

Glazed wares as main cargoes and personal belongings in the Novy Svet shipwreck (13th c. AD, Crimea): a diversity of origins investigated by chemical analysis

Keywords: Crimea, shipwreck, chemical analysis.

***Abstract:** The underwater excavations of a shipwreck in Novy Svet (Crimea) reveal an exceptional cargo of glazed wares. The ship, which according to texts may be a Pisan vessel sunk in 1277, carried two main cargoes of glazed ceramics, together with wares of various types present in smaller quantities. The latter are seen as personal belongings or material used by the crew. Their origins may be as diverse as northern Italy, the Levantine coast, Constantinople, Cyprus and other locations in the Byzantine and Seljuk territories. Some of these hypotheses are confirmed by chemical analysis.

Palabras clave: Crimen, pecio, análisis químico.

*****Resumen:** Las excavaciones submarinas de un pecio en Novy Svet (Crimea) revelan un excepcional cargamento de cerámicas vidriadas. Puede tratarse, según las fuentes, de una nave pisana hundida en 1277, que llevaba dos cargamentos principales de cerámicas vidriadas junto con piezas de varios tipos presentes en cantidades menores. Estas parecen corres-

ponder con las pertenencias personales, o el ajuar cotidiano, de la propia tripulación. Sus procedencias pueden ser tan diversas como de la Italia septentrional, la costa de Levante, Constantinopla, Chipre y otras localidades en territorios bizantinos y selyukíes. Algunas de estas hipótesis se confirman mediante análisis químicos.

Mots clés : Crimée, épave, analyses chimiques.

****Résumé :** Les fouilles sous-marines d'une épave à Novy Svet (Crimée) mettent au jour une quantité exceptionnelle de céramiques glaçurées. Cette épave pourrait être identifiée à un navire pisan dont le naufrage en 1277 est mentionné dans des textes. Deux catégories de céramiques faisaient partie de la cargaison, alors que de nombreuses autres présentes en petites quantités étaient probablement des effets personnels ou du matériel de bord. Leurs origines pourraient être aussi variées que l'Italie du Nord, la côte levantine, Constantinople, Chypre, et d'autres sites des territoires byzantins et seldjoukides. Certaines de ces hypothèses sont confirmées par des analyses chimiques.

Since 1999, expeditions by the underwater archaeologists of the National University Taras Shevchenko (Kiev, Ukraine) have conducted extensive field work in the bay of Novy Svet near Sudak (Crimea) (fig. 1).



Figure 1: Location of the Novy Svet shipwreck and places of origin of some of the glazed wares found in the excavation.

Researchers succeeded in localizing and mapping the site of a shipwreck which may be identified as a late 13th century Pisan vessel mentioned in texts (ZELENKO, 1999). As in 2005, the excavated area covers 600 m². Besides amphorae (types Günsenin 4 and 3 mainly), pithoi, glass and other items, the shipwreck contains an exceptional quantity of glazed table wares (ZELENKO, 1999, 2003, 2004, 2005; TESLENKO, 2000) (fig. 2).

As far as we know, this is only the third medieval shipwreck found in the area of the Black sea and the Eastern Mediterranean carrying a significant cargo of glazed ceramics. The other examples, referred to as the Pelagonesos-Alonnesos and the Kastellorizo shipwrecks (PAPANIKOLA-BAKIRTZI, 1999), have been identified but not excavated. The Novy Svet shipwreck is thus seen as

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Figure 2: General view of glazed ceramics from the shipwreck.

a unique opportunity to better understand maritime trade in glazed ceramics, which is well attested by terrestrial excavations but poorly documented otherwise. Some of the ceramics finds were investigated by chemical analysis in the “Laboratoire de céramologie” in Lyon (France). Hypotheses concerning their origins were tested using the laboratory’s chemical database, which includes reference data for several medieval workshops in the Eastern Mediterranean and the Black sea (see for instance PICON, 1992 and WAKSMAN & FRANÇOIS, 2004 for a general approach and the citations below for data concerning the reference groups considered).

The glazed wares found in the Novy Svet shipwreck show a great variety of types. However, only two of them are represented in large quantities. One group, corresponding to the most numerous finds (several hundred complete forms) and called so far the “Novy Svet group” (fig. 3), is described in details elsewhere (TESLENKO, 2000; TESLENKO & WAKSMAN, forthcoming).

