



Proposed New Article on the Date and Authorship of Names Originally Published with Incomplete Protologues

KEVIN DE QUEIROZ¹, PHILIP D. CANTINO², NICO CELLINESE³

¹Department of Vertebrate Zoology, National Museum of Natural History, Smithsonian Institution, MRC 162, Washington, DC 20560, USA. dequeirozk@si.edu; <https://orcid.org/0000-0001-9165-3522>

²Department of Environmental and Plant Biology, Ohio University, Athens, OH 45701, USA.

cantino@ohio.edu; <https://orcid.org/0000-0002-6673-8759>

³University of Florida, Florida Museum of Natural History, 1659 Museum Rd., Gainesville, FL 32611.

ncellinese@flmnh.ufl.edu; <https://orcid.org/0000-0002-7157-9414>

Now that the *International Code of Phylogenetic Nomenclature (PhyloCode)* (Cantino and de Queiroz 2020) has been officially launched, works are appearing that attempt to establish taxon names according to the rules of that code. Because of our close involvement with the operation of that system (NC is the Chair of the Registration Committee and point person for RegNum, the registration database, and in this capacity, she consults frequently with PDC and KdQ, the primary authors of the *PhyloCode*), we have become aware of cases in which authors have proposed phylogenetically defined names that satisfy the requirements for publication but not those for establishment. In such cases, for the requirements for establishment to be satisfied, the protologues must either be corrected with published errata or republished in a way that satisfies the requirements. Moreover, this situation naturally raises the question as to whether the authorship and date of the names are those of the original publication in which the names were proposed or those of the subsequently published errata or full protologues in which all the requirements for establishment were satisfied. The current version of the *PhyloCode* does not provide an answer.

We propose that for converted clade names (Art. 6.3), the nominal author(s) (Art. 19.1) and date should be those of the original publication in which the name was proposed (not the one in which it was first defined phylogenetically), but the definitional author(s) (Art. 19.1) and date should be those of the subsequent publication in which all the requirements for establishment are satisfied. For new clade names (Art. 9.1), we propose that both the nominal author(s) and date and the definitional author(s) and date should be those of the subsequent publication in which all the requirements for establishment are satisfied. Thus, when an author(s) republishes a protologue for what was considered a new clade name in the original publication that failed to satisfy all requirements for establishment, the name is *not* to be treated as a preexisting name. Before the requirements are satisfied, the name has no status under the *PhyloCode* and is thus analogous to a *nomen nudum* under the rank-based codes. There is, however, an exception. If a new name was established under a rank-based code in the same publication in which it was first proposed and provided with a phylogenetic definition (but failed to satisfy all the requirements for establishment under the *PhyloCode*), then it is to be treated as a preexisting name and therefore a converted clade name when it is republished to satisfy the requirements for establishment. For such names, the nominal author(s) and date should be those of the publication in which the name was first proposed (and established under one of the rank-based codes), but the definitional author(s) and date should be those of the subsequent publication in which all the requirements for establishment are satisfied.

It should be noted that names that were originally proposed as phylogenetically defined names prior to the starting date of the *PhyloCode* (and thus are not considered established) are also considered preexisting names. The reason that phylogenetically defined names published (but not established) after the starting date of the *PhyloCode* are not considered preexisting is to discourage authors from proposing new names, for which they would be considered the nominal authors, without following the rules for establishment, which could otherwise be done unethically (e.g., to claim authorship of many names).

To implement the decisions above, we propose that the following new article be added to the *PhyloCode* to address such situations.

New Art. 7.4. A new clade name that is phylogenetically defined in a publication after the starting date of this code but fails to satisfy one or more of the requirements for establishment has no status under this code. Such a name may be established in a subsequent publication with the same or a different definition, at which time it is considered a new name rather than a preexisting name (but see Note 7.4.1), with the date of establishment and (both nominal and definitional) authorship those of the publication (including errata and corrigenda) in which the requirements for establishment are fully satisfied. A preexisting name that is phylogenetically defined in a publication after the starting date of this code but fails to satisfy one or more of the requirements for establishment remains a preexisting name under this code. Such a name may be established in a subsequent publication with the same or a different definition, at which time it is considered a converted clade name with the date of establishment and definitional (but not nominal) authorship those of the publication (including errata and corrigenda) in which the requirements for establishment are fully satisfied.

New Note 7.4.1. A new clade name that is established under a rank-based code (e.g., the botanical or the zoological code) in the same publication in which it is first provided with a phylogenetic definition, but fails to satisfy all the requirements for establishment under the *PhyloCode*, is to be treated as a preexisting name (Art. 6.2(a)) when republished for the purpose of establishment.

New Example 1. Johnson *et al.* (2020) proposed phylogenetic definitions for the names of several clades of extinct crocodylomorphs (pan-crocodylians) but did not register the names or cite the registration numbers in the protologues, as required by this code (Arts. 8, 7.2). After registering several of those names, Johnson *et al.* (2022) subsequently republished modified versions of the protologues including the registration numbers. Therefore, the authorship and date of publication (establishment) of the names in question are Johnson *et al.* (2022), not Johnson *et al.* (2020). In addition to clearly preexisting names such as *Teleosauridae* Geoffroy Saint-Hilaire 1831, even the new names *Machimosauridae* and *Machimosaurinae* proposed by Johnson *et al.* (2020) qualified as preexisting and thus were treated as converted clade names when they were properly established by Johnson *et al.* (2022), because they had been established (made available) under the zoological code in the earlier publication (Johnson *et al.* 2020) in which they were first defined phylogenetically but failed to satisfy all the requirements for establishment under this code.

With the addition of the above new article, other modifications are appropriate. Thus, we also propose that Note 6.2.1 be modified as follows (additions in **bold**):

Note 6.2.1. Names that were phylogenetically defined in publications (Art. 4) prior to the starting date of this code (**30 April 2020**; Art. 7.1) and are not “legitimate” (*ICNAFP*, *ICNP*), “potentially valid” (*ICZN*), or “valid” (*ICVCN*) are considered to be preexisting names after the starting date of this code. They fall under Article 6.2 (b) because they are in use but were not governed by any code at the time they were published. **By contrast, new clade names that are phylogenetically defined in publications after the starting date of this code but fail to satisfy one or more of the requirements for establishment have no status under this code but may be established subsequently (Art. 7.4).**

And we propose the following addition to Article 19 (authorship):

New Note 19.1.4. For determining authorship of clade names that were phylogenetically defined after the starting date of this code and failed to satisfy one or more of the requirements for establishment but were established subsequently, see Art. 7.4.

Literature Cited

- Cantino, P. D., and K. de Queiroz. 2020. *International Code of Phylogenetic Nomenclature (PhyloCode)*. CRC Press, Boca Raton, Florida.
<https://doi.org/10.1201/9780429446320>
- Johnson, M. M., M. T. Young, and S. L. Brusatte. 2020. The phylogenetics of *Teleosauroidea* (*Crocodylomorpha*, *Thalattosuchia*) and implications for their ecology and evolution. *PeerJ* 8:e9808.
<https://doi.org/10.7717/peerj.9808>
- Johnson, M. M., M. T. Young, A. Brignon, and S. L. Brusatte. 2022. Addition to “The phylogenetics of *Teleosauroidea* (*Crocodylomorpha*, *Thalattosuchia*) and implications for their ecology and evolution.” *Bulletin of Phylogenetic Nomenclature* 001 (1):001–007.
<https://doi.org/10.11646/bpn.1.1.1>