне Керченского пролива (история поисков и открытий)”, in: П. Е. Сорокин (ed.), *Изучение памятников морской археологии*].

originate from a cultural layer of that time, areas of which were discovered during the archaeological excavations.<sup>4</sup>

Along with the aboveground excavations, underwater surveys of Akra were conducted. They focused on examining the defensive wall of the city and the secondary fixation of the tower. During the underwater surveys, stone pavements and masonry walls were also traced.<sup>5</sup>

The third stage of the archaeological research on Akra is linked with the work of a complex archaeological expedition, created in 2011 on the initiative of the State Hermitage to study the flooded part of the ancient town.<sup>6</sup> This study is ongoing. Its tasks include conducting an archaeological survey in the water area of the ancient town, as well as conducting systematic full-scale underwater excavations to study the planning and character of the urban development, the typology, the features of homebuilding, the system of fortification and its elements, the examination of previously discovered archaeological objects, and the search for new ones to make a relevant topographic plan of the city. This is urgent because the underwater and coastal parts of the site are gradually disappearing as a consequence of natural influences (wind, water, chemical erosion) and human activity.<sup>7</sup>

Overall, the ancient city site of Akra presently has two distinct areas of study. The first one lies underwater. It accounts for about 70 % of the site's area and avoided complete destruction by breakers in the strait due to lucky circumstances. In the fourth century BC, the small low cape the settlement was founded on was cut off by the sturdy defensive stone wall. It served as a kind of protection that preserved cultural layers adjacent to it from water erosion. The degree of preservation of the wall greatly varies in different areas – from 0.3 m in the sea area to 1.6 m in the coastal area (Fig. 2). It directly affected the thickness of the preserved cultural layers. Another important feature of the flooded part of the city site is that all deposits of the cultural layer and the underwater remains of buildings are dated exclusively to the Hellenistic period (Fig. 3). Layers that formed in Akra in the Roman period were completely destroyed in the underwater area.

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<sup>4</sup> Kulikov 2001 [А. В. Куликов, “Отчет об исследованиях античного городища Акра в полевом сезоне 1997 г.”, *Архив ГБУ РК “Восточно-Крымский историко-культурный музей-заповедник”*], 21; Kulikov 2007, 1040.

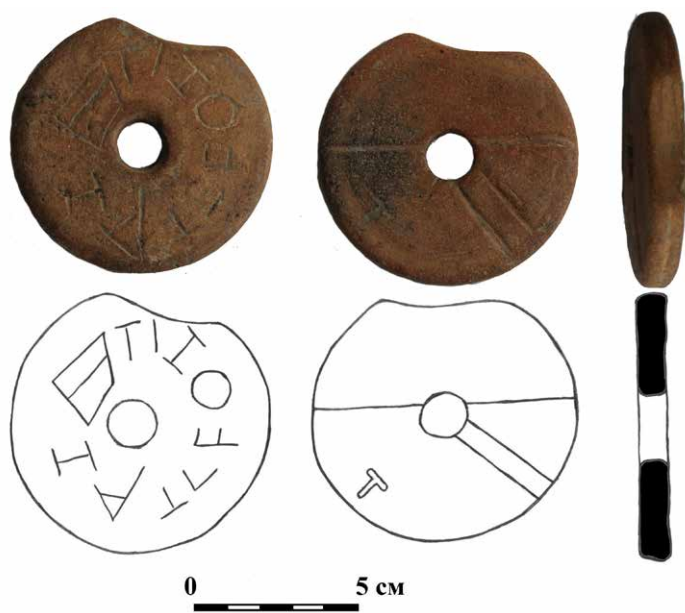
<sup>5</sup> Grabovetskiy–Kulikov 1998 [С. В. Грабовецкий, А. В. Куликов, “Обследование античного поселения в районе озера Яныш (Восточный Крым)”, *Изучение памятников морской археологии*], 82.

<sup>6</sup> Solovyev–Vakhoneev 2015, 188–201.

<sup>7</sup> Solovyev et al. 2021 [С. Л. Соловьев, В. В. Вахонеев, Л. Г. Шенко, *Акра – античный город на Европейском Боспоре*], 11, 30, 31.



*Fig. 2.* The masonry of the underwater defensive wall in the coastal area.



*Fig. 3.* Ceramic spindle whorl with graffiti found in an Hellenistic house.

