ARTICLE 63 (MONTREAL CODE) AND THE TYPE METHOD

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The evolution of a nomenclatural rule reflects the refinement of our interpretation of its meaning as we learn to recognize its less obvious connotations and consequences. Here we trace the development of what has become Article 63 of the Montreal (1961) Code, a curious example of a rule which materialized like a changeling in 1930 from the old Art. 51-1 of the Brussels (1912) Code, with no apparent resemblance to its direct progenitor (cf. Furtado 1960, 1962; but also Fosberg 1960, Tryon 1962). Almost immediately, at the Amsterdam Congress in 1935, there was a shift in the emphasis of the rule. It then remained static for a twenty-year period of appraisal, and at Montreal was given a tentative clarification, not so much by a direct change in its own wording, as by an addition to the present Art. 7, Note 4.

This is its past, which we feel we must review in detail in spite of the previous discourses on it, for it seems to us that a chronological survey will help us arrive at the next logical step necessary to assure conformity between this ruling as it now stands and the type method of botanical nomenclature.

A. The concept of superfluity in nomenclature: its appearance and its development to 1956.

Common sense dictates that once an organism has a name, it needs no other — an idea that has been contained in the rules since their beginning.

The original statement, Art. 60-1 in De Candolle's Lois (1867), and Art. 51 in the Vienna (1906) and Brussels (1912) Codes, was as follows: "Every one should refuse to admit a name in the following cases: 1. When the name is applied in the plant kingdom to a group which has an earlier valid name." The Vienna and Brussels Codes also gave examples: "Carelia Adans. (1763) is a name which was applied by its author to a genus which had already received a valid name (Ageratum L. [1753]) (synonym); similarly Trichilia alata N. E. Brown (in Kew Bull. [1896] p. 160) is a name which cannot be maintained because it is a synonym of T. pterophylla C.DC. (in Bull. Herb. Boiss. 11, 581 [1894])." This rule is clearly referable simply to priority of publication, making no distinction between ordinary 'later synonyms' and 'superfluous' names.

By the re-phrasing of the article, Article 60-1 in the Cambridge (1935) Rules directs attention away from synonymy in general to a special type of synonymy, labelling as 'superfluous' (and therefore illegitimate) a name which is published when there is already a valid name in existence "for the group to which it was applied, with its particular circumscription, position and rank". And it is the examples that explain what is meant by this restriction of the rule:

"[1] The generic name Cainito Adans. (Fam. II, 166: 1763) is illegitimate because it was a superfluous name for Chrysophyllum L. (Sp. Pl. ed. 1, 192: 1753); the two genera had precisely the same circumscription. —

[2] The generic name Unisema Raf. (Med. Repos. N. York, V, 192: 1819) is illegitimate because Rafinesque so circumscribed his genus as to include Pontederia cordata L., the type species of Pontederia L. (1753); Unisema Raf. was therefore a superfluous name for Pontederia L. —

[3] Chrysophyllum sericeum Salisb. (Prodr. 138: 1796) is illegitimate, being a superfluous name for C. Cainito L. (1753), which Salisbury cited as a synonym. —
[4] On the other hand, *Cucubalus latifolius* Mill. and *C. angustifolius* Mill. (Gard. Dict. ed. 8. nn. 3, 4: 1768) are not illegitimate names, although these species are now re-united with *C. Behen* L. (1753), from which Miller separated them; *C. latifolius* Mill. and *C. angustifolius* Mill. as circumscribed by Miller did not include the type of *C. Behen* L.”

From the first three examples, it is seen that the illegitimacy of 'superfluity' is applicable to the following cases: [1] when there are two names but only one circumscription (and though neither name is explicitly typified, it is clear that whatever is chosen to typify the earlier name is available to typify the later); [2] when the nomenclatural type of the earlier name is explicitly included in the circumscription of the later taxon, whether or not the circumscriptions are identical; and [3] when the earlier name is cited as a synonym, an automatic inclusion of the type in the original circumscription of the later taxon. Example [4] excludes from 'superfluity' (as it is here understood) names which are later synonyms for obviously purely taxonomic reasons. Thus the rule, although apparently dealing solely with circumscription (a taxonomic matter), is seen actually to be primarily involved in the nomenclatural problem of the explicit or automatic incorporation of the type of an earlier name in the circumscription accompanying valid publication of a later name. (cf. Tryon 1962 for a detailed analysis of this point).

