it shall be changed, however, and there does not seem to be general agreement whether the next younger valid name based on another genus of the family and already in family form should be used, or whether the new name of the oldest or the type genus should be given a family suffix. It would seem desirable to introduce some uniformity of procedure. For example, if the generic name *A-us* 1850, the type genus of the family A-idae 1850, is found to be a synonym of *B-us* 1840, should A-idae be replaced by a newly coined family name, B-idae, in preference to an already proposed name, C-idae 1860, founded on *C-us* 1860, if *C-us* is clearly a member of the same family as *A-us*? And if B-idae should be used in this case, if *A-us* 1850 must be discarded as a newly recognized homonyn and is replaced by *B-us* 1930, should B-idae be the family name? It seems simpler and more consistent with the underlying principles of nomenclature to use C-idae in either case.

The one rule specifically applying to names above family rank is that they shall be uninomial. There seems to be general agreement that although it is desirable to use the older of two synonyms, other things being equal, it is not absolutely essential, if usage has established the later name. For example, Rodentia Smith 1827 is generally used in preference to Glires Linné 1758, and Carnivora Latreille 1825 instead of Ferae Linné 1758. There can be no serious ambiguity in the use of a better-known synonym of later date, but the situation is decidedly different if a homonym is used. The International Rules condemn homonyms for generic and specific names, explicitly and unreservedly. It would seem as if the grounds were equally cogent for the larger groups. To give specific examples, the name Cyclostomata Busk 1852 for a bryozoan order is an exact homonym of Cyclostomata Müller 1834 (= Cyclostoma Rafinesque 1815, also Cyclostoma Latreille 1829, preoccupied by Cyclostoma Lamarck 1801), the lampreys and their relatives. Decapoda Leach 1817, as a subdivision of the cephalopod mollusks, is preoccupied by Decapoda Latreille 1806 in the Crustacea. Tardigrada Illiger 1811 for the tree sloths has precedence over Tardigrada for the water-bears, a Latinization of "Tardigrades" Doyère 1840 (from "le tardigrade" of Spallanzani). In some cases the French form was in use earlier than the date given, but in no case could it reverse the technical priority, as not in Latinized form, nor does it reverse the essential priority, unless, by a stretch of the imagination in the case of "le tardigrade," which is used in the singular referring to an individual and not as a group name. In the case of "Cyclostomata" and "Decapoda," the earlier usage is quite certainly more wide-spread than the later homonym; this is probably not the case with "Tardigrada." In any case, the use of the identical name for entirely distinct groups, besides being slovenly, is a source of possible confusion, especially in bibliographic work. It would seem desirable to discontinue the use of the later term, replacing it with the earliest or best-known valid synonym (for example, Tubuliporina Milne Edwards for Cyclostomata Busk), or if none is available, by a new term.

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THE ORIGIN OF SYMPHORICARPUS

IN a paper entitled "Chromosomes and Phylogeny in Caprifoliaceae," by Karl Sax and D. A. Kribs, published in the *Journal* of the Arnold Arboretum,[1] the authors point out that the genus *Symphoricarpus* is represented in China by only one species, of very limited distribution, whereas the other species are, all of them, natives of North America. Since most of the genera of Caprifoliaceae are most abundant in Asia, and certain genera are found only in China, "it would seem probable," they say, "that the family is of Asiatic origin."

On this assumption they ask the question, "Does this mean that the genus is so old that the original Oriental forms have disappeared and only the newer American species remain?"

Is it necessary to assume that there was ever more than one species of the genus in China? Alternatively may there not have been in North America a species (allied to or even conspecific with the Chinese species and coeval with it) which died out, perhaps through climatic changes? This hypothetical species, now defunct, may first have produced offspring some of which were better adapted to the American climate. By isolation, or otherwise, such species might, conceivably, have given rise to the fifteen (or so) existing American species, which may not all be of equal age.

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ENTROPY AND ORGANIZATION

THE growth of physical concepts depends on the conditions under which they arise. As the context of ideas and experimental facts changes, these concepts also change. From this point of view, it is easy to see how the physical or mathematical probability of an event depends on the assumptions or conventions under which it is calculated. Further,

[1] *Journal* of the Arnold Arboretum, Harvard University, 11 (No. 3): 147–153, July, 1930.