

## Crypt archaeology: preliminary investigations in the Basilian Church of the Holy Trinity of Vilnius, Lithuania

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Sir,  
Between 2015 and 2016, researchers from Vilnius University initiated a historical, archaeological, and anthropological investigation of a crypt in the Basilian Church of the Holy Trinity, built in the 16<sup>th</sup> century AD (1). With the consent of the Uniate Church and the Cultural Heritage Department of Lithuania, we

decided to organize the crypt to arrange the coffins in an orderly manner and carry out a study of the crypt and its contents. The investigated crypt lies under the middle part of the church and its entrance is located directly in front of the main altar (Fig. 1). Written sources mention the existence of two additional crypts used for the burial of laypeople and Basilian nuns



**Figure 1.** a) The gate leading to the Basilian Church of the Holy Trinity in Vilnius, Lithuania; b) one of the investigated mummies; c) an additional mummy from the crypt

(2). Prior to the current research, the crypt was filled with coffins, most of which were highly damaged; individual bones were also scattered among the coffins, together with fragments of bricks and other rubbish. At the entrance, there were some coffins placed in the crypt at a later stage, one atop the other. The crypt's central part was less full of coffins and there were many individual coffin planks. At the bottom of the room there were several rows of coffins, stowed in three to four levels, as well as individual human bones that were thrown into the crypt through an opening. Most of the individual bones were put in the crypt during reconstruction works and amelioration of the church area. The last time coffins were placed into the crypt was during the Soviet period when the State Institute of Civil Engineering established its scientific laboratories in the church. In some of the coffins located near the entrance, there were newspaper fragments dating to 1965. Due to the presence of signs of biodeterioration, the Lithuanian Art Museum Pranas Gudynas Restoration Center carried out microbiological analyses. The results showed that all samples were dominated by fungi of the species *Penicillium spinulosum* Thom, which subsist on decomposed wood, soil, and many other natural environments. These fungi, as well as those of the genera *Nigrospora* and *Chaetomium*, are active cellulose destroyers and may cause allergies and respiratory conditions (3). Hence, working in the crypt or on its artifacts required the use of disinfectants, masks, gloves, and other materials commonly required for conservation. Some of the coffins were decorated with monograms of Jesus or the Blessed Virgin Mary in both Latin and Greek, together with some other symbols such as the skull and bones. Part of the coffins were painted black and decorated with white crosses. In total, 71 coffins and more than 60 skeletons were explored. For identification of the remains, Latin and Polish inscriptions present on the coffins were of vital importance. The study found as many as 14 coffins with such records. The inscriptions showed that the subjects buried in them died between 1717 and 1788. This is why other coffins buried in the soil of the room and excavated in 2016 are believed to date to a period earlier than 1717. The artifacts recovered by the investigation were temporarily located in the Lithuanian Art Museum Pranas Gudynas Restoration Center un-

til future storage in a new space or in the restored crypt takes place. Anthropological research was conducted on 74 burials including 56 skeletons, 13 poorly mummified bodies, and five mummified bodies, which were preserved due to a process of natural desiccation (4). Natural mummification is indicated by the apparent lack of embalming incisions located in the chest or the abdomen of the surviving mummies. Only the subject located in coffin no. 7 shows that the abdomen and chest areas were filled with small woodchips, which may indicate a case of embalming. Investigations revealed that the majority of the buried subjects ( $n = 68$ ) were males, two were probable males, and two were females. Additionally, the remains of two of the subjects were highly damaged, hence sex estimation was not possible. Judging from the grave goods, most of the burials belonged to religious members of the Basilian Order, as confirmed by the presence of epitachelions and paramans. In the course of this research a large portion of artifacts were represented by coffin textiles and metal decorations, parts of liturgical wear, personal religious goods, and colored silk and brocade cloths. Shroud-like materials and clothing that were found in the coffins featured the presence of name initials or other special characters that provided additional information to identify the deceased and their social status. Unfortunately, clothing and clothing fragments were found in small numbers and footwear was not found at all. A separate cloth decorated with a string fragment showing a zigzag pattern indicates that during the Soviet period the remains from the other crypts reserved to the laity and the nuns were transferred to the central crypt. The investigation found eight Crucifix cast metal figurines and twelve crosses. Several coffins contained a number of small bags at the chest level of the deceased. In eight of the coffins, bricks that may be connected to a burial tradition of eastern monks were found (5). The brick placed beneath the head of the deceased can be interpreted as a sign of ascetic life or as an allusion to the Old Testament episode of the dream of Jacob in Bethel (Genesis 28, 10-22), symbolizing a connection between the deceased and the patriarch. In conclusion, the human remains buried in this crypt represent a valuable source of bio-historical information and are bound to yield important paleopathological data in the near future (6).

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## References

1. Račiūnaitė T. Vilniaus buvęs bazilijonų vienuolynas ir Švč. Trejybės bažnyčia. In: Janonienė R, Klajumienė D (sudarytojos), Lietuvos vienuolynai: vadovas. Vilnius: Vilniaus dailės akademijos leidykla; 1998: 276-81.
2. LVIA, fund 1178, inventory 1, file 374, sheet 58-58v, 62.
3. Pinheiro AC. Urban Settings. Fungi in Archives: a Double Concern. In: Viegas C, Pinheiro AC, Sabino R et al. (Eds), Environmental Mycology in Public Health. Fungi and Mycotoxin Risk Assessment and Management. London: Academic Press; 2016: 157-66.
4. Piombino-Mascali D, Gill-Frerking H, Beckett RG. The Taphonomy of Natural Mummies. In: Schotsmans EMJ, Márquez-Grant N, Forbes SL (Eds), Taphonomy of Human Remains: Forensic Analysis of the Dead and the Depositional Environment. Chichester: Wiley; 2017: 101-19.
5. Беляев ЛА. Каменные “подушки” монашеских погребений и их ветхозаветный прототип. Российская Археология 2005; 4: 171-5.
6. Aufderheide AC. The Scientific Study of Mummies. Cambridge: Cambridge University Press; 2003.

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