This involvement with the inclusion of a type rather than with circumscription for its own sake was expressed more precisely, as recommended at the Amsterdam meetings in 1935, in the re-wording of the article itself in the Brittonia (1947) edition: “A name is illegitimate in the following cases. (1) If it was nomenclaturally superfluous when published, i.e. if the group to which it was applied, as circumscribed by the author, included the type of a name which the author ought to have adopted under one or more of the Rules”. And its examples remained the same. So the rule stood, essentially unchanged, as Art. 73-1 in the Stockholm (1952) Code and Art. 64-1 in the Paris (1956) Code.

What stands out in the article at this time (1956) is that I. what is now called 'nomenclatural superfluity' seems to be so natural an idea that the term needs no definition, II. that the status of nomenclatural superfluosness of a name bears an inherent illegitimacy (illegitimate because nomenclaturally superfluous, or nomenclaturally superfluous and therefore illegitimate), and III. that the circumstances under which a name is nomenclaturally superfluous are now outlined as (a) the inclusion at the time of publication of a type of an earlier name, (b) the legitimacy and availability (not just validity) of that earlier name.


Fosberg (1953) warned of the problem involved in following this rule to the letter. Interpreting it as stressing original circumscription of a taxon with no regard to the typification of its name (Fosberg 1959: “Circumscription is determined by ... Typification is determined by ... Art. 64-1 definitely says ‘circumscription’”), he found later that, in order to apply Art. 64-1 (1956), he was forced to ignore Art. 7 (1956) which says: “A nomenclatural type is that constituent element of a taxon to which the name of the taxon is permanently attached, whether as an accepted name or as a synonym.”

The case treated by Fosberg (1959) is taken from Bentham in Hooker (Lond. J. Bot. 3: 225, 1844):
"XXVII. SERIANTHES.

v. 7, p. 359, — ... [descr.] ... Singapore, Wallich; Otaheite, Ber-
tero, Hinds; Philippine Islands, Cuming."

This may be summarized as follows (cf. also Fosberg 1960; Furtado 1960, 1962):
Serianthes grandiflora was published as a comb. nov. by Bentham in
1844, but is accepted according to our rules as a nom. nov. because
the basionym, Inga grandiflora Wallich, was a nom. nud. In the cir-
cumscription of the species, Bentham cited Wallich #5285, type of
the basionym, and also included, as a synonym, Acacia myriadenia
Bert. ex Guill. of earlier validation.

Fosberg’s conclusion that S. grandiflora is a superfluous name for A. myriadenia
was reached in spite of his colleague’s insistence that the typification of the later name
made the taxon potentially different from the species whose name was cited in synonymy
but otherwise typified.

It seems that, notwithstanding his earlier statement (Fosberg 1954) on the practical
value of the type method, Fosberg (1959) had taken Art. 64-1 (1956) as dealing with
circumstances in which a name is fixed, not to its type, but to the circumscription of
the taxon for which the name is introduced. But do such circumstances actually exist
in the rules? As Rickett (1953) has pointed out, in the code a name is typified neither
by a description (exception: Art. 9-1 in 1961) nor by a circumscription (cf. Art. 51 in
1961), although these must be considered in the choice of a lectotype or neotype. The
nomenclatural type (i.e. the type of the name) of a species is a single specimen (Art. 9
in 1961) and of a genus a single species (Art. 10 in 1961). Whether or not the paratypes
included in a specific circumscription prove to be conspecific, or in a generic circum-
scription congeneric, is a taxonomic matter, not a nomenclatural one. Whatever the
paratypic material proves to be, it may not break the nomenclatural bond between a
name and its type.

The problem as it existed in the rules up to 1961 is a result of the apparent neglect,
in Art. 65-1 (1956), of the possibility of a definite and distinct typification of a name
or epithet which happens to be applied, at the time of valid publication, to a taxon
whose circumscription includes the type of an earlier legitimate name or epithet. Since
the type method (Principle II and Art. 7) presents typification as the fundamental link
between a name and a taxon, and holotypification as supreme, this apparent oversight
placed Art. 64-1 (1956) in competition with Art. 7 (cf. Holttum 1962).

