

Bianca Elena Grigoraș

## THE MEDIUM SIZED STORAGE VESSELS FROM *DINOGETIA*

*During the past 80 years of excavation a huge amount of pottery has been discovered at Dinogetia. Among them, storage vessels represent a distinct category. These vessels are different in type and can be dated to the late Roman period. Most of them are decorated with groups of incised lines. Their presence is a reliable indication of the storage activities that took place in this remote fortress. The presence of local production of storage vessels in different periods and their morphological features demonstrate an extensive practice in preservation of foodstuff for medium and long-term periods. Also, considering their dimensions and their mobility, they can be correlated with familial consumption. Their modest capacities, less than 150-200 liters, was enough to store food for a limited period of time, but also enough to keep that food fresh.*

Lower Danube – economy – storage – pithoi – family consumption

### 1. Introduction

The lower Danube is a fertile land that is watered by many small rivers and the Danube and is able to produce a variety of cereals. For instance, at Moșneni there were found *Triticum aestivum ssp. vulgare*, *Hordeum ulfare vulgare*, *Vicia cf. faba*; at Murighiol: *Triticum aestivum*, *Triticum cf. durum*, *secale cereale* and *lens esculenta* (cf. Bărbulescu 2001: 204-206). Its climatic and geographic peculiarities include wet summers and also periods of drought.

The first foreign contacts of the local population from the lower Danube area were with the Greek cities founded here in the Archaic and Classical periods. The Greeks brought with them new ceramic forms, including *pithoi*, which played an important role in the local economy. Later, given the strategic position on the border of the Danube and on the western Black Sea shore, this area became of interest to the Romans.

During the Hellenistic period and in the 1<sup>st</sup> century AD, the Pontic cities endured many political and economic crises. Many inscriptions found at Histria demonstrate the lack of food starting in the 3<sup>rd</sup> century BC and continuing until the 1<sup>st</sup> century AD (cf. Pippidi 1967: 50). For example, the decree honoring Agathocles son of Antiphilos informs us that Histria was attacked by the Thracians when the wheat was ripe, Agathocles, chosen to lead the archers, gathered some men and allowed the inhabitants to gather their grains without any problems (Pippidi 1967: 186-192). Another decree, discovered at Callatis, was erected in honor of Isagoras son of Iatrokles who saved the city from a great famine (Pippidi and Berciu 1965: 319; Bărbulescu 2001: 203). From these examples we can observe that the economic situation on the Lower Danube was very unstable, and even the well-being of Greek cities depended on some benefactors.

The situation started to change when the area became part of the Roman empire (Vulpe and Barnea 1968: 15). The measures undertaken by the Romans were targeted at the recovery of the economic and demographic situation. In one instance, *Sex. Aelius Cato* settled 50.000 Getae (Strabo VII, 3, 10; Bejan 1998: 95; Petolescu 2010: 702), and in another *Tib. Plautius Silvanus Aelianus* transferred 100.000 Transdanubians to the right bank of the Danube to increase the number of taxpayers (*ad prestanda tributa*) (Bichir 1984: 95; Gostar 1979: 136; Pippidi 1967: 307-309). Due to this Roman policy there was a growth of population, and this can be correlated with an increase in agricultural exploitation able to support the large number of Roman garrisons established on the lower Danube frontier. The consequences did not cease to appear, and from the same document, the Tiburtine inscription, we discover that the south Danubian territory was the first to send wheat to Rome (*/primus ex ea provincia magno tritici modo /annonam p(opuli) R(omani)*), an export attested also by the literary sources (Cassius Dio 62.16.5 cited by Garnsey 1988: 224; *CIL*, XIV, 3608 = *ILS* 986; Pippidi and Berciu 1965: 311). Due to these measures, the Roman army stationed in this region, following the general rule, was able to find their supplies in the neighborhood or in the province (Garnsey and Saller 1987: 88; Le Roux 1995: 417).

### 2. The settlement

The Roman fortress of *Dinogetia* is located on the right bank of the Danube and today is known under the name Bisericuța, Garvăn village, Tulcea county (Romania). In spite of its modest dimensions (c. 1.2 ha.), *Dinogetia*, due to its favorable strategic position, played a significant role

in defending the province of *Moesia Inferior* and later the province of Scythia. This is shown not only by its impressive defensive wall but also by the large variety of artefacts, including imported amphorae, fine wares, coins, and lamps discovered at this site. These demonstrate intensive trade as well as the care of imperial authorities. Also, we cannot exclude the idea of that it served as a customs point between the Roman empire and the barbarian territory on the other part of the Danube. *Dinogetia* can be called a *statio* thanks to *tegulae* material with the inscription *Classis F(lavia) M(oesica)(ISM V 263; Suceveanu and Barnea 1991: 67)* and the discovery of a bronze balance (Ştefan 1950: 152-162). As a transit point, *Dinogetia* may have received additional foodstuff from the north of the Danube to supplement its own agricultural supplies.

