

Comment (Case 3847) – Authors’ reply to opposition to proposed conservation of *Simopithecus oswaldi* Andrews, 1916 by reversal of precedence with *Cynocephalus atlanticus* Thomas, 1884.

(see BZN 78: 99–106 [Case]; BZN 79: 53–54 [Comment])

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Delson et al. (2021) proposed to conserve *Simopithecus oswaldi* Andrews, 1916 (currently *Theropithecus oswaldi*) by reversal of precedence with *Cynocephalus atlanticus* Thomas, 1884 (currently *Theropithecus atlanticus*), on the basis that the latter name has been used only about 12 times since Alemseged & Geraads (1998) suggested that it be employed as a distinct species for North African fossils, while the former name is in widespread usage. *Theropithecus oswaldi* has been discussed in over 75 publications since 1998 and is the name assigned to most Pliocene and Pleistocene fossil samples, often with subdivision into chrono-geographic subspecies across Africa and into Eurasia. If these two species were considered synonymous, leading to *Theropithecus atlanticus* becoming the senior synonym for these many fossil samples and subspecies, prevailing usage would be upset. Moreover, there is no consensus about this synonymy, so that authors might

use different nomina for these extensive samples from sub-Saharan Africa because they disagree about the status of a single isolated tooth. Instead, the application proposed to give conditional precedence to the later name, which would still permit the use of *Theropithecus atlanticus* as a distinct species or a subspecies of *Theropithecus oswaldi*.

Geraads & Alemseged (2022) have argued against this action on two grounds. First, they support absolute priority and urge against the reversal of precedence, arguing that prevailing usage is not a sufficient criterion for dismissal of priority and suggesting that paleontology has seen many changes, so that this minor one would not be problematic. Second, they suggest that the reason for the rare usage of the name *Theropithecus atlanticus* depends on an under-representation of northern African literature and specimens in paleontological dialogue. By comparison, specimens from eastern and southern Africa are more complete and publications more numerous, so that the Kenya-based name *Theropithecus oswaldi* became more common.

We reject both of their arguments. With regard to their first argument, prevailing usage is a sufficient criterion for reversing absolute priority, and Article 23.9 is designed to permit the reversal of precedence under specific conditions. If the senior synonym has not been used at all after 1899 and the junior synonym is in common usage, precedence can be reversed without recourse to the Commission. If, as in the present case, the senior synonym has been rarely used compared to the junior synonym, and it is thought that “the use of the older synonym would threaten stability or universality or cause confusion” (Article 23.9.3), the Commission may be petitioned. Priority (or precedence) is of course an important element of stability, which is a primary aim of the Code that overrides pure priority. In a case like this, when the senior nomen has only been rarely used, by a limited number of authors, often in a discussion about relative precedence; and the junior nomen is in widespread usage by many authors across a great geographical and temporal range, strict adherence to priority would result in significant disturbance of settled nomenclature and lead to confusion.

Geraads & Alemseged wrote “The proposed reversal of precedence by Delson et al. of the name *Theropithecus atlanticus* (Thomas, 1884) in favor of *T. oswaldi* is conditioned by the synonymy of these names, but these authors mention that they favor it (‘even if it were shown [as seems likely] to be conspecific with *Simopithecus oswaldi*’). We fear that the confusion created by this conditional rejection will in fact result in an uncritical acceptance of this subjective synonymy, based upon an ICZN nomenclatural decision that does not deal with it, rather than objective anatomical comparisons. If indeed, synonymy is substantiated by morphological evidence then *T. atlanticus* has priority over *T. oswaldi* per the ICZN rules.” Unfortunately, this phrasing is faulty. Our proposed reversal of precedence is indeed based on the possibility of synonymy, and (not “but”) we expect that conspecificity is the case (although we cannot yet be certain). That is why we propose conditional reversal. We do not agree that such a ruling by the Commission would lead paleontologists to accept the synonymy without sufficient morphological analysis, but it might in fact lead to more analyses of the taxonomic (as opposed to nomenclatural) problem. If, in the future, some colleagues consider that *T. atlanticus* refers to the same species as *T. oswaldi*, while others do not, these different names could be applied to the same species or subspecies, leading to significant confusion; our proposal would prevent such confusion. Once again, if the two nomina are considered to refer to biologically distinct species, the proposal would have no impact.

We also consider that Geraads & Alemseged’s second argument, that northern African

fossils and names were given less consideration, is not relevant to the case at hand. As they note, the publication by Thomas (1884) proposed a number of species names which are still in use, because they were based on more distinct specimens. *Cynocephalus atlanticus* was based on an isolated tooth thought to belong to a variety of “savannah baboon” (currently *Papio*), and it was not recognized as pertinent to *Theropithecus* until nearly 100 years after its publication. Hill (1970) mentioned that the tooth might be allocated to “Theropithecini” without mentioning the genus. Delson (1973) reported that it was a *Theropithecus* and then he (Delson, 1974) included *Cynocephalus atlanticus* under the heading *Theropithecus* sp. Later authors accepted this identification. In the meantime, many more complete specimens, including crania, mandibles and other elements were described from southern and especially eastern Africa, mostly considered as linked to *Simopithecus oswaldi* Andrews, 1916. This has nothing to do with a bias against northern African material or publications, just the stochastic processes of paleontological discovery. None of this is relevant to the proposal to conditionally reverse precedence in this case.

Geraads & Alemseged (2022) also noted that the annotated bibliography of African fossil mammals before 1950 (Hopwood and Hollyfield, 1954) included Thomas (1884) and thus mentioned *Cynocephalus atlanticus*. We extended our search through Google Scholar online finding about 40 listings for that name after 1998, including those we had already mentioned and at least 12 more (once duplicates and errors were removed). By comparison, a search for *Theropithecus oswaldi* since 1998 yielded over 500 citations, at least 10 times that of the senior nomen.

Therefore, we continue to support our proposal for conditional reversal of precedence, without modification.

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