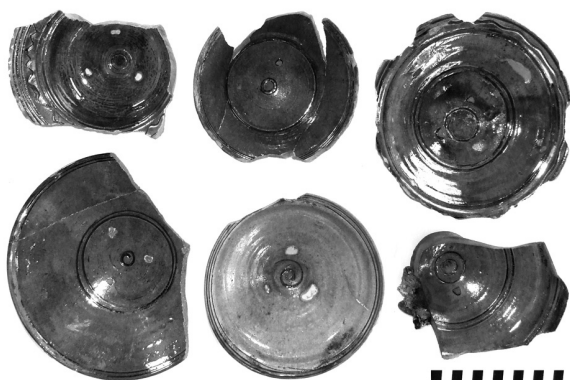


Figure 3: Examples of “Novy Svet ware”. They constitute the main cargo of glazed ceramics.

They bear a monochrome glaze and are decorated with the sgraffito technique in simple patterns of concentric lines or central spirals, sometimes associated with wave patterns. Morphological parallels initially suggested a Nicean production (FRANÇOIS, 1997). This hypothesis was however not confirmed by chemical analysis, and the origin of this ware is as yet unknown. Its diffusion is important in the Crimea and has been shown to extend to Turkey and the Levant (WAKSMAN & FRANÇOIS, 2004; TESLENKO & WAKSMAN, forthcoming). In addition to a variety of opened forms were found several slip-painted jugs which seemed to present the same fabric (fig. 4). However, these closed forms show chemical characteristics different from the “Novy Svet group” and should therefore be considered a distinct production.

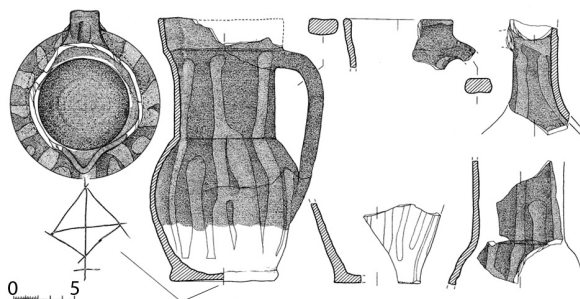


Figure 4: Many jugs were found, which according to analyses were not made with the same clay as the “Novy Svet ware”.

The second main group in the cargo is identified as Byzantine “Glazed White Ware”, sometimes in its Green and Brown Painted variant (fig. 5). Recent investigations both in the field and in the laboratory support the hypothesis of a Constantinopolitan origin for the late productions of White Wares, including the Novy Svet examples (HAYES, 1992; WAKSMAN, 2006).

The two main groups of glazed wares are not found in the same sectors in the ship. The majority of the “Novy Svet wares” are concentrated close to an area interpreted as the stern. They are associated with Günsenin 4 amphorae (GÜNSENIN, 1990), whereas Byzantine “Glazed White Wares” are mostly near the prow together with Günsenin 3 amphorae.

Besides the main categories, different types are present in small quantities. It suggests that they may correspond to material for the crew or to

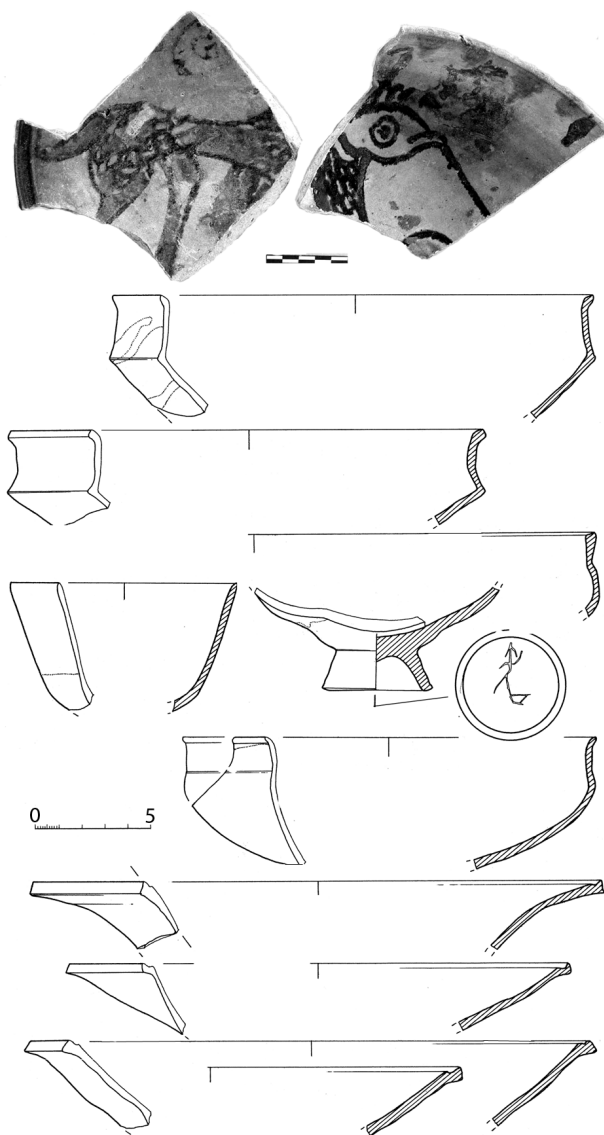


Figure 5: The cargo includes fairly large quantities of Constantinopolitan Glazed White Ware.

