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Cuboscaphoids, naviculo-cuboids,
language barriers and the use of standardised osteological nomenclatures in archaeozoological studies.

Joris Peters*

RESUME

L'ICAZ et certains chercheurs concernés ont tenté de standardiser les procédures de mensuration pour différentes groupes de vertébrés. Un effort comparable devrait être fait pour la nomenclature ostéologique. Jusqu'ici, nous sommes mis en présence de terminologies dérivées de diverses disciplines : anatomie physique, médecine humaine ou vétérinaire, paléontologie, etc. L'utilisation de différentes langues s'ajoutant à cela, on aboutit à une grande confusion. Nous voudrions proposer ici l'usage d'une terminologie anatomique uniforme, comme l'a fait l'Association Internationale des Anatomistes vétérinaires pour les animaux domestiques (*Nomina Anatomica Veterinaria*) et pour les oiseaux *(Nomina Anatomica Avium).*

ABSTRACT

A plea is made for the use of standardised osteological nomenclatures in archaeozoological analyses.

Key words : Osteology, Osteological terminology, Archeozoological reporting.

One of the most important results of former ICAZ-conferences (Budapest 1971; Groningen 1974) has been the agreement to develop a measuring guide, in order to promote and standardise the taking of measurements of animal bones recovered from archaeological sites. It was also agreed that A. von den Driesch and J. Boessneck (University of Munich) would work out this project, which resulted in the well known measuring guide by von den Driesch (1976). As a consequence, measurements on osseous remains from a great number of sites, investigated by different archaeozoologists, can now be compared. In the following, we would like to defend the view that a comparable standardisation can be achieved, without much difficulty, for the terminology (i.e. the names) used to list or describe bones from archaeological sites.

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Up to now, we are confronted in archaeozoological reports with terminologies adopted from several disciplines : physical anthropology, human medicine, veterinary science, vertebrate biology, palaeontology etc. Moreover, the languages and traditions of the various European and other scholars can add substantially to the confusion of terms. An example of this is given in Table 1, based on several text books, including, among others, Sisson and Grossman (1953), Cornwall (1956), Grassé (1967), Bass (1971), Romer and Parsons (1977), Vaughan (1978), Feneis (1982). It summarizes some of the names available to describe carpal and tarsal bones. Many more could be added, if one takes into account vernacular names in the different languages. This is only one example of how the use of several terminologies may create confusion. Moreover, if articles are written without little reference to Latin terms, a lot of interesting data can remain unknown, just because of language barriers !

To avoid confusion and to stimulate the free circulation of archaeozoological data, a standardised nomenclature may prove of great help. The anatomical terminology, adopted by the International Committee on Veterinary Gross Anatomical Nomenclature in its *Nomina Anatomica Veterinaria* (3rd. ed., 1983) would serve this purpose very well. All the descriptive terms are in Latin but this is not a disadvantage : Latin can be considered a more or less political neutral language. The fact that the terminology has been developed for domestic mammals is no objection. The anatomical names are directly applicable to representatives of several important mammalian orders : *Oryctolagus* (Lagomorpha); *Rattus*, *Mus* (Rodentia); *Canis*, *Felis* (Carnivora); *Equus* (Perissodactyla); *Sus*, *Bos*, *Ovis*, *Capra* (Artiodactyla). These names can in many cases be used without much problems for genera of the same orders. For species or genera of other mammalian orders, the terminology problem presents itself mainly as a transposition exercise, because detailed drawings of their skeletal parts are available (see among others : Grassé 1967; Pales and Lambert 1971; Walker 1985), labeled with the names as used by the various authors. It should perhaps also be stressed here that most of the archaeozoological research focuses on remains of domestic mammals. Archaeozoological samples frequently yield, besides mammals, remains of other vertebrates. As to the fish, amphibian, and reptilian bones, we are certain that representative works on their anatomical terminology exist. However, our experience with these groups and our knowledge of the available literature dealing with fish, amphibians and reptiles is limited. We therefore do not want to make suggestions as to the terminology which should be preferred. For birds, however, an anatomical guide with the correct osteological terminology has been published by the International Committee on Avian Anatomical Nomenclature, entitled *Nomina Anatomica Avium* (Baumel, 1979). The advantages, following from the use of the *Nomina Anatomica Veterinaria*, appear to be valid also for archaeozoological work on birds. A final word about the use of latin terminologies and descriptions in articles. We understand that many authors use preferentially common language so as to avoid reports which become too technical for non-specialists. This does not prevent them to include between brackets the "correct" latin names where necessary : (1) in their inventories, (2) for their detailed osteomorphological descriptions and (3) to explain figured specimens. According to us, this would stimulate, or at least enable, archaeozoologists to read or look at publications in other languages then their own. For example, the archaeozoological papers published in Polish, by the Poznan-school, make their contents more or less

