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### The different meanings of the nomen **Amphibia**: a correction

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I recently published a survey of the different meanings of the nomen **AMPHIBIA** in taxonomic publications since 1758 (Dubois 2015). The ‘meaning’ of a nomen in zoological nomenclature depends on the system used for the allocation of nomina to taxa, and several such systems can be used (see e.g. Dubois 2006*a–b*). In the paper at stake, I used the ‘orostensional nomenclatural system’ (OONS) for class-series nomenclature. In this system, a class-series nomen—i.e., a nomen above the rank superfamily, therefore one whose taxonomic allocation is not regulated by the *Code* (Anonymous 1999)—applies, in a given classification, to the most inclusive class-series taxon that includes all its originally expressly included nominal genera (conucleogenera) and excludes all its originally expressly excluded nominal genera (alienogenera)—if such a taxon indeed exists in this classification. However, if one at least of the alienogenera is now part of the most inclusive taxon including all the conucleogenera, the nomen cannot be taxonomically allocated and qualifies as an anaptonym in the classification used as reference (Dubois 2006*a–b*, 2011), although it may not be so under another taxonomic frame.

Under the OONS system of taxonomic allocation of nomina, I identified six different meanings of the term **AMPHIBIA** in the post-1757 scientific literature. Three of them, that I designated as (A1), (A2) and (A4), are anaptonyms in all recent classifications of vertebrates and do not need to be discussed further here. Three meanings remain, which correspond to three different taxa recognised as valid in different classifications: (A5) for a taxon including only the frogs and salamanders but excluding the cecilians; (A6) for the taxon, sometimes designated as ‘crown-taxon **AMPHIBIA**’, including the frogs, salamanders and cecilians but excluding the all-fossil groups of anamniote tetrapods traditionally referred to the amphibians (lepospondyls, temnospondyls, etc.); and (A3) for the taxon including all recent anamniote tetrapods and excluding all amniotes. In phylogenetic terms, the taxon (A3), sometimes designated as ‘total-taxon **AMPHIBIA**’, should be defined, following Gauthier *et al.* (1989) and Laurin (1998), as the anamniote tetrapods, both recent and fossil, that share a more recent common ancestor with the recent amphibians (frogs, salamanders and cecilians) than with recent amniotes and their extinct relatives (a taxon often designated as **REPTILIOMORPHA**)—i.e., in a phylogenetic tree, the crown-group as well as all branches of the tree back to the split with the closest branch to have living members (the recent amniotes), but excluding this node. There are currently several competing hypotheses (known as the ‘temnospondyl’, ‘lepospondyl’ and ‘polyphyletic’ hypotheses) regarding the phylogenetic relationships among early tetrapods (recent reviews e.g. in Sigurdson & Green 2011 and Marjanović & Laurin 2013), so that the fossil content of **AMPHIBIA** under this definition is still controversial, but under most hypotheses several groups of anamniote tetrapods such as *Diadectes* and related genera are now thought to be more closely related to amniotes than to the frogs, salamanders and cecilians, and are therefore not members of the **AMPHIBIA** although they have long been referred to this taxon.

In the referred paper, I followed Gill (1910) in crediting the first use of the nomen **AMPHIBIA** under the meaning (A3) to Latreille (1806). However, this interpretation was an anachronism and it must be corrected.

The problem stems from the fact that Latreille (1806: 2–3), although providing a general classification of the animal kingdom (“*Distributio naturalis classium animalium*”) gave a list of classes with their diagnoses, but did not state their contents (in terms of orders, genera or species). In his ‘*Sectio prima*’ of the animal kingdom, which he termed ‘*Animalia Vertebrata*’, he recognised two divisions according to the structure of the heart (‘*cor biloculare*’ or ‘*cor uniloculare*’) and the fact that the blood was ‘warm’ or ‘cold’ (‘*sanguine calido*’ or ‘*sanguine frigido*’). In the group of vertebrates defined as having a single ventricle and cold blood, he distinguished three classes, diagnosed solely by their organs of respiration: ‘*branchiae*’ for the **PISCES**, ‘*pulmones et branchiae*’ for the **AMPHIBIA** and ‘*pulmones*’ for the **REPTILIA**. The nomina of these taxa were therefore defined intensionally, not ostensionally.