personal belongings of the crew and the passengers rather than to the cargo. But whether they really belonged to the ship may be open to question, as part of the remains were found in shallow water and could have been brought in by the tide from other sectors of the bay. Typological parallels suggest for these ceramics origins as diverse as northern Italy, Cyprus, Lebanon, as well as Seljuk and Byzantine territories.

The latter are represented by several types, most of them such as “Zeuxippus Ware” (MEGAW, 1968; SANDERS, 1999, for an update of the dating) and “Aegean Ware” (MEGAW, 1975) corresponding to as yet unlocated workshops.

Recent research has enabled better definition of the characteristics of “Zeuxippus Ware” and of several related productions, including the “Novy Svet group” (WAKSMAN & FRANÇOIS, 2004). Although samples of “Zeuxippus Ware” from the shipwreck (fig. 6) were not taken for analysis, there is little doubt that it is present.



Figure 6: Zeuxippus Ware is present in few examples.

“Aegean Ware” seemed to appear in very few examples. However, one sample taken for analysis as representative (fig. 7) was found not to belong to this production (WAKSMAN & VON WARTBURG, forthcoming). Also, the usual dating of “Aegean Ware” in the early 13th century does not match the date of 1277 proposed for the sinking of the ship (ZELENKO, 1999). It could be that some examples of “Aegean Ware” are present as intrusive material, as mentioned above, together with other later and possibly related productions.

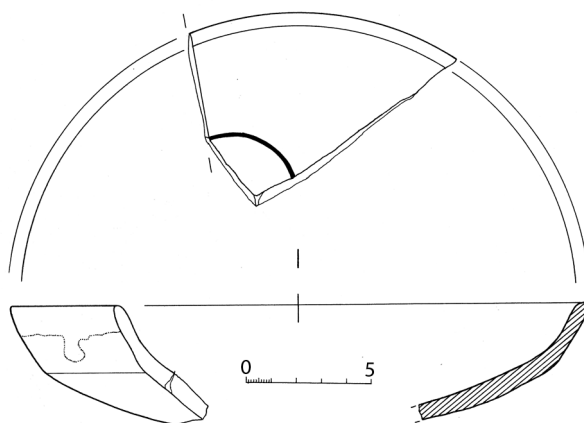


Figure 7: This sherd was initially identified as “Aegean Ware”, but such identification was not confirmed by analysis.

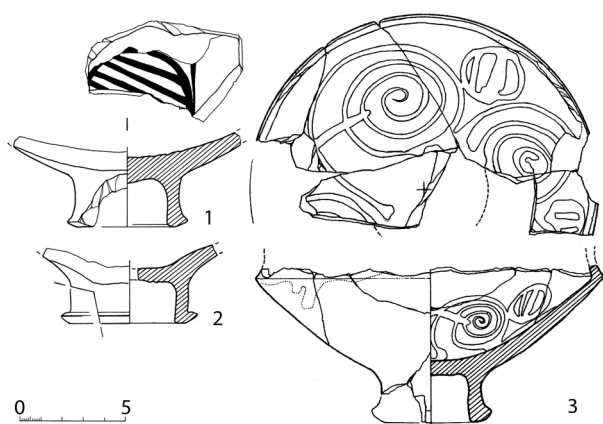


Figure 8: Cypriot sgraffito and slip-painted ware. Nos. 1-2 match chemically the production of the region of Paphos.

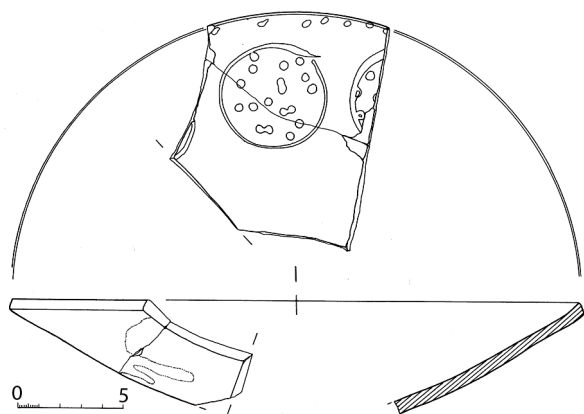


Figure 9: Slip-painted ware, unlikely to have come from the Paphos area.

