

For that reason, the following proposal revises Art. 52.2(e) and Art. 52 Note 1 to support Ex. 6. Similarly, because it is not clear in the Example that the “type” of the synonym is excluded, as required by Art. 52.2(e), the Note appears to introduce a new concept and is more appropriately treated as an Article.

(413) Amend Art. 52.2 and convert Art. 52 Note 1 into a new Article, as follows (new text in bold, deleted text in strikethrough):

“52.2. For the purpose of Art. 52.1, definite inclusion of the type of a name is effected by **the unqualified** citation of (a) [...]. It is also effected (e) by **the unqualified** citation of the name itself or any name homotypic at that time, unless the type is at the same time excluded either explicitly, **definitely** or by implication (e.g. **inclusion of the type in another taxon**).”

~~“Note 1–52n. The inclusion, For purposes of Art. 52.2, a citation of a name or element is not unqualified if (a) it is cited with an expression of doubt, of an element in a new taxon, (e.g. the citation of a name or element with a question mark), or in a sense that excludes one or more of its potential type elements, does not make the name of the new taxon nomenclaturally superfluous (e.g. the citation of a name pro parte, either explicitly or by exclusion of a homotypic name) or (b) the name itself or any name homotypic at that time is also simultaneously cited as a different taxon (or as a synonym of a different taxon) by the same author.”~~

If Prop. 413 is accepted, certain changes are desirable for Art. 52 Ex. 5 and 6. In the former Example, Dandy cited *Galium tricornue*

and also excluded *Valantia aparine*, its replaced synonym. Because a name is not the same as a type, Dandy did not explicitly exclude the type. In fact, *V. aparine* was not typified until 2000. The Editorial Committee may wish to consider amending the Examples as follows (new text in bold, deleted text in strikethrough):

“Ex. 5. ~~Explicit exclusion of type~~ **Unqualified citation**. When publishing the name *Galium tricornutum*, Dandy (in Watsonia 4: 47. 1957) cited *G. tricornue* Stokes (Bot. Arr. Brit. Pl., ed. 2, 1: 153. 1787) pro parte as a synonym while explicitly excluding ~~its type~~ ***Valantia aparine* L., its replaced synonym, which was not typified until 2000. *Galium tricornutum* is not superfluous for two reasons: the pro parte citation of *G. tricornue* and the exclusion of the homotypic name *V. aparine*.**”

“Ex. 6. ~~Exclusion of type by implication~~ **Unqualified citation**. *Tmesipteris elongata* P. A. Dang. (in Botaniste 2: 213. 1891) was published as a new species but *Psilotum truncatum* R. Br. was cited as a synonym. However, on the following page, *T. truncata* (R. Br.) Desv. is recognized as a different species and two pages later both are distinguished in a key, thus showing that the meaning of the cited synonym was either “*P. truncatum* R. Br. pro parte” or “*P. truncatum* auct. non R. Br.” **Because Dang’s citation was qualified, *Tmesipteris elongata* is not nomenclaturally superfluous.**”

Acknowledgements

I thank Nicholas J. Turland and John H. Wiersema for their assistance with these proposals.

(414–425) Proposals on orthographical errors and orthographical variants

Vincent Demoulin

Département des sciences de la vie, Institut de Botanique B.22, Université de Liège, 4000 Liège, Belgium
Address for correspondence: Vincent Demoulin, v.demoulin@uliege.be

DOI <https://doi.org/10.1002/tax.13053>

First published as part of this issue. See online for details.

Chapter VIII (“Orthography and Gender of Names”) of the *Shenzhen Code* (Turland & al. in *Regnum Veg.* 159. 2018) has always been contentious, some persons considering that it asks for too much attention to grammatical correctness, others that there is a limit to the tolerance of unusual, unjustified original spellings. A family environment that facilitated my access to advice in philology encouraged me to attempt to clarify this section of the *Code*, first alone for the 1981 Sydney Congress (Demoulin in *Taxon* 30: 233–248. 1981) and later by animating, together with Dan Nicolson, a Special Committee for Orthography for the 1987 Berlin Congress (Demoulin & Nicolson in *Taxon* 35: 794–803. 1986). In each case, few proposals reached a sufficient majority for acceptance by Congresses and, discouraged and convinced that orthography committees are hopeless enterprises, I did not involve myself much anymore in the issue.

