

**NEW RECONSTRUCTION OF THE SKULL OF *NEMEGTOSAURUS*  
*MONGOLIENSIS*, NOWINSKI, 1971 (SAUROPODA)<sup>†</sup>**

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*Nemegtosaurus mongoliensis* (Nowinski 1971) commonly has been included within the diplodocids by numerous authors, due to an erroneous reconstruction of the cranium in the original description. The cranium of *Nemegtosaurus* has suffered a posterolateral postmortem deformation. Various features demonstrate that this species has a skull of primitive construction similar to *Brachiosaurus* and *Camarasaurus*, among them: (1) length of the mandible is nearly as long as the skull. (2) Presence of a surangular foramen. (3) Absence of a preantorbital fenestra. (4) Dorsal border of the maxilla and premaxilla showing a flat and slightly concave surface forming the floor of the external naris. (5) Presence of a coronoid. (6) Premaxilla and maxilla relatively tall and robust in lateral view. (7) Basipterygoid processes directed ventrally. On the other hand, two characters are shared with *Brachiosaurus*-type skulls: (1) absence of a retroarticular process. (2) Base of the ascending process of the maxilla retracted posteriorly.

Finally, the postmortem deformation has produced the displacement of the quadrate, quadratojugal, squamosal, and possibly the basioccipital; in this manner the original description shows that the quadratojugal contacts the middle portion of the quadrate, not its distal portion, and that the articular condyle of the quadrate contacts the middle portion of the surangular rather than the articular. Correcting the displacement of the cited bones anteriorly in their correct position, and with the evidence obtained in the analysis of all characters cited before, we propose that *Nemegtosaurus* had a brachiosaurid-type skull, not a diplodocid-type skull.

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<sup>†</sup> original reference: Calvo, J. O., L. Salgado, and R. A. Coria. 1998. Nueva reconstrucción del cráneo de *Nemegtosaurus mongoliensis*, Nowinski, 1971 (Sauropoda). Acta geologica lilloana 18 (1): 156-157.