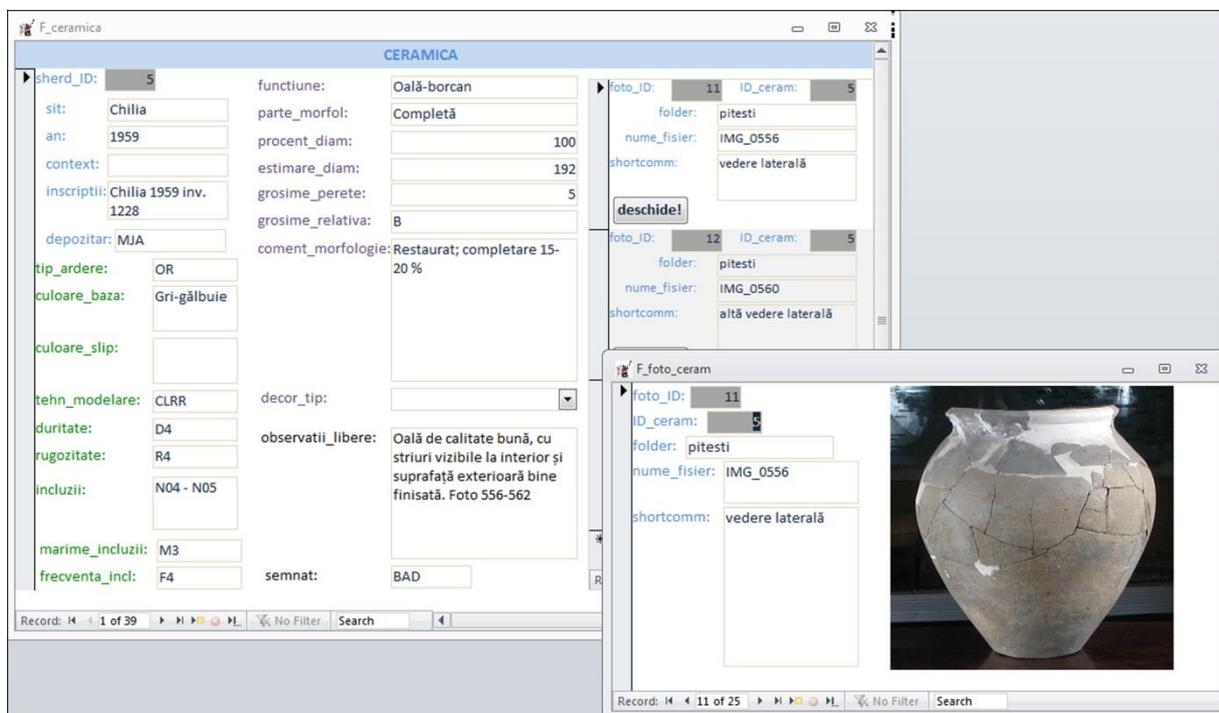


SECTION 5. SQL database for pottery gathered during field survey

The creation of database for the pottery is the result of the fact that most of the artefacts discovered on an archaeological site or during field surveys, are represented by ceramics. Given the high number of items we are expecting, the data acquisition and its processing in a data base is, nowadays, a current practice.

The acronym SQL comes from *Structured Query Language*, or a database system based on the separation between stocking data (*tables*) and interrogating it (*queries*), which are managed by an SQL server, and forms and reports, which are locally managed by the user. This architecture is recommended especially for remote cooperation, which is practically the case for any partnership project. We have chosen Microsoft SQL, already in use in the National Museum from 14 years.

A second advantage for using SQL language is the easiness with which such data can be reproduced within the Internet environment.



The screenshot displays a web-based data collection form titled "CERAMICA". The form is organized into several sections with input fields and text areas. The main form includes fields for "sherd_ID" (5), "sit" (Chilia), "an" (1959), "context", "inscriptii" (Chilia 1959 inv. 1228), "depozitar" (MJA), "tip_ardere" (OR), "culoare_baza" (Gri-gălbuie), "culoare_slip", "tehn_modelare" (CLRR), "duritate" (D4), "rugozitate" (R4), "incluzii" (N04 - N05), "marime_incluzii" (M3), "frecventa_incl" (F4), "functiune" (Oală-borcan), "parte_morfol" (Completă), "procent_diam" (100), "estimare_diam" (192), "grosime_perete" (5), "grosime_relativa" (B), "coment_morfologie" (Restaurat; completare 15-20%), "decor_tip", "observatii_libere" (Oală de calitate bună, cu striuri vizibile la interior și suprafață exterioară bine finisată. Foto 556-562), and "semnat" (BAD). A "deschide!" button is visible. To the right, a smaller form shows "foto_ID" (11), "ID_ceram" (5), "folder" (pitesti), "nume_fisier" (IMG_0556), and "shortcomm" (vedere laterală). Below this, another window titled "F_foto_ceram" displays a photograph of a pottery fragment with a "foto_ID" of 11, "ID_ceram" of 5, "folder" of "pitesti", "nume_fisier" of "IMG_0556", and "shortcomm" of "vedere laterală". The bottom of the form shows a record count of "1 of 39" and a search bar.