### 3. Typology of the storage vessel from *Dinogetia*

Ancient societies saw storage as a vital activity positioned between production and consumption. There is a long tradition of using ceramic vessels for preserving cereals. Their shapes and morphological characteristics remained unchanged for many centuries. During pre-Roman times, with the exception of some large *pithoi* found in some Getic *oppida* such as Popeşti (Vulpe 1966: fig. 22), Sprâncenata (Preda 1986: pl. XLIV.2, XLV. 5), and Răcăţău (Căpitanu and Ursachi 1969: fig. 12), the predominant storage vessels are of small and medium-size capacities. The latter can be correlated with a familial mode of production and storage. They have capacities varying between 5 and 50 liters and can be found in households on both sides of the Danube until the 3<sup>rd</sup> century AD. Starting in the 3<sup>rd</sup> century an increase in capacity is observed but also a change in forms, including the adoption of the large Roman *dolium* capable of reaching 1800 liters (Grigoraş 2018: 126). Getic storage vessels were found at: Hârşova, (cf. Nicolae 2009: fig. 4-7, pl. IV-VI), dated to the 2<sup>nd</sup>-1<sup>st</sup> century BC and the 2<sup>nd</sup>-3<sup>rd</sup> century AD; Bugeac, (cf. Scorpan 1969: 48, fig. 20), dated to the 1<sup>st</sup> century BC and 1<sup>st</sup> century AD; Histria, (cf. Condurachi 1970: fig. 16.) dated to the 2<sup>nd</sup> century AD; Aliman, (cf. Scorpan 1974: 240, fig. 4), dated to the 2<sup>nd</sup>-3<sup>rd</sup> century AD; Ulmetum, (cf. Şova 2014: 252-256), dated to the 2<sup>nd</sup>-3<sup>rd</sup> century AD; Sarichioi, (cf. Baumann 1995: pl. XI/10-11), dated to the 2<sup>nd</sup>-3<sup>rd</sup> century AD; Enisala, (cf. Babeş 1971: 30, fig. 7/1-4, 8/2), dated to the 2<sup>nd</sup>-3<sup>rd</sup> century AD.

The storage vessels that predominate at *Dinogetia* are of large and medium size. Due to limited space here, I discuss only the medium sized vessels. This type of vessel is generally found isolated in one corner of the house and seems to indicate a medium size production of cereals for family consumption (Garcia 1987: 60). Due to the lack of complete vessels, my analysis was made only on their upper parts. They are divided into five types according to their morphological features. Their rim diameters vary between 34 and 45 cm and have various forms and several types of decoration and fabrics. They can be dated from the beginning of the second half of the 3<sup>rd</sup> century through the 6<sup>th</sup> century. Some are well dated by coin discoveries.

**Type I.** This type is well represented. The mouth is wide varying between 32 and 47 cm. The rim is flaring and is deco-

rated with horizontal and wavy incised ornaments (fig. 1, 1-4). These decorations can be found on vessels from a wide area, not only within the Roman Empire but also in barbarian territory. Similar shapes have been found at *oppida* Sprâncenata (cf. Preda 1986: 96, Pl. XLIII/1) and Popeşti (cf. Opaîţ 2013: 50, pl. 9/3). Also, there is no consistency in fabric color, which can be grayish (Munsell 10YR 5/1) or brownish (7.5YR 6/6). The fabric is coarse with inclusions varying between 0,5 and 5,0 mm. Among the inclusions we can recognize quartz, pebbles, and mica, but there could be also some organic material which was decomposed during the firing process. One fragment (fig. 1, 2) comes from a context dated to the beginning of the 3<sup>rd</sup> century. Analogies can be found at Babadag-Toprachioi, but this site is dated to the 5<sup>th</sup> century AD (Opaîţ 1991b: 211, fig. 11/2). Therefore, we can say that this type demonstrates a continuity from the 3<sup>rd</sup> to 5<sup>th</sup> century AD.