accessible through the use of Latin tables etc. (see for example Sobocinski 1975), which one can combine with the information obtained from the summaries in other language than Polish.

To conclude, we are convinced that the use of a standardised anatomical terminology, as adopted in the *Nomina Anatomica Veterinaria* for mammals and in the *Nomina Anatomica Avium* for birds, would contribute greatly to the accessibility of archaeozoological reports from all over the world. Such a standardisation of the terminology concerning bones and their morphology fits well with a major aim of the ICAZ : to maximise the exchange of information through archaeozoological reports, which, technically seen, are more or less comparable.

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Nomina Anatomica Veterinaria		Human anatomy, mammalian anatomy and others
Ossa carpi	: Os carpi radiale	Os scaphoideum, Scaphoid, Os naviculare(manis), Navicular, Radiale, Scheepvormig been, ...
	Os carpi intermedium	Os lunatum, Lunate, Lunar, Semilunar, Intermedium, Maanbeen, Mondbein, ...
	Os carpi ulnare	Os triquetrum, Triquetral, Os cuneiforme, Cuneiform, Pyramidal, Cubital, Driehoeksbeen, ...
	Os carpi accessorium	Os pisiforme, Pisiform, Sus-carpien, Erwtebeen, Erbsenbein, ...
	Os carpi centrale	Central, Os multangulum accessorium, Accessorisch veelhoekigbeen, ...
	Os carpale I	Os trapezium, Trapezium, Multangulum majus, Distal carpal I, Groot veelhoekigbeen, ...
	Os carpale II	Os trapezoideum, Trapezoid, Multangulum minus, Distal carpal II, Klein veelhoekigbeen, ...
	Os carpale III	Os capitatum, Capitate, Magnum, Grand os, Troisième carpien, Kopbeen, ...
	Os carpale IV	Os hamatum, Hamate, Unciform, Os crochu, Distal carpal IV, Haakbeen, ...
Ossa tarsi	: Talus	Talus, Astragalus, Tibiale, Os tarsi tibiale, Katrolbeen, Sprungbein, ...
	Calcaneus	Calcaneus, Os calcis, Os tarsi fibulare, Péronéal, Hielbeen, Fersenbein, ...
	Os tarsi centrale	Os naviculare pedis, Navicular, Scaphoïde, Centrale, Scheepvormig been, Kahnbein, ...
	Os tarsale I	Os cuneiforme mediale, Entocuneiforme, Internal cuneiform, Distal tarsal 1, Inneres Keilbein ,...
	Os tarsale II	Os cuneiforme intermedium, Mesocuneiform, Middle cuneiform, Deuxième cunéiforme, ...
	Os tarsale III	Os cuneiforme laterale, Ectocuneiform, Os cuneiforme tertium, Buitenste cuneiform, ...
	Os tarsale IV	Os cuboideum, Cuboid, Tarsiens 4+5, Distal tarsal IV, Teerlingbeen, Würfelbein, ...
Some fusions	: Os carpale II+III	Os trapezoideo-capitatum, Os magnum, Magnum, ...
	Os centroquartale	Os naviculocuboideum, Os centrotarsale, Scaphocuboïde, ...
	Os tarsale II+III	Os cuneiforme intermediolaterale, Ectomesocuneiform, Grand cunéiforme, ... AD NAUSEAM.

Table 1. Synonyms of carpal and tarsal bones, excerpted from English, French, Netherlandish and German texts.