Figure 5.1. Aspect of the data collection form

The database is aimed both to the already existing ceramics in the museum collections, and for the archaeological material gathered on the field. The existing ceramics is useful as element of comparison, an action which is absolutely necessary, given the fact that the ceramics gathered during field survey is usually very fragmented and its cultural identification depends not only on the experience of the archaeologists with special qualifications in ceramology (two members of the present team have their doctoral dissertations in ceramics), but also on the reference lots that may be accessed.

Given the fragmentary character of the artefacts which will be recovered from the field, the chart we proposed (see Appendix 1) lays emphasis on manufacturing elements, like type of burning, colour, modelling technique, asperity etc.

In order to have a more facile statistical analysis, a pre-codification of the analysed elements was made (type of burning, colour, technique, asperity etc.), according to Appendix 2. The purpose of the pre-codification is to avoid a useless variation of the classification terms. The estimation of the inclusions frequency and of selection's quality is made using international standard schemas (see fig. 5.2).

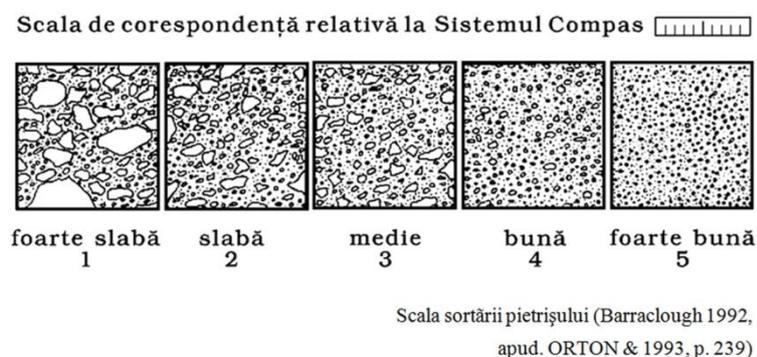


Figure 5.2. The sorting scale of the gravel, according to the amendment from TEODOR 2001 (subchapter 3.7, fig. 24).

The ceramic form allows the use of several photos for documenting a single artefact (so a „one-to-many” relation, as we can see in fig. 5.1). In order to avoid a difficult navigation of the data base, we kept from exposing snapshots in the very frame of the electronic chart itself, the photos being visualized „on request”, in a pop-up form. Actually the photos from the database are used only to easily identify the artefact, the operators having the possibility to visualize the photographs in their original size (approx. 3 MB each); surely the transfer of data on the internet depends on the quality of the connection (you can try: there is an excellent connection at the National Museum).

In the next stage, after designing and after gathering a large number of artefacts (especially complete items from the museum collections), the data base for ceramics will be available to the public. We wish to do this thing especially because the specific elements of Chilia-Militari culture are virtually unknown, inclusively within the archaeological professional body, the only documentation source available today being drawings or low quality black and white photos (or reproductions).

The necessity of a more detailed study about ceramic manufacturing is due from the observation – made some time ago, in autumn 2012 – that along the line of the former Roman frontier there are not only Roman artefacts, but also sherds which are usually ascribed to a „barbarian” civilisation, namely Chilia-Militari culture, allegedly „free Dacians”¹. In order to avoid a confusion between the Roman pottery and the one belonging to Chilia-Militari, a preliminary comparative study is necessary, which in fact we have already started. The attempt to quantify the ceramic „contribution” of the *Getae* from the Romanian Plain, along the Roman frontier, has the purpose to better understand the relations between the „conqueror” and the local population.

¹ The collocation, frequently used throughout the literature concerning the 3rd century Walachian archaeology, is extremely debatable, starting with the fact that the area is mainly a „Getae”, not „Dacian” one, and ending with a natural doubt concerning the adjective „free”, at least for the consistent reason that some of the key sites – including the eponym site Chilia – is west of the Roman *limes*. The literature describing this culture (especially BICHER 1984, 34-37) emphasizes the partially Romanized character of the local ceramics. Which is exactly why, in small amounts and with no archaeological context, it is relatively hard to discriminate it of the “authentic” Roman ceramics, henceforth the need of a detailed study about the manufacturing methods.