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# Morphological variability of the brain in Asian *Homo erectus*

Dominique Grimaud-Hervé<sup>\*†1</sup>, Florent Detroit<sup>2</sup>, Lou Albessard<sup>3</sup>, Harry Widianto<sup>4</sup>, and Xiujie Wu<sup>5</sup>

<sup>1</sup>UMR 7194 - HNHP - Département Homme et Environnement (MNHN) – Museum National d’Histoire Naturelle - MNHN (FRANCE) – Musée de l’Homme, Place du Trocadéro, 75016 Paris, France

<sup>2</sup>UMR 7194 - HNHP - Département Homme et Environnement (MNHN) (MNHN) – Musée National d’Histoire Naturelle - MNHN (France) – Musée de l’Homme, Place du Trocadéro, 75016 Paris, France

<sup>3</sup>UMR 7194 - HNHP - Département Homme et Environnement (MNHN) (MNHN) – Museum National d’Histoire Naturelle - MNHN (FRANCE) – Musée de l’Homme, Place du Trocadéro, 75016 Paris, France

<sup>4</sup>Ministry of Education and Culture, Jakarta – Ministry of Education and Culture, Jakarta, Indonésie

<sup>5</sup>IVPP - Chinese Academy of Science – 142 Xi-Zhi-Men-Wai Beijing 100044, Chine

## Résumé

Based on the latest discoveries of the most ancient human fossil remains from the first "out of Africa", the limits of the morphological variability of *Homo habilis*, *Homo rudolfensis*, *Homo ergaster* and *Homo erectus* seem unstable and variable. So much so that Lordkipanidze and colleagues prefer include all the hominines from Africa, Georgia and Asia (both insular and continental) in a same large group that they call *Homo erectus s.l.*

The re-examination of an important anatomical element, which is the brain, on a large sample of *Homo erectus* coming from Asia continental from the site of Lower Cave of Zhoukoudian (Zkd II, III, V, X, XI and XII), Hexian (Hexian 1) and Nanjing cave (Nanjing 1) will be fruitful to try to elaborate a list of taxonomically informative endocranial features. The results of an exhaustive morphological description of the encephalic reliefs, the vascular imprints of the cranial sinuses and the middle meningeal system will be compared with hominines from other geographical regions such as Insular Asia and particularly with the island of Java. The comparative sample comprises the human fossil specimens from Trinil (Tr2), from the Kabuh layers of the Sangiran dome (Sangiran 2, 10, 12, 17, 38) and the more recent ones from the sites of Sambungmacan (Sb1, Sb3) and Ngandong (Ng1, 2, 4, 5, 6, 7, 8, 9, 10, 11 and 12) sites.

The morphological results will be completed by a morphometric analysis taking into account the major endocranial measurements. These first results obtained by the comparison between these two geographical areas will be very informative concerning the limits of the morphometrical variability of this large *Homo erectus* sample.

**Mots-Clés:** endocast *Homo erectus* Asia morphological variability

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\*Intervenant

†Auteur correspondant: dominique.grimaud-herve@mnhn.fr