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***PACHYPUS* d'ALTON, AN ELUSIVE GENUS OF GLYPTODONT (MAMMALIA: CINGULATA: GLYPTODONTIDAE)**

Pachypus d'Alton, un esquivo género de gliptodontes (Mammalia: Cingulata: Glyptodontidae)

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Abstract. A review of the pertinent literature shows that the proposed genus *Pachypus* d'Alton was never described and was only mentioned, with an erroneous reference, by Owen (1841). All later authors have never seen the original paper and refer to it, directly or indirectly, under the authority of Owen. The genus should be referred to as: *Pachypus* d'Alton, 1839, in Owen, 1841, genus *coelebs*, in fact a *nomen illegitimum* and homonym of *Pachypus* Dejean, 1821.

Keywords. Mammalia, Glyptodontidae, *Pachypus*, Nomenclature, Bibliography.

Resumen. Un análisis de la literatura confirma que el género *Pachypus* d'Alton nunca fue formalmente descrito y sólo mencionado, con una referencia errónea, por Owen (1841). Ninguno de los autores posteriores jamás consultó el trabajo original y lo mencionan, directa o indirectamente, bajo la autoridad de Owen. El género debería ser citado como *Pachypus* d'Alton, 1839, in Owen, 1841, *genus coelebs*, de hecho, un *nomen illegitimum* y homónimo de *Pachypus* Dejean, 1821.

Palabras clave. Mammalia, Glyptodontidae, *Pachypus*, Nomenclatura, Bibliografía.

"A este proposito digo que mi intencion es dezir lo que se y he visto en aquestas cosas..."

Gonzalo Fernández de Oviedo. 1535.
La Historia General de las Indias, Libro XV,
Capitulo I, folio CXII verso.

The genus *Pachypus* d'Alton, according to Owen (1841:86, footnote), was apparently erected in 1839. I was unable to find the original description of this taxon as given by Owen (op. cit.) in "...the meeting of the German Naturalists at Erlangen, September 1839...". *Pachypus* has often been mentioned in the literature, but it seems that nobody really consulted the original publication and probably has ever seen it. Probably all these mentions have followed the principle of authority accepting what Owen expressed.

Over the years I've tried to find the original description of *Pachypus*, without success. Finally, I could consult four of the reports of the yearly meetings beginning with that of 1838 and ending in 1841 (Figure 1) with the following results:

1. The 16. Versammlung (meeting) of the Gesellschaft deutscher Naturforscher und Aerzte (from here on as GdNA) took place in 1838 in the city of Freiburg and was printed in September 1839 (GdNA, 1839:iv). D'Alton does not appear in the list of participants. Owen participated only in this meeting, presenting a paper on the dental structure of fossil fishes and amphibians (GdNA, 1839:25, 69). No mention of *Pachypus* in this volume.
2. The 17. Versammlung took place in Pymont in 1839 and was printed in November-December 1840 (GdNA, 1840). D'Alton figures in the list of participants presenting two papers, one on the human brain and the other on comparative osteology of birds and mammals (GdNZ, 1840:813, 920-922, 949). Owen did

not participate but he is mentioned on p. 922. This is the only meeting published in a journal. No mention of *Pachypus* in this volume.

3. The 18. Versammlung took place in Erlangen in 1840 and was printed after January 15, 1841 (GdNA, 1841:iv). Neither d'Alton nor Owen are listed among the participants. No mention of *Pachypus* in this volume.
4. 19. Versammlung took place in Braunschweig in 1841 and was printed in March 1842 (GdNA, 1842:vi). As in the previous meeting none of the two researchers is on the list of participants. No mention of *Pachypus* in this volume.

