
Hominin diversity and occlusal pattern variations: New insights from Early Pleistocene discoveries in the Shungura Formation (Ethiopia)

*Diversité des hominines et variation du patron occlusal : nouvelles perspectives
des découvertes du Pléistocène inférieur de la Formation de Shungura (Éthiopie)*

Arthur Thiebaut, Franck Guy, Leslea Hlusko et Jean-Renaud Boisserie



Édition électronique

URL : <https://journals.openedition.org/bmsap/13646>

ISSN : 1777-5469

Éditeur

Société d'Anthropologie de Paris

Référence électronique

Arthur Thiebaut, Franck Guy, Leslea Hlusko et Jean-Renaud Boisserie, « Hominin diversity and occlusal pattern variations: New insights from Early Pleistocene discoveries in the Shungura Formation (Ethiopia) », *Bulletins et mémoires de la Société d'Anthropologie de Paris* [En ligne], 36(S) | 2024, mis en ligne le 23 décembre 2023, consulté le 07 janvier 2024. URL : <http://journals.openedition.org/bmsap/13646>

Ce document a été généré automatiquement le 7 janvier 2024.



Le texte seul est utilisable sous licence CC BY-NC-ND 4.0. Les autres éléments (illustrations, fichiers annexes importés) sont « Tous droits réservés », sauf mention contraire.

Hominin diversity and occlusal pattern variations: New insights from Early Pleistocene discoveries in the Shungura Formation (Ethiopia)

Diversité des hominines et variation du patron occlusal : nouvelles perspectives des découvertes du Pléistocène inférieur de la Formation de Shungura (Éthiopie)

Arthur Thiebaut, Franck Guy, Leslea Hlusko et Jean-Renaud Boisserie

- 1 Field missions conducted in the Shungura formation (Ethiopia) by the International Omo Research Expedition (IORE, 1967-1974) and the Omo Group Research Expedition (OGRE, 2006 to present) have yielded numerous fossil remains, including hundreds of hominin teeth. The most recent members, from H to L (1.89 to 1.09 Ma), deposited during the Early Pleistocene, have been little surveyed by the IORE. This time interval, documents the appearance of more derived species of *Homo*, such as *H. ergaster/erectus*, as well as the last occurrence of *Paranthropus boisei*. This study proposes the description of an unpublished sample of hominin teeth, discovered by the OGRE, providing new insights into the diversity and morphological variations of Early Pleistocene hominins from Shungura. Both qualitative and quantitative analyses were conducted for taxonomic attribution, including tooth size, occlusal patterns, enamel thickness and discrete anatomical characters. The results support the hypothesis of the presence of *Homo cf. ergaster* in the Omo Valley during the Early Pleistocene and confirm the occurrence of *Paranthropus boisei* in levels in which it had never been described previously in the Turkana Basin. Moreover, new methods of occlusal pattern analysis provided quantitative evidence of an enlargement of the occlusal basin in the genus *Paranthropus*, relative to a narrowing occlusal basin in the genus *Homo*. We anticipate

our results to be a starting point for more detailed analysis of the occlusal pattern variation in Eastern African hominins.

AUTEURS

ARTHUR THIEBAUT

PALEVOPRIM UMR 7262, CNRS, Université de Poitiers, Poitiers, France ; artthiebaut[at]gmail.com

FRANCK GUY

PALEVOPRIM UMR 7262, CNRS, Université de Poitiers, Poitiers, France

LESLEA HLUSKO

Centro Nacional de Investigación sobre la Evolución Humana (CENIEH), Burgos, Spain

JEAN-RENAUD BOISSERIE

PALEVOPRIM UMR 7262, CNRS, Université de Poitiers, Poitiers, France ; French Centre for Ethiopian Studies, CNRS, Ministry of Europe and Foreign Affairs, Addis Ababa, Ethiopia