



## Viewing the *Draft BioCode* as a protistologist and museum employee

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### Abstract

The initiative resulting in a revived *Draft BioCode* (DBC) is highly welcomed, to a lesser extent the acontextual, ahistorical and disembodied presentation of the latter. Examples from ciliatology show that we not only face a taxonomic gap combined with a biodiversity crisis but also a “nomenclature awareness” gap. Because of many discrepancies between announced and actually deposited type material in protistology, a four-eyes principle is suggested, viz. registration of type specimen(s) should be performed or countersigned by the curator(s) of the relevant institution(s), preferably natural history museums. Pseudonomenclature may be characterized by a loose series of articles covering more or less ranks viewed from a top-down perspective, a misleading, discordant terminology (e.g. concerning diagnosis, circumscription, protologue, sorts of types) and a stability concept flawed by the absence of clear guidelines concerning “prevailing usage” or “established custom”. Bionomenclature-in-the-making resulting in a *de facto* unified *BioCode* would be enhanced by a critical mass of taxonomists defending a clear coherent plan favouring a bottom-up approach, i.e., most important are concrete specimens including their (micro)habitats, a fine-tuned, consistent terminology, and stringent, automatic rules.

**Key words:** *BioCode*, “nomenclature awareness” gap, automatic rules vs. unregulated “custom”, material vs. immaterial evidence, terminology, bionomenclature-in-the-making

Responsible for invertebrates (except insects) and as a trained protistologist (ciliates and testate amoebae) in an “all-purpose” museum, I am confronted with the divergence of worldviews and disciplines, both in universities and particularly natural history museums. As such I belong to “those that are wanting for a complete coverage of all groups of organisms” (*Draft BioCode*, shortly DBC, by Greuter *et al.* 2011: 44). Faced with interdisciplinary exhibitions, e.g. on evolution, I learned that most people effectively resist (bio)diversity exemplified by (though a very restricted range of) scientific names and often totally neglect how knowledge is generated. Investigations of the delight and burden of naming ciliates (Aesch 2001, 2003, 2004, 2008, in preparation) led me to the conclusion that malpractices of amateurs and scientists have been due to a confusion between nomenclature and taxonomy and various misapplications of ambiguous nomenclatural rules. Too many taxonomists do not care for unavailability and/or homonyms, thus misunderstanding their “freedom”, i.e. blinkered from seeing its limits clearly, such sourcing out nomenclature contributes to the bad image of taxonomy. Although not less than 459 authors (only senior ones embraced) proposed 2797 generic names in the protist phylum Ciliophora since 1767, about a dozen of them are “sensitive” to nomenclatural matters (e.g., Corliss 1960, 1995; Foissner 1987, 1988, 2002)—supposedly the rate doesn’t differ essentially among researchers on other phyla (Wheeler 2007, 2010; Winston 2007)—, thus we not only face a taxonomic gap combined with the biodiversity crisis (Boreo 2010; Cotterill & Foissner 2010; Wheeler 2010; Dubois 2011) but also a “nomenclature awareness” gap.