C. Critical analysis of the attempt at solution in the present code.

Recognition of the possible undermining of the primary significance of typification
was obviously what prompted not only Ross’s (1958; also Lanjouw 1959, p. 62)
proposal C to Art. 64-1, but also Lanjouw’s (1959, p. 16) proposal N to Art. 7 as an
amendment to the logical proposal K of Bullock and Ross (1958, also Lanjouw 1959,
p. 15). And the insertion of these proposals, the first as a note in Art. 63, and the latter
two as part of Art. 7-4, in the Montreal (1961) Code, has laid proper stress on typifi-
cation, indicating what may be an acceptable restriction to the definition of superfluous
names:

“Art. 63. Note. A nomenclaturally superfluous new combination is not illegitimate
if the epithet of its basionym is legitimate. When published it is incorrect, but it may
become correct later.”

“Art. 7. Note 4. . . . A name or epithet which was nomenclaturally superfluous
when published (see Art. 63) is automatically typified by the type of the name or
epithet which ought to have been adopted under the rules, unless the author of the superfluous name or epithet has indicated a definite type.”

Comparing the references to superfluity in the Montreal (1961) Code (Art. 63 and its Note; Art. 7 Note 4, second paragraph) with those in the 1956 Code, we find that I. ‘nomenclatural superfluity’ remains undefined; II. the state of nomenclatural superfluosity of a name is no longer taken as inherently illegitimate, but may be either illegitimate (in the body of Art. 63) or legitimate (in the note to Art. 63); III. the circumstances under which a name is superfluous have apparently not changed, i.e. (a) the inclusion of a type of an earlier name (b) which is legitimate and available; but now we see the immediate effect of the establishment of a later name under these circumstances: IV. it is automatically typified by the type of the earlier name, V. except when it is itself otherwise (holo)typified.

Each of these points must be examined.

I. Let us first try to define ‘nomenclatural superfluity’ — this term for what has appeared to be so natural an idea that no definition is given in the Code.

The concept must follow logically from the fundamental principles of nomenclature: Since nomenclature is based on priority of publication (Princ. III), and a taxon can have only one correct name (Princ. IV), that name is the oldest available under the rules. The application of a name is determined by its nomenclatural type (Princ. II) which is defined (in Art. 7) as the one element to which the name is intimately and irrevocably linked either as an accepted name or as a synonym.

Three hypothetical cases cover the ways in which a name could be considered superfluous:

Hypothesis (i) When two names or epithets have the same type. These two names or epithets are obligate synonyms. Only one name can be correct. If the earlier is illegitimate or unavailable at the time of publication of the later, this more recent name, if legitimate and available, is correct as a nomen novum. If, on the other hand, the earlier name is both available and legitimate when the recent name is published, this later name is not only incorrect: it is an obligate later synonym at the moment of its birth, immediately completely superfluous. Being obligately superfluous, with its type tied to a name of prior status, this later name deserves no recognition within the laws of nomenclature: it is inherently illegitimate. As a ‘nomenclatural synonym’ in the terms of the Code (Art. 14 Note 3), it can achieve recognition only through conservation.

Hypothesis (ii) When two names or epithets do not have identical types, but these types are judged to belong to the same taxon. The two names or epithets are then treated as facultative synonyms. If the older is available, the more recent is an incorrect later synonym. It, too, is in a certain way superfluous, but this is a superfluity which is subject to revision on the basis of a taxonomic judgement of the relationship between the two types. A later facultative synonym may be incorrect at the moment of publication, but may become correct later, or vice versa, depending on the case.

Let us look at the two cases: the first, when the author of the recent name does not suspect that the type of his name belongs to an already named taxon; the second case, when the author of the recent name indicates that the name which he has erected and typified is applied to a taxon in which he would also place the type of an older name. In the first case, the recent name is correct until the relationship is established between his type and that of the older name. In the second case, if the older name whose type has been included is available, the recent name is incorrect at the time of publication, on the basis of the taxonomic judgement of the publishing author.

Here there is no obligate synonymy, for the types of the names are not identical. There is certainly some superfluity — but not a ‘nomenclatural superfluity’ in the terms
of the Code, for the later name is superfluous only because of a taxonomic evaluation, whether at the moment of publication or later. And since a later facultative synonym can be reinstated through a reversal of taxonomic judgement, it remains legitimate. Facultative superfluity, therefore, does not connote illegitimacy. (cf. also Holttum 1962).