It is worth noting that the founding of the city on a very low cape that stretches far out to sea, in a place so unusual for other Bosporan coastal cities, had a very negative effect on the entire subsequent history of Akra despite the convenience of its defence. We can assume that Akra was founded in the Phanagorian regression period.<sup>8</sup> The sea level was lower, and the cape itself was accordingly higher. After the end of the regression, the coastal areas of the city began to be regularly flooded and even swamped. One should add that, just before the dawn of the Common Era, Strabo (11. 2. 8) called Akra “a small village” (κωμίον). If we consider that he borrowed some information from the periplus of Artemidorus of Ephesus, Akra could already have had such a status at the end of the second century BC.<sup>9</sup> Obviously, there had to be important reasons for the change in the city’s status. It appears that the worsening of ecological and sanitary conditions due to constant floods may have significantly influenced this process.

Another observation made during the excavations that can also indirectly point to the floods is that significant sterile sand beddings were traced under some areas of Hellenistic development.<sup>10</sup> They could have been arranged specifically for groundwater drainage. It is no coincidence that all storage pits discovered underwater had stone facings with clay daubs (Fig. 4). In the base of a tower construction near the defensive wall (Fig. 5), wooden crates built of longitudinal and transverse beams were found. One of the reasons for such a construction of the foundation could be the high groundwater or seawater level that came to an ancient surface during the construction of the tower in the second half or the end of the fourth century BC.

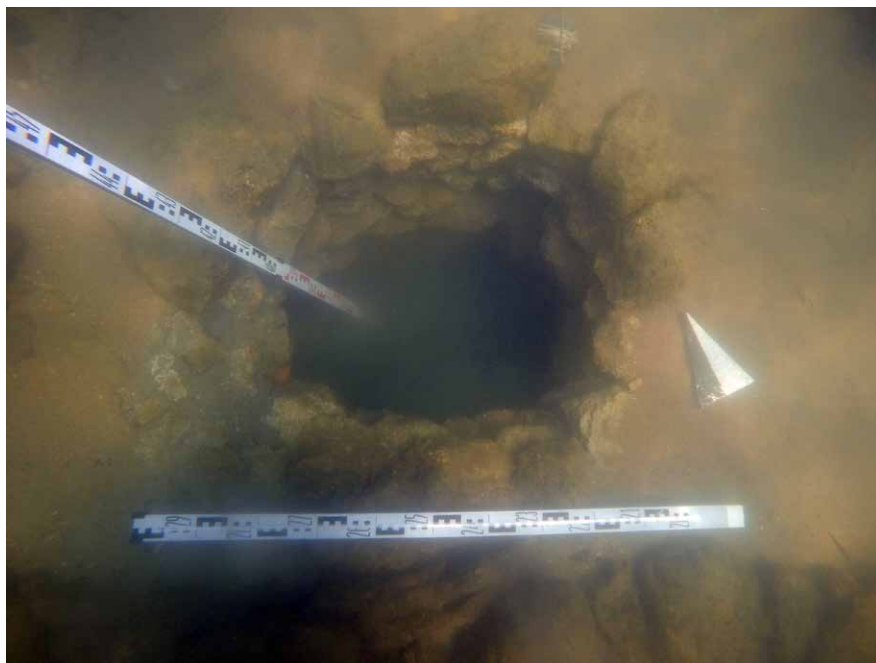
We should note another important feature of the modern site’s topography – cultural layers preserved only in areas close to the defensive wall and as far as a few dozen meters from it. The further away from the wall, the worse is the preservation of the layer. Thus, we can assume that the area of the preserved cultural layer from the Hellenistic period occupies about 1.7 thousand m<sup>2</sup> out of 3 hectares of the flooded part. The aboveground area of about 0.45 hectares was not considered.

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<sup>8</sup> Vakhoneev 2015 [В. В. Вахонеев, “Подводное городище Акра и изменение уровня моря в IV в. до н. э.”, in: *XVI Боспорские чтения*], 44.

<sup>9</sup> Zavoikin 2022 [А. А. Завойкин, “Китей: размышления о ‘малом боспорском городе’”, *Древности Боспора*], 106.

<sup>10</sup> Vakhoneev–Solovyev 2023 [В. В. Вахонеев, С. Л. Соловьев, “Археологические исследования античного городища Акра в 2023 г.”, *Бюллетень ИИМК РАН: охранный археология*], 189.