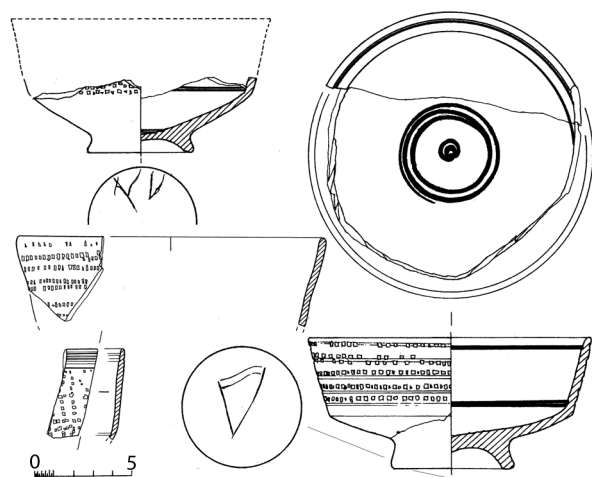


Figure 10: Venetian Roulette Ware.

A Cypriot origin was considered for several sherds including sgraffito and slip-painted wares (figs. 8-9). Some of them match chemically the 13th century productions of the Paphos region (PAPANIKOLA-BAKITZIS, 1993; VON WARTBURG, 1997) (fig. 8.1-2), whereas a Cypriot origin could not be confirmed for others (fig. 9).

This supposedly Pisan ship also carried northern Italian wares, including a few bowls of Venetian "Roulette Ware" (fig. 10) and several spectacular examples of "graffita arcaica tirrenica" (VARALDO, 1999) (fig. 11). According to analyses,

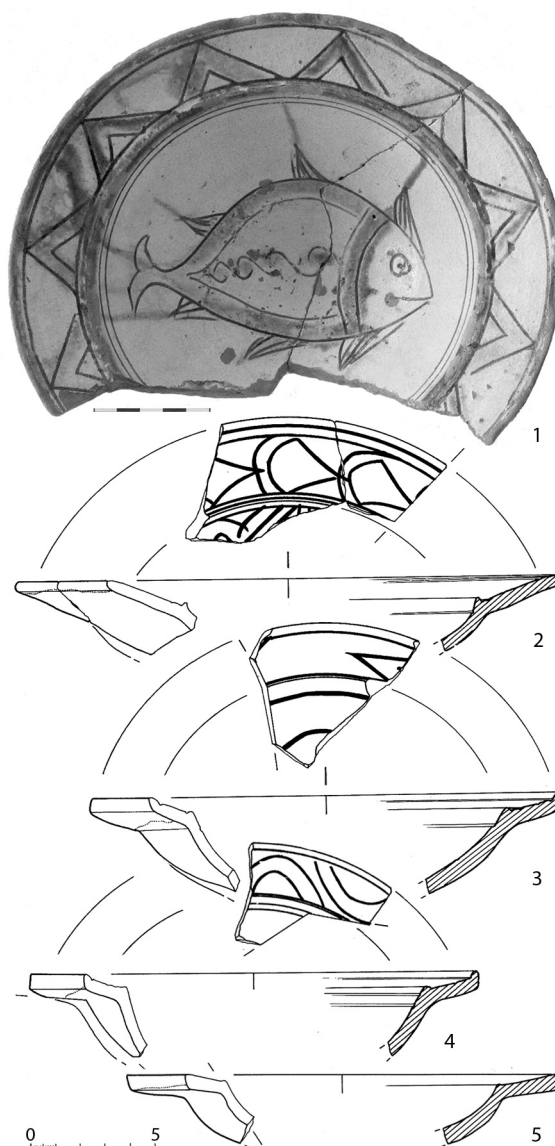


Figure 11: Graffita arcaica tirennica and Port Saint-Symeon Ware. Chemical analysis attributes nos. 3-4 to the production of Savona, while no. 2 may have come from the region of Antioch.

some were most probably manufactured in Savona (fig. 11.3-4) (CAPELLI, CABELLA & WAKSMAN, forthcoming).

Coming in the same forms, but with much higher contents in magnesium, chromium and nickel pointing to an origin in the region of Antioch, are found examples of “Port Saint-Symeon Ware” (fig. 11.2), which may have inspired “graffita arcaica tirrenica” both technically and typologically (RIAVEZ, 2001: 528-530).