Hypothesis (iii) When a new name is published without a holotype and applied to a taxon which includes the type of an older legitimate name. Here a decision must be made about the type of the new name, for there is no type explicitly and irrevocably linked to the new name by the author. Under such conditions, a lectotype should be chosen; but choice of a lectotype involves consideration of a circumscription, and in this circumscription there stands the type of an older available name, the type of a name the author would have accepted had he been on guard against violating nomenclatural rules. Here, therefore, is an automatic type for the new name, and we are back at the first hypothesis: the recent name has the same type as the earlier, is nomenclaturally (obligately) synonymous, therefore nomenclaturaly (obligately) superfluous, and thus illegitimate.

We see from hypotheses (i) and (iii) that nomenclatural (obligate) superfluity is synchronous with nomenclatural (obligate) synonymy. This would seem to be why no definition for nomenclatural superfluity has appeared in the Code: it is the obvious superfluity of a later nomenclatural synonym. And so, if we choose to spell out what has seemed to be the obvious, we can say that “a nomenclaturally superfluous name is a later nomenclatural synonym, i.e. an obligate synonym because its application is determined by the same type that fixes the application of an earlier legitimate and available name in the same rank. Nomenclatural superfluity bears an inherent illegitimacy.”

Hypothesis (ii) deals with facultative rather than obligate synonymy and therefore facultative rather than obligate superfluity. And facultative superfluity is not what we mean by nomenclatural superfluity, for taxonomic considerations decide the former while nomenclatural regulations alone determine the latter.

At this point it seems useful to refer to Baehni’s (1953) comment on the use of the word ‘nomenclatural’ in the expression ‘nomenclaturally superfluous name’, and his fear of the appearance of a term like ‘taxonomically superfluous’. It would certainly seem tautologous to say that, if superfluous, a name is nomenclaturally superfluous, and a taxon taxonomically superfluous. However, we have found that the superfluity of a name may be either obligate or facultative, the facultative subject to taxonomic judgement. When Tryon (1962, p. 118) used the term ‘taxonomically superfluous’, would he not have accepted for it the definition of what we have called ‘facultative superfluity of a name’? One might give the terms ‘nomenclatural’ and ‘taxonomic’ their full meanings in this context, i.e. ‘in accordance with the rules of nomenclature’ and ‘in accordance with taxonomic judgement’, and so rediscover the respective equivalence of the expressions ‘obligate’ and ‘facultative’ in the Code.

In any case, it would seem desirable that the term ‘nomenclaturally superfluous’ (since it was introduced to mean ‘inherently illegitimate’) be confined to the sense of ‘obligately synonymous’, ‘facultatively superfluous’ remaining for ‘facultatively synonymous’.

II. Under consideration here is the 1961 change in the Code’s attitude to the state of superfluousness of a name — that by the addition of the Note to Art. 63, a legitimate superfluity has been accorded recognition in the discussion regarding transfers.

It is evident that, as long as all other legal requirements are fulfilled, (1) any combination of a generic name with a legitimate epithet is legitimate, and (2) any combination with a nomenclaturally superfluous (and therefore illegitimate) epithet is itself nomenclaturally superfluous and illegitimate; while (3) a combination which uses
a legitimate epithet which is facultatively synonymous with an earlier, legitimate and available epithet, is no more than facultatively superfluous and incorrect, not illegitimate. Just as in hypothesis (ii), if the type of the older epithet is included in the taxon as circumscribed by the author of the new combination, the *comb. nov.* is facultatively superfluous from the moment of publication, incorrect but not irrevocably so.

Therefore we may accept nomenclatural (obligate) superfluity as the subject of Art. 63 itself, and facultative superfluity as that of the Note to Art. 63. There has been no real change in the Code's attitude to superfluity. The fault lies in the use of the term 'nomenclatural superfluity' to cover both obligate and facultative conditions. And the note would be better understood if it made the distinction clear, stating that it deals with a new combination published under conditions which might be taken to involve nomenclatural superfluity except that a *comb. nov.* is already typified by the type of its basionym.

But this Note is a valuable addition to the Article, for it has brought into prominence the different interpretations that might be given to the term 'nomenclatural superfluity' and the need for defining that term clearly.

III. The special circumstance giving rise to nomenclatural superfluity as treated in Art. 63 is that in which, at the time of publication of a new name, the type of an earlier legitimate and available name is included in the circumscription of the taxon for which the new name is presented.

