



Supplemental file: Statement on provenance of *Shenzianyuloma* holotype

Mark A. S. McMenamin1,*

1 Department of Geology and Geography, Mount Holyoke College, South Hadley, MA, USA * Correspondence: mmcmenam@mtholyoke.edu; Tel.: 413-538-2280

I acquired the holotype of *Shenzianyuloma* on eBay from a crystal and fossil vendor located in Lianyungang, Jiangsu, China. When I first saw its eBay listing, I realized that this was an important specimen at risk of being lost to science by vanishing into a private collection. I purchased the specimen on Feb. 21, 2019 for US \$99.00 plus \$10.00 shipping.

Although I have great respect for the laws governing Chinese fossil protection, particularly the 1982 Cultural Relics Protection Law and newer legislation that came into force in 2011, when what is now the *Shenzianyuloma* holotype came on the market on eBay, we (by 'we', I am referring to the global paleontological community) were faced with an emergency situation. This critical specimen was at great risk of vanishing into a private collection, and thus being lost (temporarily or permanently) to the scientific community. In my capacity as a professor of geology, I determined that this particular "specimen was special enough to warrant a rescue purchase (as an exception) in order to save a specimen for science by placing it within a public scientific collection" [1].

Although I understand that Chinese paleontologists have thereby been deprived of the opportunity to announce and name this particular specimen, the loss was probably going to occur anyway as the specimen most likely would have gone to a private collector had I not intervened. Furthermore, several benefits accrue to the Chinese paleontological community as a result of my taking steps to secure the specimen.

First, as can be seen in the reference list of the paper describing *Shenzianyuloma*, Chinese paleontologists receive numerous literature citations to their excellent published research. This enhances their reputation, both individually and collectively. Second, my description of a hitherto unknown type of vetulicolian is now freely available, and will assist in the interpretation of and study of both existing and future discoveries from Chengjiang and other Chinese Cambrian fossil localities. Third, the holotype of *Shenzianyuloma* may now be obtained for study from its repository in México (or studied by making a visit to the repository); this may provide new information critical for continued study of the Cambrian explosion.

In conclusion, I urge the Chinese paleontological community (and the rest of the global paleontological community as well) to view the description of *Shenzianyuloma* as a net gain rather than a loss. Indeed, once this fossil was offered for sale, it in a certain sense entered the public domain. Such fossils, "and the information they carry, belong to the international scientific community, in trust for everyone" [2] and should be preserved and made available for scientific study as a "part of a global heritage" [3].

References

[1] Liston, J. Fossil protection legislation: Chinese issues, global problems. *Biological Journal of the Linnean Society* **2014**, *113*, 694-706.

- [2] Martin, J.G. All legal and ethical? Museums and the international market in fossils. In *Museums and the Future of Collecting, Second Edition;* Knell, S.J., Ed.; Farhnam: Ashgate, United Kingdom, 2004, 155-164.
- [3] Taylor, M.A.; Harte, D.C. Palaeontological site conservation and the law in Britain. In *The Use and Conservation of Palaeontological Sites*; Crowther, P.R., Wimbeldon, W.A., Eds.; *Special Papers in Palaeontology* 1988, 40, 21-39.



© 2019 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).