

THE
FOSSIL
WEEK

ABSTRACT BOOK



5TH INTERNATIONAL
PALAEOONTOLOGICAL
CONGRESS



From July 9th to 13th, 2018
France



The forgotten fossils of the Cradle of Humankind: the example of the Plio-Pleistocene lizards of Bolt's Farm

Nonhlanhla Vilakazi*[†]¹, Lazarus Kgasi², Dominique Gommery^{1,2,3}, Frank S negas^{1,2,3}

1 University of South Africa (UNISA) – University of South Africa 1 Preller Street Muckleneuk Department of Anthropology and Archaeology Pretoria 0002, South Africa

2 Plio-Pleistocene Palaeontology Section, Ditsong National Museum of Natural History – Pretoria, South Africa

3 CR2P (MNHN-SU-CNRS), Paris - France

The Plio-Pleistocene sites of the Cradle of Humankind (UNESCO site), at Taung and also Makapansgat Limeworks, all in South Africa, have yielded a rich collection of macrofauna but also an abundance of microfauna. This has been validated by different publications on rodents, insectivores, elephant shrews and birds. Very few fossil remains of reptiles are also present but these animals are cited usually just in the faunal list at reptile level, except for the turtle and for the varanid lizard which has been discovered at Sterkfontein and Swartkrans. The extant small lizards (smaller than the varanid) in Southern Africa present a large diversity and are represented by 53 families and by 433 species. In Europe, there is a long tradition in the study of small reptiles for the Neogene and the Quaternary, which, until now, did not exist in South Africa. This is probably due to the access to comparative osteological collections (the comparative material is usually rarely completely prepared, making the study almost impossible). The excavation and preparation methods have probably also played a negative role in the collection of small fossil remains (small lizards included). The fossiliferous breccia blocks are prepared mechanically and not by acid as at the Ditsong National Museum of Natural History. Different loci of Bolt's Farm Cave System (BFCS), as BPB, and ACI yielded some lizard mandibles. The first comparative study suggests that these mandibles are characteristics of two different groups: the Agamas (Agamidae) and the Cordylids (Cordylidae). A more precise study permits us to suggest that the first one belongs to the sub-family of Agaminae, probably to the genus *Agama* or *Acanthocercus*, and the second to Crag lizards (pseudocordylids). The Crag lizards are rock specialists and need suitable crevices for protection from predators and climatic events. These lizards have some climatic demand. This study shows that it is possible to have the finest determination of the fossil lizards found at the Cradle of Humankind.

* Speaker

[†] Corresponding author: Nonny.Vilakazi@gmail.com