(a) The question of what constitutes inclusion of a type in a circumscription has been thoroughly analyzed by Tryon (1962), and before him Rogers (1949) scrutinized the means whereby a type might be considered excluded. As Tryon has pointed out, in difficult cases, "the type must be considered to be included . . . if . . .[it] . . . is, by some means, not definitely excluded". Therefore the circumstance for superfluity might better be phrased "includes (i.e. does not definitely exclude) the type . . .".

Even so, we are in difficulty, for, as Rogers has clearly demonstrated, there are many ways in which a type may be considered definitely excluded. (cf. also Holttum 1962). Here we may perhaps draw on the experience gained in viewing the transition from one of Silva's (1959, also Lanjouw 1959, p. 53) proposals to its published wording as the first paragraph of the present Art. 48. Silva's proposed "purposely excludes" provided at least some limitation to what the Code was ready to accept as exclusion. In the 1961 Code, it became "circumscribes . . . in such a way as to exclude" which has admitted for acceptance the numerous ways of which Rogers gave warning. Limits must surely be set to what the Code will accept as exclusion of a type. And it is suggested here that Silva's recommended restriction to a deliberate act on the part of the publishing author holds fewer problems than the unqualified statements now in the Code (Art. 47, 48, 63). Deliberate exclusion by an author is a matter of his showing that he has given thought to the type which he has excluded. Either the author questions its admission to his taxon because he indicates doubt of its identity or, acknowledging familiarity with its characters, proceeds to state unequivocally that it is unacceptable in his taxon or to place it elsewhere.

We might therefore stipulate that one circumstance for nomenclatural superfluity be "the inclusion (by which is meant the non-exclusion through an explicit and clearly deliberate act) of the type of an earlier name."

(b) The Article proceeds with a further requirement for nomenclatural superfluity: that the included type be that of "a name or epithet which ought to have been adopted under the rules", in other words, both legitimate and available. The question here is whether it may not be advisable to consider the possibility that a name that was legitimate and available at the time of publication of the later name may not eventually become illegitimate, perhaps as a *nomen rejiciendum*. It may be convenient to provide
for automatic re-legitimacy of a later nomenclatural synonym in the event of the failure of the earlier name to retain its legitimacy.

IV. It is the addition of the second paragraph to Art. 7 Note 4 that is a most significant contribution to the Code's approach to superfluity. In the first part of this paragraph, we see that the type of the new name (labelled 'nomenclaturally superfluous' because it fulfils the conditions given in Art. 63) is automatically that which typifies the earlier name. The circumstances are those described in hypothesis (iii) above, and the conclusion about the typification of the recent name is in full accord with our intuitive comprehension of the concept of nomenclatural superfluity. As Tryon (1962) has said, "for a later name to be nomenclaturally superfluous there must be ... identity of the types of the ... names".

The first part of this addition to Art. 7-4 is immediately acceptable as a reflection of the natural interrelationship of nomenclatural synonymy with nomenclatural superfluity.

V. Then we come to the last clause of this statement in Art. 7-4, to a qualification of particular import: "unless the author of the superfluous name or epithet has indicated a definite type". No justification is needed for this qualification. The type method demands it. In the "Guide for the Determination of Types", we read that "the choice made by the original author, if definitely expressed at the time of the original publication of the name of the taxon, is final". The bond between a name and its holotype is indivisible.

And therefore the last clause in Art. 7-4 deals not with 'nomenclaturally superfluous' names or epithets but only with 'superfluous' names or epithets. The first part of the paragraph refers us to hypothesis (iii), the last clause to hypothesis (ii). By explicit typification of the later name, its synonymy with the earlier name is withdrawn from nomenclatural obligancy and becomes contingent on taxonomic judgement, a facultative synonymy. The conclusion seems self-evident that the superfluity in this instance is also only a facultative superfluity. (cf. also Holttum 1962).

As in the discussion on the facultative superfluity of new combinations (II above), the only objection we have is to the use of the term 'superfluous' without the applicable qualification. Here, too, the restricting phrase might be more easily understood if it were worded as referring to an author's publishing a new name "in such a way that it might be considered a nomenclaturally superfluous name (in accordance with Art. 63) except for the fact that he has designated a (holo)type (different from the type of the earlier name or epithet)".