*Fig. 4. The storage pit no. 3/2017c with stone facing.*



*Fig. 5. A part of the Akra defensive wall with a tower. Aerial photograph.*

Currently, the defensive wall has been explored to a length of just over 150 m. The whole length of the wall could reach 250 m.<sup>11</sup> It starts at a distance of 94–98 m from the modern water's edge (in different years, the line of the water's edge has been moving) at a depth of –3.60 m according to the Baltic system. It is evident that in ancient times the defensive wall started right in the sea, where a section entering the water was composed of large blocks. Then it went north-west over the land, shielding the low cape with the settlement on it. The wall was built in the first half of the fourth century BC. It was partly rebuilt in the last quarter of the fourth to the beginning of the third century BC. The defensive wall ceased to be used for its intended purpose no later than the turn of the third to the second century BC. The excavations of the coastal area Beregovoy in 2016, as well as the prospecting shafts of 1985, showed that the wall was blocked by the remains of buildings from the first to the third centuries AD.<sup>12</sup>

The Hellenistic urban development of Akra included residential houses of the typical planning scheme, arranged in city blocks.<sup>13</sup> The area of the city itself was about 3.5 hectares. Currently, the remains of at least six building complexes from the second half of the fourth to the early third century BC and from the third to second century BC were discovered underwater.<sup>14</sup>

The layers of the Roman period are preserved only in the aboveground part of the site – about 4.5 thousand m<sup>2</sup>.<sup>15</sup>

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<sup>11</sup> Vakhoneev 2021 [В. В. Вахонеев, “Оборонительные сооружения боспорского города Акра”, *Боспорские исследования*], 42–64.

<sup>12</sup> Shilik 1987 [К. К. Шилик, “Исследование античной Акры”, *Археологические открытия 1985 г.*], 632; Solovyev 2017 [С. Л. Соловьев, *Отчет о научно-исследовательской работе. Археологические раскопки на выявленном объекте археологического наследия “Античное городище Акра” на восточной окраине пос. Заветное в Ленинском районе Республики Крым в 2016 г.*], 29.

<sup>13</sup> Solovyev–Vakhoneev–Kuznetsov 2017 [С. Л. Соловьев, В. В. Вахонеев, А. В. Кузнецов, “Подводные археологические раскопки античного города Акра в 2015 году”, *Археологический сборник Государственного Эрмитажа*], 165–176.

<sup>14</sup> Vakhoneev–Solovyev 2018, 247.

<sup>15</sup> Kulikov 2007, 1040; Solovyev et al. 2019 [С. Л. Соловьев, В. В. Вахонеев, М. М. Ахмадеева, А. В. Кузнецов, “Исследования античного города Акра в 2016 году”, *Археологический сборник Государственного Эрмитажа*], 135–154; Vakhoneev 2012 [В. В. Вахонеев, “Топография и планировка античного городища Акра”, *XIII Боспорские чтения*], 75–79.



The discovery of developments dating to Roman times suggests that Akra had sufficiently dense development on the high part of the ancient cape during that period. The same situation is observed in the other Bosporan town, Myrmekion, which Strabo (11. 2. 6) defined as κώμη. Earlier it was thought that, in Roman times, Myrmekion consisted of a series of estates, sometimes even fortified, with wastelands between them. However, excavations in recent years have convincingly shown that, despite significant changes in the spatial organization of the city in Roman times compared with the Hellenistic age, Myrmekion had fairly dense development in the western and central parts of the city site.<sup>16</sup>

Additionally, traces of life in the early medieval period were found in the aboveground excavations in Akra. In excavation area I, part of a layer from the eighth and ninth centuries AD was traced. In the upper layers of the Zapadnyy excavation area, an oval (in the ground plan view) pit no. 2 with a depth of 0.8 m was unearthed (Fig. 6). At the bottom



Fig. 6. The medieval pit in the excavation area Zapadnyy.

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<sup>16</sup> Milikhina 2022 [Н. Н. Милихина, “Проблемы исследования Мирмекия римского времени (топографический аспект)”, *Археологические вести*], 105.



of the pit, a jar of the Taman type from the ninth to eleventh centuries AD was found. There were also a few fragments of such vessels in the filling. Due to the discovery of this pit, we can assume that there are other early medieval complexes in the aboveground part of Akra.