**Type II.** The rim is flaring, and the mouth has a 34-cm diameter. The most important distinction between the first type and this one is the projecting horizontal rim and the truncated conical neck. (fig. 1, 5). This feature is common among some Greek *pithoi*; therefore we can infer a Greek influence on this pithos type. See the Archaic *pithos* found at Histria (cf. Condurachi 1959: 283, fig. 7). Analogies can also be found in the eastern part of Romania, thus indicating the level of technological achievement of the local population under strong Hellenistic influence. The Greek influence is also visible in the transplanting of some Aegean vine varieties that triggered local production of amphorae (cf. Opaîţ 2013: 27). An opposite situation can be found in Gallia, where the origin of *dolia* is not a Greek one but was inspired by other surrounding populations, such as the Iberians or Etruscans (cf. Carrato 2017: 80). The sherd from *Dinogetia* has a compact, fine, brownish fabric (7.5YR 6/6-6/8) with inclusions of mica and iron oxide. These vessels demonstrate the implementation of Greek agricultural practices by developing a local wine production in this space (Opaîţ 2013: 27). Thus, for local consumption, wine could be stored either in barrels or, more likely, in small *pithoi*. However, their use for storing grains cannot be ruled out. This process was manifested in the cultural sphere, in social and religious practices, and also in the local economy. Analogies for this type on the lower Danube area can be found at Romula (Popilan 1976: 208), and Babadag-Toprachioi (Opaîţ 1991b: 211, fig. 12/4) but these exhibit a more conical neck.

**Type III.** This type has a thick rim measuring 38 cm in diameter while the globular body starts immediately under the rim (fig. 2, 6). The upper part of the body has a wavy incised decoration. The fabric is compact, fine, and the color is brownish (5YR 6/8). Silver mica and iron oxide represent the main inclusions. Here we can also include a fragment of a smaller size (fig. 2, 7). The rim is thicker, and the diameter is 21 cm. The fabric is compact, fine, and the color is brownish (5YR 5/8). Analogies have been found at Durostorum (Muşeteanu and Elefterescu 1992: 237, fig. 4.82), Histria (Opaîţ 2004: 2), and Babadag-Toprachioi (Opaîţ 1991b: 211, fig. 12/2).

**Type IV.** The rim is not completely preserved but this situation allows us to see that this was formed by adding a new clay layer. The decoration is formed by incised dots that