If this is the meaning of the statement which is the last clause of Note 4 to Art. 7, it is out of place there. Art. 7 deals with typification, and Note 2 states that where a holotype is extant it automatically fixes the application of the name. The clause in question merely repeats that fact. But incorporated in Art. 63, a statement of this kind would serve the necessary function of drawing further attention to the limiting of 'nomenclatural superfluity' to obligately synonymous names.

In summary, we see nomenclatural superfluity as applicable to a name or epithet applied at the time of publication to a taxon in which the author includes (i.e. from which he does not exclude by an explicit and clearly deliberate act) the type of an earlier legitimate and available name — but only when the later name is not (holo) typified by a type different from that of the earlier name.

Now the real significance of this qualification shows up clearly. It is not circumscription that Art. 63 is concerned with, but the application of a name by the publishing author; and if application, then typification is the central theme, for the application of a name is determined by its type. So a different light is thrown on the inclusion of
an earlier type in the circumscription. In order to be effective in making the new name illegitimate because nomenclatural superfluous, the type of the earlier name must be included in such a way that it is eligible to typify the later name; but if a (holo)type is given for the newly published name, nothing in the circumscription (which otherwise would provide guidance for the choice of a lectotype) can be considered in competition with the holotype for position of type.

All this, we feel, is implicit in the present Code’s answer to the question of what nomenclatural superfluity is. But because differing interpretations continue to be made, Art. 63 must become precise on the following points:

1. nomenclatural superfluity concerns the nomenclatural synonymy of a later name or epithet with an earlier legitimate and available name or epithet;
2. nomenclatural superfluity bears an absolute illegitimacy from inception;
3. a new name or epithet is recognized as nomenclaturally superfluous when it is published (a) with a designated type which is at the same time the type of an earlier legitimate and available name or epithet, or (b) without a designated type and including (i.e. not excluding deliberately and explicitly) the type of such a name or epithet. In the latter circumstance, the type of the earlier automatically becomes the type of the later name or epithet.

D. Proposals.

Consideration is given here to comments by Furtado (1962) and Holttum (1962) on the matter of superfluous names, and to Tryon’s (1962) well argued proposal. Finally our own proposal is presented in accordance with our above reasoning.

1. Furtado (1962): Furtado has recognized the ambiguity in the use of the term ‘nomenclaturally superfluous’ to cover both the cases in the body of Art. 63 and the case cited in the Note to Art. 63, but now seems ready to accept the outlawing of Serianthes grandiflora Benth. (1844) on the basis of Fosberg’s (1959) argument. But this leads him to argue for the legitimacy of S. grandiflora Benth. (1846) as a nom. nov. for the 1844-taxon-less-Acacia-myriadenia. The error in his reasoning is based on the imprecision in the Code which appears to allow a typified name to become illegitimate because ‘superfluous’ for an otherwise typified name. If S. grandiflora Benth. (1844) is typified by Wallich’s type, S. grandiflora Benth. (1846) is, as Fosberg (1960) pointed out, the same name for the same taxon. If S. grandiflora Benth. (1844) is nomenclaturally superfluous for A. myriadenia, it must be typified by the type of the latter, and the differently typified 1846 S. grandiflora Benth. becomes a later homonym of the 1844 name.

2. Holttum (1962): In his final paragraph, Holttum has given, succinctly, the gist of our discourse. But the example he uses has emphasized the need for the more thorough analysis we have tried to give the problem, and particularly for extreme precision in defining what is meant not only by ‘including the type’ but also by ‘indicating a definite type’ (second paragraph of Art. 7-4).

In Holttum’s discussion of the case of Ugena semihastata Cavanilles, two questions arise: (i) did Cavanilles actually ‘indicate a definite type’ (holotype) for the name U. semihastata, (ii) did Cavanilles include Ophioglossum flexuosum (and its type) in his taxon?

According to our reasoning, if the answer to (i) is ‘yes’, Holttum is right in accepting U. semihastata as legitimate, and question (ii) need not be answered except to evaluate Cavanilles’s taxonomic judgment on facultative synonymy. But if, as the picture is presented by Holttum, the answer to (i) is ‘no’, we must decide whether the specimen described and illustrated by Cavanilles is still to be accepted as the holotype or is only
the apparently obvious choice for lectotype. And to decide this, we must answer question (ii).