Sergey Solovyev

*Institute for the History of Material Culture*

*St Petersburg (IHMC RAS)*

ssl2610@yandex.ru

Viktor Vakhoneev

*Institute for the History of Material Culture*

*St Petersburg (IHMC RAS)*

vvvkerch@mail.ru

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The article is devoted to the latest archaeological research on the ancient settlement of Akra on a sandy embankment near the village of Zavetnoye in eastern Crimea. This ancient settlement was localized only in the early 1980s, and the history of its study has 3 stages. The authors analyze the reasons why the cultural layer was preserved underwater and was not destroyed by surf waves as on other coastal

archaeological sites. Special attention is paid to the topography and layout of the monument in the Hellenistic and Roman periods.

The settlement is divided into two very different research sites: underwater and terrestrial. The underwater part accounts for about 70 % of the monument's territory. It was preserved due to the presence of a powerful defensive wall built in the 4<sup>th</sup> century BC. Cultural layers under water were preserved only in areas close to this wall. The Hellenistic urban development of Akra included residential houses of the typical planning scheme, arranged in city blocks. At least six building complexes from this time were studied there.

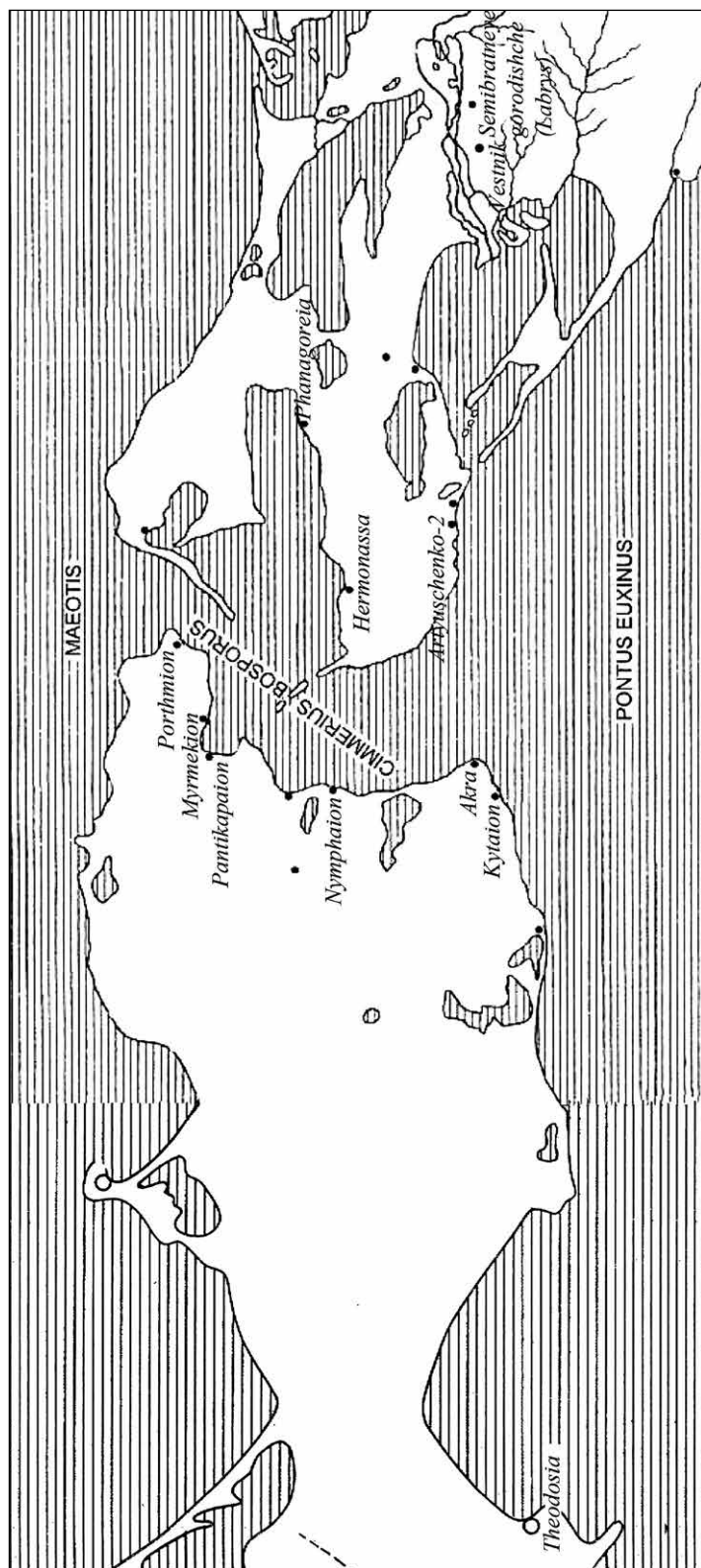
Unfortunately, the layers from Roman times have not been preserved underwater, while on a small piece of land, areas of dense buildings from the first centuries AD have recently been discovered. Finally, the latest research has also confirmed the presence of life in the settlement in the early medieval period.