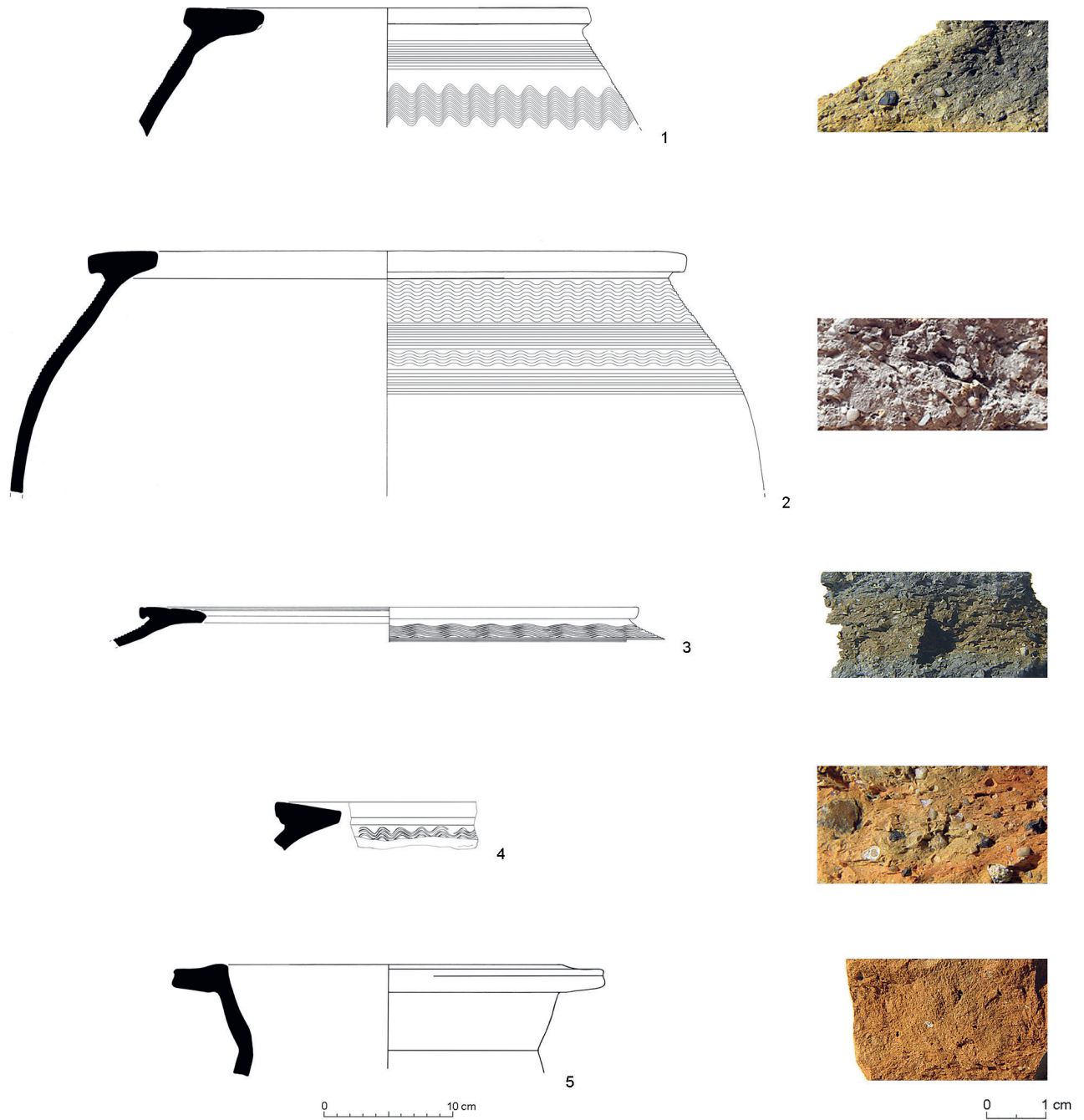


Fig. 1. Type I (1 to 4); Type II (5).

are on top of an incised wavy line (fig. 2, 8). The fabric is compact, fine, with inclusions of mica and iron oxides. The color is brownish (5YR 6/6).

**Type V.** This type is represented by two fragments. It is possible to calculate the diameter of just one of them (c. 40 cm). The rim is trapezoidal, and the decoration is represented by incised ovi (fig. 2, 9-10). The fabric is compact, hard, and the color is brownish (7.5 YR 6/6). One example was discovered in a context dated to the beginning of the 4<sup>th</sup> century. A similar vessel was found at Capidava, dated to the 6<sup>th</sup> century (Oprîș and Rațiu 2018: 88, pl. 12), as well as at Murighiol (Opaîț 1991a: 133. fig. 7/50).

#### 4. Conclusion

As these discoveries show, the storage of food was an important part of daily life at *Dinogetia*. In the Roman period, the inhabitants had to keep provisions for their own consumption and to provide supplies to the army. It was the only way to satisfy their own necessities and to pay their taxes. For this reason, there was a connection between large *dolia* and medium- and small-size storage vessels. This ceramic container was able to preserve different quantities of food. One of the most important qualities of these vessels of different sizes was that they were created to connect the preservation of a certain