I have traced the citations of *Pachypus* in the literature with the following results in chronological order:

- d'Alton (1839) except for the mention by Owen (1841:86), no reference found.
- Owen (1841:86, footnote) is the author of the first mention of *Pachypus* as a synonym of *Glyptodon*.
- Wagner (1843:60), citation based on Owen (1841).
- Owen (1845:108, footnote) reproduces the same text from Owen (1841).
- Agassiz (1845:7 of the addenda to Mammalia) mentions the genus as synonym of *Glyptodon* as published in the Versammlung of 1839 (sic) not indicating the place.
- Bronn (1848:537), citation based on Owen (1845).
- Bronn (1853:996) mentions it as synonym of *Hoplophorus selloi* Lund, 1839.
- Nodot (1857:75) mentions the genus as published in the meeting of Erlangen, 1839 (sic) probably following Owen (1841 or 1845).
- Ameghino (1889:760) mentions the genus as published in the meeting of Erlangen, 1839 (sic) probably following Owen (1841 or 1845).
- Palmer (1904:495) mentions *Pachypus*

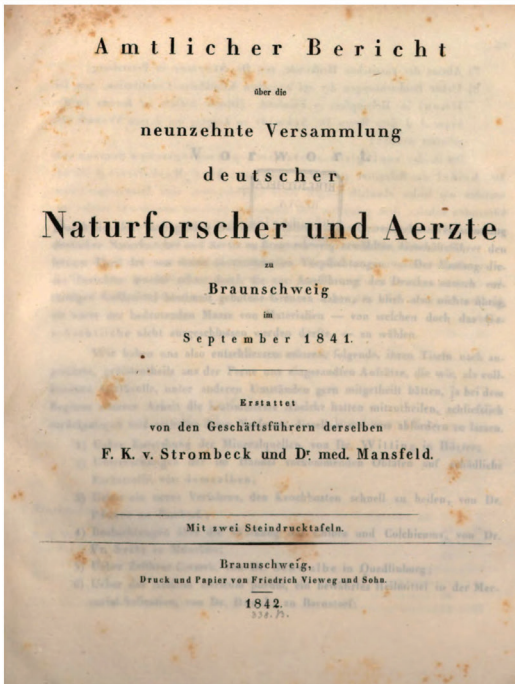
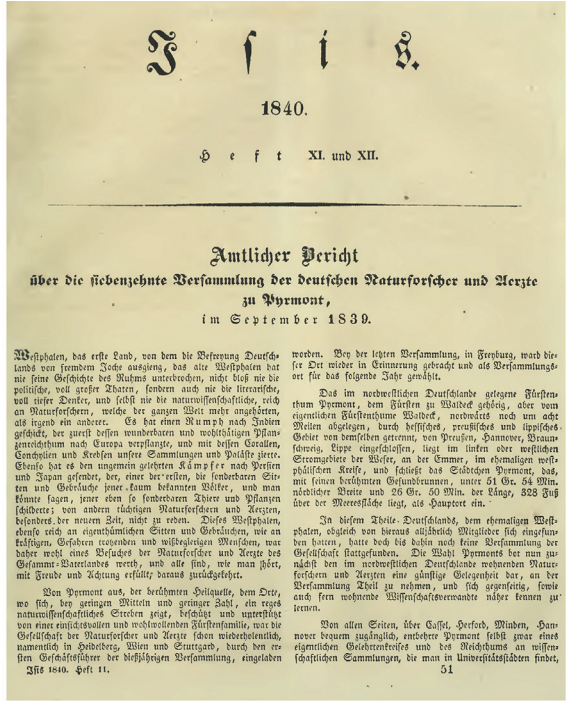
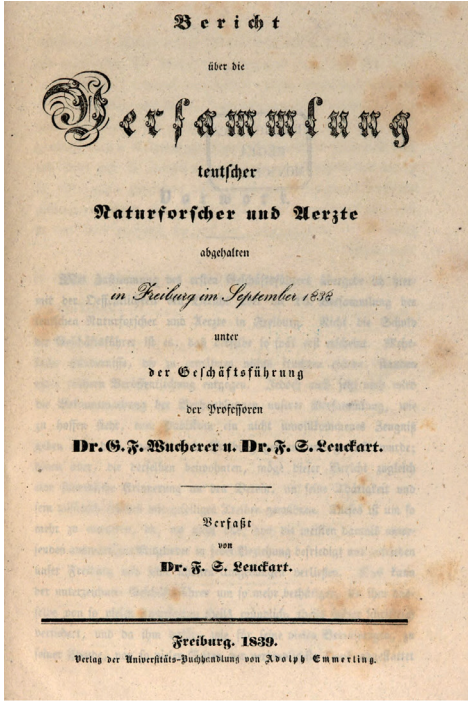