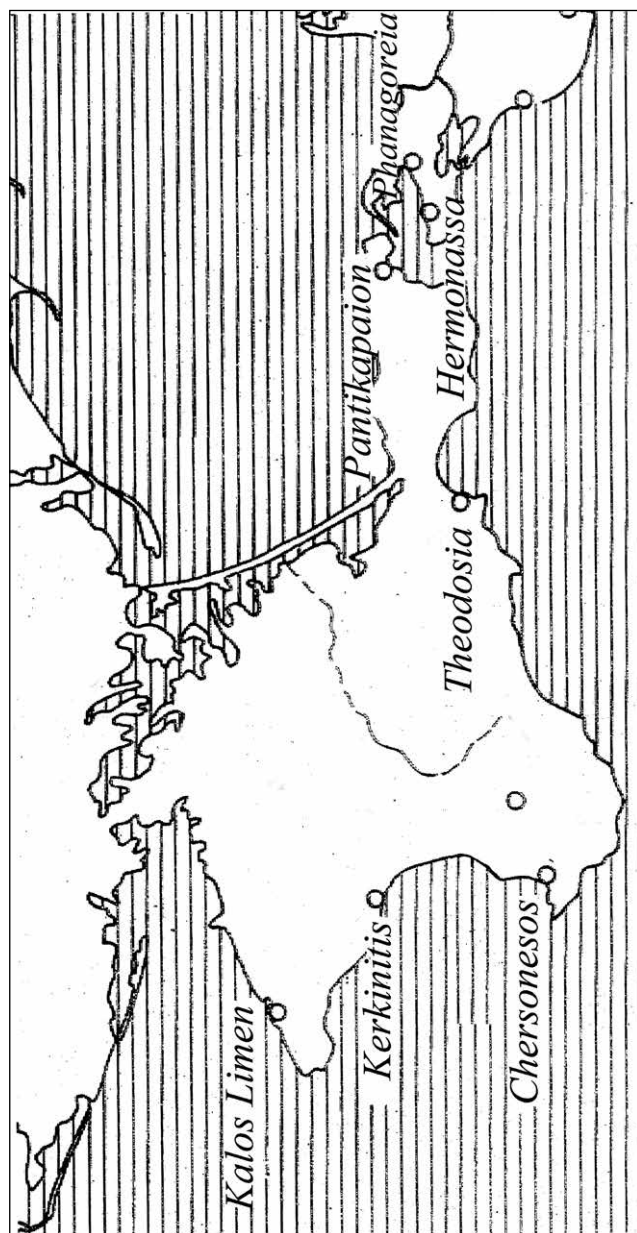
Статья посвящена последним археологическим исследованиям античного городища Акра на песчаной насыпи у села Заветное в Восточном Крыму. Это античное городище было локализовано только в начале 1980-х гг., и история его изучения насчитывает 3 этапа. Авторы анализируют причины, по которым культурный слой сохранился под водой, а не был разрушен волнами прибоя, как на других прибрежных археологических объектах. Особое внимание уделяется топографии и планировке памятника в эллинистический и римский периоды.

Городище разделено на два совершенно разных участка: подводный и наземный. Подводная часть составляет около 70 % территории памятника. Она сохранилась благодаря наличию мощной оборонительной стены, построенной в IV веке до н. э. Культурные слои, находящиеся под водой, сохранились только в районах, непосредственно прилегающих к этой стене. Городская застройка Акры в эллинистический период включала жилые дома типичной планировочной схемы, расположенные в городских кварталах. Здесь было изучено по меньшей мере шесть комплексов зданий этого времени.

К сожалению, слои, относящиеся к римскому периоду, не сохранились под водой, в то время как на небольшом участке суши недавно была исследована плотная застройка первых веков нашей эры. Наконец, последние исследования также подтвердили присутствие жизни на поселении в период раннего средневековья.

# **ARCHAEOLOGICA**





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