Holttum says: “what is included is a name, cited in error”. But the only reason for citing a name in a circumscription is to ascribe to the circumscribed taxon the material known by that name. And unless you expressly exclude the type, by citing a name you undoubtedly include its type, whether in error or not. Cavanilles chose to accept O. flexuosum as part of the taxon to which he gave the new name of U. semihastata. His taxon was established to encompass not only the material at hand (and described) but also, by his own admission, material to which Linnaeus had given the name of O. flexuosum. From this and the absence of explicit designation of a type, it is seen that the specimen which Cavanilles described is not a holotype but only one of the syntypes of his taxon, though certainly the syntype which would have been the obvious choice for lectotype if the additional material ‘used’ by the author had not been type of an earlier available name.

In summary, Cavanilles did not “designate a nomenclatural type”; nor was the material described and illustrated “the one specimen ‘used’ by the author”; therefore, in the terms of Art. 7-2, U. semihastata is not holotypified. Since holotypification is what we take to be meant by the last clause of Art. 7-4, U. semihastata falls outside the qualification. And because Cavanilles applied his new untyped name to a taxon in which he included the type of an epithet he should have adopted, U. semihastata Cav. must be judged nomenclaturally superfluous (Art. 63) and automatically typified by the type of O. flexuosum L. (first part of second paragraph of Art. 7-4). This decision we consider to be fully supported by the Code.

What we wish to stress by this discussion is that it should be possible for someone completely ignorant of the taxonomy of the group involved to approach a problem in nomenclature and arrive at the legally acceptable conclusion by strict application of the rules of nomenclature. Holttum’s interpretation would rule out this possibility, for only those who know the characteristics of O. flexuosum L. would be qualified to judge whether or not its type could fit into the description of U. semihastata.

The further problem mentioned by Holttum does require taxonomic knowledge: is the type (“a sterile frond”) of O. flexuosum a satisfactory type for the taxon? If not, perhaps other botanists require the protection afforded mycologists and palaeontologists by Art. 59. Should it be possible to reject the name O. flexuosum L. because its type does not bear the distinguishing fertile characters of the species, flexuosum L. would not be an epithet that ought to have been adopted, U. semihastata would be legitimate and typified by the ‘obvious’ lectotype.

3. Tryon (1962): (i) Tryon takes Art. 63 as divorced from Art. 7-4, and so believes that Art. 63 legislates on cases in which there is de facto inclusion of the type of an earlier name in the circumscription of the taxon referred to the later name. But in the light of Art. 7-4, inclusion in a circumscription becomes effective only if the included type is not excluded from the position of type of the later name. This is quite a different situation.

(ii) Tryon concludes that typification by the author under circumstances where he includes an earlier type must be taken to be an error — that because “the author was not actually describing a new species” his typification is not to be recognized by the Code (“the designated type can not stand”). But the error lies in creating another name for a taxon which already has a good name, not in the act of typifying a name. The error the author has made is legislated against by the rules of priority; and his name falls into synonymy by his own action. But the type of the earlier name has no priority over the type of a later name, for they are different types for different names, whether
or not those names are, more broadly, applied to the same taxon. Tryon’s point of view would degrade the status of holotypification which, to this time, has been considered wholly legitimate and even irrevocable.

(iii) Tryon proposes legislation in favor of automatic typification when it competes for supremacy with holotypification. We appreciate the logical force of his assumption that when automatic typification is in order, no importance should be given to an author’s indication of a definite type other than the one that automatically applies. Since a name or epithet may have only one type, if it is already (automatically) typified, does it matter that the author pointed to something else as type? So phrased, the question answers itself, for it gives priority as well as preeminence to automatic typification. But there is nothing in the present rules to support the demotion of holotypification in favor of automatic typification.

To make this demotion legal would involve: (a) revoking, in fact and in spirit, the already accepted last clause of Art. 7 Note 4; (b) either qualifying the definition of holotype in Art. 7 Note 2, with a reference to Art. 63 as an example of a case where the author’s designation of a nomenclatural type does not automatically fix the application of a name; or adding another note to Art. 7, giving automatic typification, wherever applicable, precedence over holotypification; (c) introducing into the rules the idea that the author’s taxonomic evaluation — i.e. his circumscription — may be given nomenclatural preference over his formal nomenclatural act. This emphasis on circumscription with a by-passing of holotypification might have far-reaching and quite unexplored effects not foreseen by Tryon when he says: “It may be mentioned that none of these [proposals] will affect the nomenclatural status of any name as it now stands under the Code”.

