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New teeth of allotherian mammals from the English Bathonian, including the earliest multituberculates

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New material and additional morphological details of a rare and phylogenetically significant large fossil snake, *Wonambi naracoortensis* Smith, 1976, are described from Pleistocene and Pliocene cave deposits in southern South Australia. The new data refute some previous interpretations of the morphology of this species, and have implications for the phylogenetic position of *Wonambi* relative to extant snakes and other fossils, including other Madtsoiidae. The nature of contacts among palatal, braincase, snout, and mandibular elements imply similar functional attributes to those of extant anilioid snakes: maxillae from multiple individuals show corrugated contact surfaces for the prefrontal, implying a tight suture; structures on the anterior and medial surfaces of the palatine choanal process are interpreted as forming extensive contacts with the vomer and parasphenoid; and the distinctly bounded facets on the basipterygoid processes and pterygoid imply little or no capacity for anteroposterior sliding of the palatopterygoid arch, hence absence of the macrostomatan 'pterygoid walk'. On the frontal, interolfactory pillars were either absent or very slender, and a deep, sculptured contact surface for the nasal implies a prokinetic joint was also absent. Margins of the frontal and parietal indicate broad entry of the sphenoid into the ophthalmic fenestra, as in Dinilysia. Similarity of elements and features of the braincase (trigeminal foramen, ear region, and basipterygoid processes) with both lizards and extant snakes show that differences between snakes and other squamates have sometimes been overstated. The case for macrostomatan affinities of *Wonambi* is not supported by new evidence.

Key words: Allotheria, “Haramiyida”, Multituberculata, dentition, occlusion, tooth cusps, Jurassic.

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