Discussions in the General Committee for nomenclature made me consider some progress could be made by freely discussing issues with a limited number of persons, and I felt encouraged to publish a detailed analysis of the case of *Brachycome* Cass., which helped me devise proposals on correctable errors (Demoulin in *Lejeunia* 200. 2019). Those proposals were not published in *Taxon* in order to leave time for additional comments, and indeed I now believe they could be ameliorated.

The question of correctability under Art. 60 led me to a reflexion on orthographical variants (Art. 61, which implies there are correct and incorrect variants, while strictly speaking an orthographical variant is an admissible one). Two years ago I prepared a manuscript on that issue for distribution to the General Committee, but having been left aside until recently it did not attract many comments. Some, however, drew my attention to enough important points

to make me feel ready to introduce some proposals that I hope will be welcomed.

A detailed history of the correctability issue is to be found in the *Brachycome* paper (Demoulin, l.c. 2019), but the draft on the history of Art. 61 would not have been ready for publication before the deadline for submitting proposals to amend the *Code* and can be requested from me.

(414) Add a new paragraph after Art. 60.1 (current wording of Art. 60.1 unchanged but quoted for context):

“60.1. The original spelling of a name or epithet is to be retained, except for the correction of typographical or orthographical errors and the standardizations imposed by Art. 60.4 (letters and ligatures foreign to classical Latin), 60.5 and 60.6 (interchange between u/v, i/j, or eu/ev), 60.7 (diacritical signs and ligatures), 60.8 (terminations; see also Art. 32.2), 60.9 (intentional latinizations), 60.10 (compounding forms), 60.11 and 60.12 (hyphens), 60.13 (apostrophes and full stops), 60.14 (abbreviations), and F.9.1 (epithets of fungal names) (see also Art. 14.8, 14.11, and F.3.2).”]

“60.1bis. Orthographical errors to be corrected under this Article are those occurring when a name or epithet issued from Greek or Latin is incorrectly written or constructed, even with a large tolerance for usages of post-classical Latin, especially botanical Latin.”

(415) Add a second new paragraph after Art. 60.1:

“60.1ter. Correction is also to be applied when names or epithets derived from the name of a person, a geographical place, or a language other than Greek or Latin is written in a way incompatible with the real orthography of the name or word, unless it is an evident intentional latinization under Art. 60.9.”

(416) Add a third new paragraph after Art. 60.1:

“60.1quater. In case of doubt, a voted Example (Art. 7 *Ex. 16 footnote) may be proposed. When an erroneous usage has been dominant for a long period, conservation may be proposed under Art. 14.11.”

An issue that has sometimes been raised is that of arbitrary formation under Art. 20. To clarify it, an addition to Art. 20 would be useful.

(417) Add the following at the end of Art. 20.1 (new text in bold):

“20.1. The name of a genus is a noun in the nominative singular, or a word treated as such, and is written with an initial capital letter (see Art. 60.2). It may be taken from any source whatever, and may even be composed in an absolutely arbitrary manner, but it must not end in *-virus*. **Names containing one or more orthographical errors are not composed in an absolutely arbitrary manner and are correctable under Art. 60.1. They are not to be considered names not validly published under Art. 32.1(c).**”

(418) Add a new voted Example to the Examples under Art. 60.1 or 60.2:

“*Ex. n. The generic name *Brachycome* Cass. (in Bull. Soc. Philom. Paris 1816: 199. 1816) is to be so spelled, even though it was originally spelled ‘*Brachyscome*’ (see Demoulin in Lejeunea 200. 2019).”

In case my modification of Art. 60.1 is adopted, this would not need to be a voted Example but, given the long-standing controversy about this name, it may nonetheless be useful to close the book in

this way, whatever the decision on my proposal for the Article would be.

