

**Commentary on:** Nuzzolese E, Borrini M. Forensic approach to an archaeological casework of “vampire” skeletal remains in Venice: odontological and anthropological prospectus. *J Forensic Sci* 2010; 55(6):1634–7.

Sir,

Although a year has elapsed since publication, we are writing this review concerning the paper “Forensic approach to an archaeological casework of ‘vampire’ skeleton remains in Venice: odontological and anthropological prospectus,” by Nuzzolese and Borrini (1). The reason for this reply is that in Italy the story of the “Vampire of Venice” is receiving extraordinary emphasis in the mass media, but despite the coverage given to the subject in journals, television, and a documentary by National Geographic, this is the only article published on the subject.

In our opinion, the argumentation presented in this paper suffers from many drawbacks and seems to lack adequate scientific evidence, not only in the conclusions but also in its initial assumption.

The first hypothesis assumed is the intentionality of the action (a brick inserted into the mouth). This deliberate action is insufficiently documented: there is no taphonomic description, nor do the figures show the state of the remains at the time of discovery, during excavations. It is only assumed that “the taphonomic profile rules out postmortem displacement of bones and a subsequent collapse of the object inside the oral cavity” and that “it is highly unlikely that pieces of bricks were part of the sediments.”

On the contrary, in the unique photograph of the archeological excavation found on the web (Figs 1 and 2), the strong postburial disturbances of the ID6 tomb and of other adjacent burials are evident, and it is possible to observe the presence of stones, bricks, and tiles in the ground near the skeleton. In addition, some of these stones seem to be very similar to the brick placed in the mouth of the ID6 individual. Therefore, no evidence suggests the intentionality of the action, and it cannot be excluded that the brick slid accidentally into the mouth, especially in that archeological context which was so strongly disturbed.

However, even assuming that this was an intentional action, other aspects seem inconsistent with what is observed in the images.

The authors described the skeleton as having been deposited in a covered space, but what did they intend by “covered space”? Was it covered with ground (decomposition in a *filled space*)? The exaggerated jaw-opening indicates a decomposition in an *empty space* (as, e.g., a coffin), as well as a slight rotation of the skull to the back, as can be observed in Fig. 1. However, this cannot be ascertained because the authors did not report the description of the joints of the cervical vertebrae.

The slight verticalization of the clavicle was interpreted as having been caused by a shroud, but this cannot be proved because this effect is usually caused by an obstacle providing some type of support (2), and is more likely to have been the wall of the coffin in which the body was laid. Not only is the presence of a shroud assumed on the basis of this weak evidence, but the shroud also had “a hole, which corresponded with the mouth” that made the gravediggers think that they were faced with a vampire “chewing her shroud”!

Apart from the difficulty (strong unlikelihood) of reconstructing the appearance of the shroud, at the time of the supposed ancient opening of the tomb, the ritual context was interpreted as being inspired by the so-called *nachzehrer*, the “shroud eaters” of the Germanic tradition. Unfortunately, belief in these supernatural

events related to the dead is not attested in Italy during the Modern Age, but appears to be tightly confined to the East German world (3).

Moreover, the authors write that “the body appeared as quite intact” in the eyes of the gravediggers, but there is no evidence of this very rare condition. The preserved connection of the temporomandibular joints, even after the opening of the mandible in *empty space*, is quite common; in fact, even if this is a labile joint, it frequently persists even in the case of secondary rotation of the head

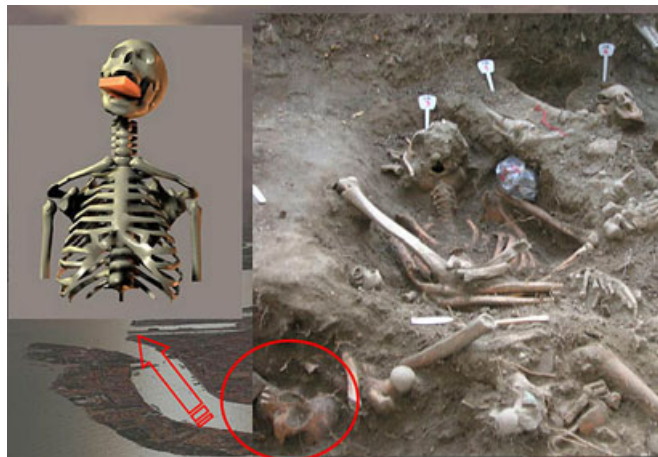


FIG. 1—Photograph of the archeological excavation of the ID6 individual. Bricks and tiles can be observed in the sediments around the tomb. Reproduced with permission from <http://www.antikitera.net/news.asp?ID=4002&TAG=Altro&page=33>.



FIG. 2—Photograph of the archeological excavation of the ID6 individual. The effects of decomposition in empty space are evident in the opened mandible and in some disturbed bones. Reproduced with permission from <http://www.misteroonline.com/la-donna-vampiro-di-venezia.php>



FIG. 3—Skeleton buried in the cemetery of Vecchiano (Pisa) showing the same taphonomic condition of the ID6 individual.

(2). Therefore, it cannot be assumed that the body was not skeletonized at the moment of insertion of the brick, only on the basis of the preserved connection of the temporo-mandibular joints.

The published image (Fig. 2 in Nuzzolese and Borrini paper [1]) shows a vertical brick, not touching the teeth, inside the mouth, and this seems to suggest that the brick had been inserted (or, simply, had accidentally fallen) after the jaw had assumed such a large opening, subsequent to the skeletonization of the body; otherwise the brick would have injured the teeth. Furthermore, a secondary infiltration of sediments into the mouth (after skeletonization) is suggested by the fact that the brick stands vertically, not leaning onto the teeth. The description does not report whether the brick had encroached on the mandibular ramus, the occipital bone, or cervical vertebrae.

During archeological excavations of medieval and postmedieval cemeteries, the opened jaw with preserved connection of the temporo-mandibular joints is frequently observed as an effect of decomposition in an empty space. This condition can be followed by a secondary oral cavity filling, even with stones or bricks, if these



FIG. 4—Skeleton buried in the Vecchio Lazzaretto cemetery with a femur in its mouth (photograph courtesy of Rigeade [4]).

are present in the surrounding sediment. We report an example from the medieval cemetery of Vecchiano, Pisa (Fig. 3). Therefore, the same event might have occurred in the Nuovo Lazzaretto burials; to support our more simple theory, we show an “eater of bones,” a skeleton found in the cemetery of Vecchio Lazzaretto in Venice with a similar archeological context (Fig. 4) (4).

Furthermore, the effects of reopening of the tomb should be documented through the accurate examination of stratigraphic sections produced by the action of the supposed gravediggers “Vampire Slayer.” However, the archeological data produced by the authors to support such an elaborated theory are very evanescent.

Finally, we wish to conclude with a very explicit sentence of Duday (2): “In such a case a distinction between an intentional action and an accident is not possible from the internal evidence of the burial. It is necessary to verify whether the same observation is repeated in other burials from the same chronological and cultural context” (p. 20). Therefore, we cannot draw any conclusions about the intentionality of the action, even less about the symbolic burial ritual.

## References

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