Another production of the Levantine area is represented by cooking pots and frying pans from Beirut (fig. 12), whose presence further confirms the large diffusion of this ware in the Crusader period (WAKSMAN, 2002).

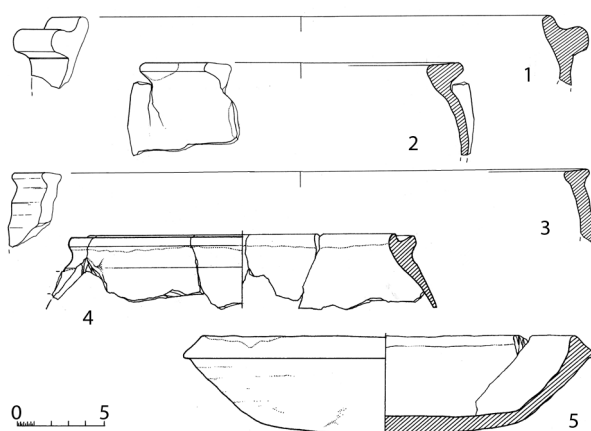


Figure 12: Levantine cooking pots and frying pans. Nos. 1-3 were identified by analysis as productions of Beirut.

Maybe from further East or from northern Anatolia is a group of wares stylistically related to the Seljuk world (fig. 13) (KRAMAROWSKIY, 2000: 243; FRANÇOIS, 2003: 320-322), but at present we lack comparative material to test this hypothesis.

Several other categories, especially of sgraffito wares, are represented in the shipwreck as well, but could not all be introduced here. The wares whose origin we could identify or which we could associate with documented types already show the diversity of a material which comes from a large area, from Italy to the Levant via the Byzantine world. Two categories are present in exceptional quan-

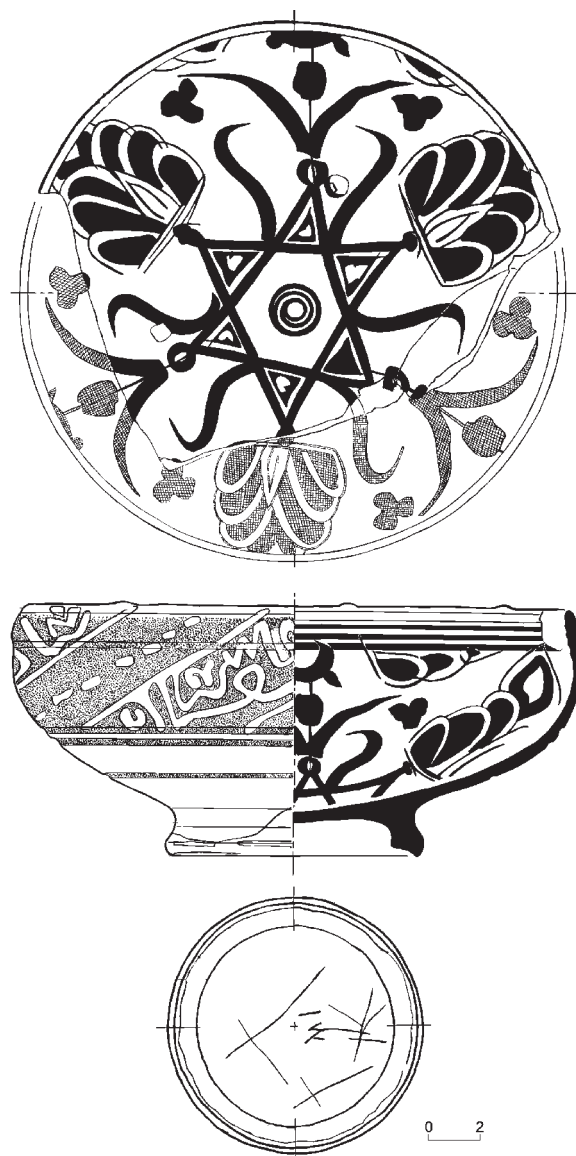


Figure 13: Ceramic stylistically related to the Seljuk world.

tities which identify them as cargo rather than as crew or passengers' belongings. The most frequent one, the so-called “Novy Svet group”, had a large diffusion especially in the Crimea, but its origin is as yet unknown. “Glazed White Wares” from the Constantinopolitan region constitute the second main type of glazed wares, which together with Günsenin 3 and 4 amphorae suggest a ceramics cargo of mainly Byzantine origin.

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Abbreviations of the journals:

BSA: The Annual of the British School at Athens

BCH: Bulletin de Correspondance Hellénique

RDAC: Report of the Department of Antiquities, Cyprus