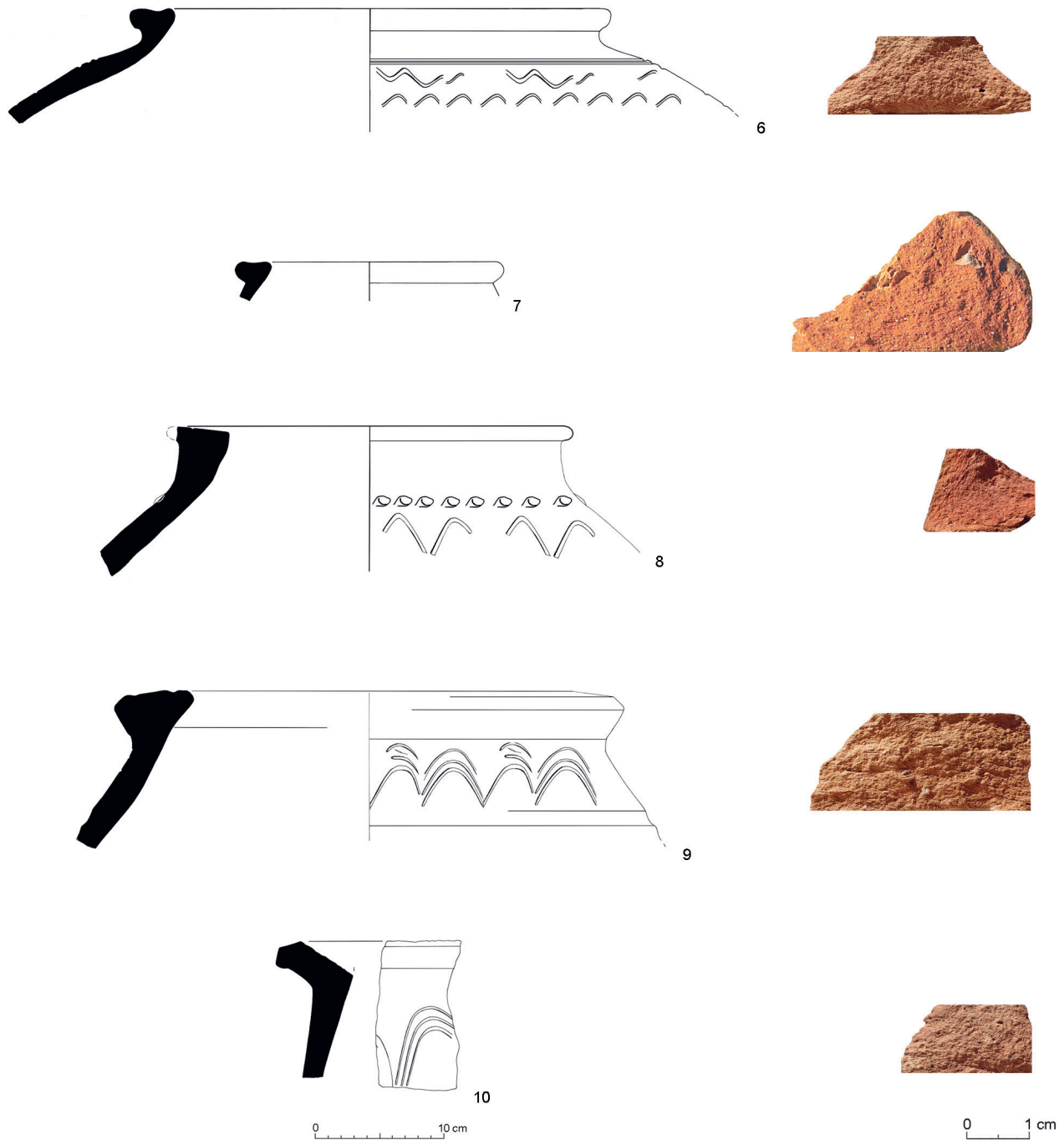


Fig. 2. Type III (6); Type III (7); Type IV (8); Type V (9 and 10).

quantity for a certain period of time. The large *dolia* were used for the storage of communal foodstuffs needed for supplying the army or for trade. The medium-size storage vessels are very important for keeping safe a medium quantity of c. 150-200 liters of foodstuffs for a limited period. Considering their dimensions and their mobility they were used for domestic consumption. In addition, their dimensions make these types of vessels difficult to be moved and transported for long distances, and therefore it is less probable to speak about imported storage vessels in this province. However, only an intensive program of petrographic analyses can elucidate this

problem. It is also worth noting that, aside from Type I, all of these vessel types were made in a fine, compact, hard fabric that suggests the existence of highly-trained local potters.

The analogies of these types of storage vessels demonstrate that *Dinogetia* was part of an intensive network of regional and provincial connections. The same vessel types were found not only in *Moesia Inferior*, later Scythia province, but also in barbarian territory. In this situation, we can talk about a certain unity between the two banks of the Danube.

Concerning chronology, our vessels are dated according to coins and other artefacts from the beginning of the 3<sup>rd</sup>



until the 6<sup>th</sup> century. Their shapes seem to indicate a certain continuity, some of them having deep roots in the Hellenistic period. The most important example is the Greek *pithos* that preserved its shape almost unchanged from the Archaic period to the 3<sup>rd</sup> century AD. The continuity in using such vessels for such a long time shows that these storage vessels

have well fulfilled their purpose of keeping safe large, medium and small quantities of foodstuffs. Their presence in the lower Danube area was increased once this area was included in the Roman Empire, and once local agriculture was forced to produce not only for its own self-sufficiency but also for supplying the Roman army.

Bianca Elena Grigoraș  
Al. I. Cuza University, Iassy  
National Institute of Heritage, Bucharest  
*grigoras.biancaelena@gmail.com*

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