There is no space here to detail the convoluted history of Art. 32 (valid publication in relation to the form of a name) and Art. 61 (“orthographical” variants), but they are largely redundant, and it might be simpler to have most issues concerning variants treated under Art. 32 with emphasis on valid publication and a broad definition of variants, based on homotypy and confusability, without linguistic considerations. This will make Chapter VIII more homogeneous, strictly dealing with orthography without introducing a definition of “orthographical variant for the purpose of this *Code*”, which is in contradiction with the usual meaning of what is an orthographical variant. Egon Eichler, with whom I shared more opinions than one may think from occasional divergences, already pointed out that “orthographic variant” in the Leningrad *Code* (Stafleu & al. in Regnum Veg. 97. 1978) was used in a misleadingly wide sense. It is indeed anomalous that Art. 60.1 prescribes the correction of an orthographical error, which, there, cannot be understood otherwise than in its restricted usual meaning of erroneous spelling, while Art. 61.2 gives a wide definition of orthographical variant that includes forms which by themselves are not erroneous (a nominative and a genitive for example). A clearer situation would be to abandon the inappropriate qualification “orthographical” for any kind of variants and move the situation based on homotypy to Art. 32, where just the name “variant” would be used.

Article 61 will then be restricted to real orthographical situations and could be the place to introduce a standardization of individual cases of strictly orthographical variants, among which choice is possible, that is variants in spelling that have occurred through space and time. The existence of such variants as *caespitosus/cespitosus*, *sylvaticus/silvaticus* has been found inconvenient to many every time one has to cite a name, and the benefits of some standardizations have been frequently mentioned. Here is the opportunity to introduce it.

(419) Restructure Art. 32 by adding amended content from Art. 61 as detailed below:

Article 32.1 and Note 1 remain unchanged.

Article 61.1 becomes Art. 32.2; “32.2” (at the end) is replaced by “16–19, 21, 23, and 24”; “orthographical” in qualification of “variant” is deleted here and elsewhere except in Art. 60 or elsewhere when it is not used with the same restricted meaning. Note that I find the reference to Art. 6.10 in Art. 61.1 uselessly confusing and Art. 14.8 is an Article to which I am radically opposed, but, if it stays, those references can be editorially added.

Article 32 Ex. 1 and 2 would be better placed under Art. 21.2.

Article 32 Note 2 may be deleted. This Note is anyway erroneous because the reference to Art. 32.2 stands for Art. 21.2.

Article 61.2 becomes Art. 32.3 and is followed by a new Art. 32 Note 2 clarifying the case of compounds with inverted elements.

Article 61 Ex. 1 becomes Art. 32 Ex. 1 and Art. 61 Ex. 2 becomes Art. 32 Ex. 2.

Article 61.3 becomes Art. 32.4.

Article 61.4 becomes Art. 32.5 with the addition at the end of the first sentence of “without change of authorship or date” that comes from present Art. 31.2 and the replacement of “corrected” by “changed” (also in Art. 61 Note 1, which becomes Art. 32 Note 3).

Article 61.5 becomes Art. 32.6, with the formulation adapted by referring to the new Art. 32.2.

Article 61 Ex. 3 becomes Art. 32 Ex. 3.

Article 32.3, 32.4, Ex. 3–5 and Notes 3 and 4 remain unchanged but become Art. 32.7, Art. 32.8, Ex. 4–6 and Notes 4 and 5, respectively.

Here is the result:

[Article 32.1 and Note 1 unchanged.]

“32.2. Only one variant of any one name is treated as validly published: the form that appears in the original publication, except as provided in Art. 60, 61, and F.9 (typographical or orthographical errors and standardizations), Art. 14.11 (conserved spellings), Art. F.3.2 (spelling of sanctioned names), and Art. 16–19, 21, 23, and 24 (rank-determining terminations). Application of the aforementioned Articles does not lead to a change of author citation or date.

32.3. Variants of a name, only one nomenclatural type being involved, are the various spellings of a name or its final epithet. Variants also result from the use of different but related stems for adding a termination or forming a compound, or from the use of different terminations as long as the category, either adjective or substantive, remains the same.

Note 2. For compounds, variants do not include words in which the order of the compounding words is inverted, which are to be treated as synonyms, not homonyms.