4. Our proposal: Our desire is to safeguard our present type method and avoid any change in the spirit of the rules. Therefore, it is here proposed that the clarification that was begun in the Montreal Code should by furthered in the next publication of the Code, primarily by a more precise delimitation of the circumstances under which nomenclatural superfluity pertains, as follows:

Proposal no. 31: Art. 7 Note 4. Delete: “unless the author of the superfluous name or epithet has indicated a definite type”.

Proposal no. 32: Art. 63. A name is illegitimate and must be rejected if it is nomenclaturally superfluous, i.e. if, at the time of valid publication, it is typified by the type of another name or epithet which ought to have been adopted under the rules. It may be so typified because (1) holotypified by that type a), or (2) untypified but applied by its author to a taxon in which he included the type of an earlier legitimate and available name (see Art. 7 Note 4) b). Including a type’ is here understood as citing a type specimen or the name of a type taxon or the earlier name itself, unless the use of the name is at the same time qualified to exclude the type whether explicitly or by some other act which clearly constitutes a voluntary rejection of the type. Examples: a) Tremellodon (Pers.) Fr. (Hym. europ. 618. 1874), based on Hydnum sect. Tremellodon Pers. (Mycol. europ. 2: 172. 1825) and therefore typified by the only original species of that section, H. gelatinosum Fr. (Syst. I: 407. 1821), is a superfuous name for Pseudohydnum Karst. (Nat. Faun. Fl. Fenn. 9: 374. 1868) whose only species at the time of valid publication was also H. gelatinosum Fr. — b) Peniophora Cke (Grev. 8: 18. 1879), untypified, was published with 16 species, one of which was Corticium quercinum ([Pers.] Fr.) S.F.Gray, the type (only original species) of Corticium S.F.Gray (Nat. Arr. 1: 653. 1821). Peniophora Cke is therefore a superfuous name for Corticium S.F.Gray.
Note 1. A name is legitimate even if applied by its author to a taxon in which he includes the type of an earlier legitimate and available name or epithet, as long as, at the time of valid publication, the new name is explicitly typified by an element other than the type of the earlier name or epithet. When published it is incorrect, but it may become correct later. A new combination also retains its legitimacy under such conditions if its basionym is legitimate.

c) Pteris killipii Maxon (Amer. Fern Jour. 23: 107. 1933) was published with a designated holotype Killip & Smith 24697 and the citation of Spruce 4063 as a paratype. Since Spruce 4063 is the type of P. vestita Baker (Syn. Fil. 169. 1867), P. killipii is treated as a later facultative synonym — incorrect, but legitimate because individually typified. — d) Serianthes grandiflora Benth. (Hook. Lond. Jour. Bot. 3: 225. 1844), although including Acacia myriadenia Bert. ex Guill. in its circumscription, is not illegitimate, because Bentham published it as a comb. nov. for Inga grandiflora Wall. (nom. nud.) and it was therefore explicitly typified by Wallich 5285 which is not the type of A. myriadenia. The synonymy given by Bentham is considered facultative, with S. grandiflora a later synonym of A. myriadenia. When later (e.g. by Bentham in 1846) the types of the two epithets are judged to belong to different taxa, the name S. grandiflora is available for use for the taxon which incorporates Wallich 5285. — e) Chloris radiata (L.) Sw. (Prodr. 26. 1788), based on Agrostis radiata L. (Syst. Nat. ed. 10, 2: 873. 1759), is legitimate even though Swartz also cited the earlier Andropogon fasciculatum L. (Sp. Pl. 1047. 1753) as a synonym. It is the correct name, in the genus Chloris, for Agrostis radiata when Andropogon fasciculatum is treated as a different species.

Note 2. Nomenclatural superfluity being contingent on the legitimacy and availability of the earlier name, if this name fails to retain its legitimacy, the later name automatically ceases to be nomenclaturally superfluous and becomes a nom. nov. for the taxon.

References

BAEHNI, C. 1953 — Taxon 2: 92.
FOSBERG, F. R. 1953 — Taxon 2: 89.
— 1954 — Taxon 3: 3.
— 1960 — Taxon 9: 243-244.

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