

PRELIMINARY STUDY AND FIRST PHOTOGRAPHS OF A SMALL SKULL OF HUMAN TYPE FOUND IN MOROCCO

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Summary : In July 2005, a small Primate skull was discovered in the desert of Tafilalet near Erfoud (Morocco). It was in the sand of a marble quarry where Devonian fossils were already found. Subsequently, the skull could be around 360 million years old. Characteristic features in the only 6.1 cm high and 3.9 cm broad fossil indicate the genus Homo : a globular forehead and hind skull, and an inferior position of the occipital hole under the cranium, which is typical for upright body posture. The fossil was called Homo alaouite, in homage to the Alaouite Dynasty.

On July 14th, 2005, I left my house with a car to explore a promising site, already famous for his fossils of *Orthoceras* and of *Goniatites*.



Fig. 1

They are groups of Cephalopod molluscs whose lines date back to 360 million years. All the area of Erfoud (Southern Morocco) is famous for its numerous "quarries of fossils", which conceal specimens of an incredible diversity. One finds there also fossils of very primitive fish, the Armoured Fish from the Devonian period (*Placodermes*).

The marbles and limestone of the desert of Tafilalet contain many marine fossils. The rock appears to be like a natural mosaic of fossils [**fig. 1**], of which some of big size, like *Orthoceras* (straight) and *Goniatites* (curled up). Grouped in colonies, which explains the current concentration of fossils, these carnivorous swimmers lived in the seas of average depth, during the Devonian period.

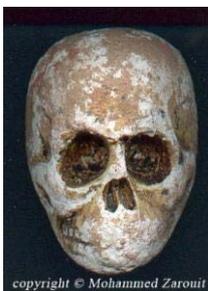


Fig. 2

This day, I was likely to discover a small skull of **Primate**, in a marble quarry, about 16 km far from Erfoud (desert of Tafilalet). The emotion was immense, because I knew that the ground did not have less than 360 million years. It was therefore the age of the little skull !

Buried in sand, in this open-sky marble quarry, where extraction had been suspended, the skull was alone [**fig. 2**]. There were no traces of a post-cranial skeleton.

It appeared to be a complete, well preserved and not deformed cranium, with a quite horizontal skull-base. The insertion of the occipital foramen is *under the cranium*.

Despite of its smallness, the cranium is that of an adult, if one refers to its unworn wisdom teeth [**cf. fig. 3 and 4**].

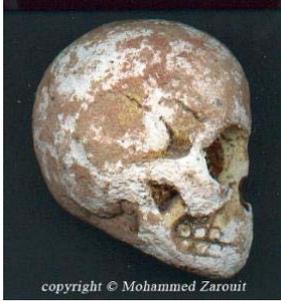


Fig. 3

The Tafilalet skull shows characteristics of the genus *Homo* :

- Position of the occipital foramen : centred head in balance.
- Jaws : short, parabolic.
- Symphyse angle : obtuse, in a back position.
- Forehead : high and round-shaped, like the hind skull.
- Dental formula: estimated at 32 teeth, inserted vertically.

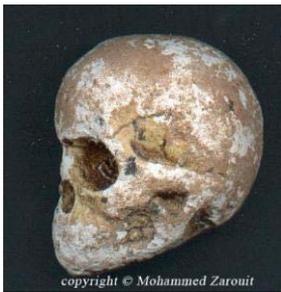


Fig. 4

The cranial parameters are :

- Circumference: 18.4 cm
- Facial angle: 81 °
- Height: LP = 3.9 cm
- Length: NQ = 6.1 cm
- Height/Length ratio: $\pm 0,639$

I have the honor to give to this specimen the scientific name of *Homo alaouite*, in homage to the Alaouite dynasty, whose **Tafilalet**, the place of the discovery, is the cradle.

For complementary and more precise details on the small skull of Tafilalet, please contact me at this electronic address : Paleo_maroc@yahoo.fr

In Tafilalet, November 28th, 2005



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