Ex. 1. *Nelumbo* Adans. (Fam. Pl. 2: 76. 1763) and ‘*Nelumbium*’ (Jussieu, Gen. Pl.: 68. 1789) are variants of a generic name based on *Nymphaea nelumbo* L., formed by using either a termination of the second or third declension of substantives. Similarly *Musineon* Raf. (in J. Phys. Chim. Hist. Nat. Arts 91: 71. 1820) and ‘*Musenium*’ (Nuttall in Torrey & Gray, Fl. N. Amer. 1: 642. 1840) are variants in termination, both with *Seseli divaricatum* Pursh as type.

Ex. 2. The epithet of *Selaginella apus* Spring (in Martius, Fl. Bras. 1(2): 119. 1840) is a noun in apposition, so that *apus* cannot be treated as a variant of the adjective *apodus*, used in *Lycopodium apodum* L. (Sp. Pl.: 1105. 1753). Spring cited *L. apodum* as a synonym of *S. apus*, but instead he should have adopted the former epithet and published “*S. apoda*”; consequently *S. apus* was nomenclaturally superfluous when published and is illegitimate under Art. 52.1.

32.4. If variants of a name of a new taxon or replacement name appear in the original publication, the one that conforms to the rules and best suits the recommendations of Art. 60 is to be retained. If the variants conform and suit equally well, the first author who, in an effectively published text (Art. 29–31), explicitly adopts one of the variants and rejects the other(s) must be followed (see also Rec. F.5A.2).

32.5. Any variant of a name not conforming to the validly published form of that name is to be changed to that form without change of authorship or date. Whenever such a variant appears in a publication, it is to be treated as if it appeared in its changed form.

Note 3. In full citations it is desirable that the original form of a changed variant of a name be added (Rec. 50F).

32.6. Confusingly similar names that are not variants as defined in Art. 32.3, but are based on the same type, are nevertheless treated as variants (for confusingly similar names based on different types, see Art. 53.2–53.4).

Ex. 3. ‘*Geaster*’ (Fries, Syst. Mycol. 3: 8. 1829) and *Geastrum* Pers. (in Neues Mag. Bot. 1: 85. 1794) : Pers. (Syn. Meth. Fung.: 131. 1801) are similar names with the same type (see Taxon 33: 498. 1984); they are treated as variants despite the fact that they are derived from two different nouns, *aster* (*asteris*) and *astrum* (*astri*).”

[Followed by Art. 32.7, Art. 32.8, Ex. 4, Ex. 5, Ex. 6, Note 4 and Note 5, i.e. the current Art. 32.3 onward unchanged.]

(420) Replace Art. 61.1 by the following:

“61.1. For homotypic names, variations in spelling, as well as other cases of variations (compounding or inflectional forms) dealt with in detail in Art. 32, do not represent nomenclatural novelties.”

(421) Replace Art. 61.2 by the following:

“61.2. The following adjectival epithets, which are orthographical variants s. str., are to be standardized as indicated (conservation is appropriate for generic names). The list is open to additions approved by an International Botanical Congress in the same manner as voted Examples.”

Four common cases are proposed with the adoption of the orthography that would be preferred by extensive modern Latin dictionaries like the Oxford one (Glare, Oxford Latin Dictionary, combined ed. 1982). Given wide use for some very well-known names, it may be that some people would prefer the reverse standardization of some cases and each case ought to be voted on separately.

(422) Add to the new Art. 61.2: “*cespitosus* to *caespitosus*”.

(423) Add to the new Art. 61.2: “*lacrymans* to *lacrimans*”.

(424) Add to the new Art. 61.2: “*pyriformis* to *piriformis*”.

(425) Add to the new Art. 61.2: “*sylvestris* to *silvestris*”.

Acknowledgements

The present work started as a discussion with some colleagues from the General Committee: David Mabberley (Chair), Karen Wilson (Secretary), Wendy Applequist, Werner Greuter and Valéry Malécot contributed most. Their comments and information significantly helped me. They may not share all of my opinions, but must be warmly thanked for their contribution.