Figure 1 - From upper left, clockwise, title page of the Versammlungen (meetings) in 1838 (Freiburg), 1839 (Pyramont), 1840 (Erlangen), and 1841 (Braunschweig).

d'Alton 1839 based on Bronn (1848).

- Sherborn (1929:4675) follows Bronn (1848).
- Mones (1986:244) follows Owen (1845).
- McKenna & Bell (1997:91) mention *Pachypus* d'Alton, 1839, as synonym of *Glyptodon*, without a source.

None of the references indicates the page of the original mention, confirming my supposition that nobody, even Owen, has seen the original paper.

All these references, directly or indirectly, follow the authority of Owen (1841 or 1845), and seem to agree in considering the genus a synonym of *Glyptodon* (some of them of *Hoplophorus*), and therefore making it available as a valid genus (ICZN, Art. 11.6.1.). Curiously the taxon is not mentioned by Roger (1896, and earlier editions), Trouessart (1898, 1905) or Simpson (1945).

I think that my fruitless search for this reference indicates that the citation is erroneous. As stated above, the *Versammlung* (Figure 1) of Erlangen took place in 1840, not in 1839, and neither d'Alton nor Owen participated in it. The previous year, 1839, the *Versammlung* took place in Pymont where Prof. Eduard d'Alton figures on the list of participants. The year and the author agree with Owen's information, but not the place, but the name of *Pachypus* is not to be found here. As they have never met in these meetings, it is possible that there was some kind of correspondence between d'Alton and Owen with the wrong information.

In any case, I think that the name falls within the limitations of Art. 9.9 and/or Art. 11.6. (ICZN). As far as I know, nobody has accepted *Pachypus* as a valid genus.

According to Owen (1841:86, footnote) the name *Pachypus* was proposed to substitute that of *Glyptodon* ("Prof. D=Alton has subsequently brought the subject of the *Glyptodon* ... and has proposed for it the generic name of *Pachypus*"). As far as there is no evidence that this name was ever published together with a description it should be better consid-

ered a junior synonym of *Glyptodon*. On the other hand, it is unavailable for nomenclatural purposes as a homonym of *Pachypus* Dejean, 1821 (Coleoptera, p. 57). The earliest printed occurrence I was able to find is in the above-mentioned paper by Owen (1841:86), a paper that I cannot date accurately. It was read at the Geological Society of London Session held on March 23, 1839 (Owen, 1841:81; it must be pointed out that the *Versammlungen* always took place in the month of September, that means six months after Owen's presentation!). The inclusion of the mentioned footnote means that it was added at earliest after September 1840. I assume that the year 1839 is an Owen's misprint.

The genus should be referred to as: *Pachypus* d'Alton, 1839, in Owen, 1841, genus *coelebs*, non Dejean, 1821, and better considered as a *nomen illegitimum*.

REFERENCES

- Agassiz, L. 1845. *Nomina systematica generum mammalium tam viventium quam fossilium, secundum ordinem alphabeticum disposita, adjectis auctoribus, libris in quibus reperiuntur, anno editionis, etymologia et familiis, ad quas pertinent, in Agassiz, L.: Nomenclator zoologicus, continens nomina systematica generum animalium tam viventium quam fossilium, secundum ordinem alphabeticum disposita, adjectis auctoribus, libris, in quibus reperiuntur, anno editionis, etymologia et familiis, ad quas pertinent, in singulis classibus*, 1(1842):xii + 1-38, 7(1845, Addenda):1-10. Jent et Gassmann, Soloduri.
- Ameghino, F. 1889. *Contribución al conocimiento de los mamíferos fósiles de la República Argentina. Actas de la Academia Nacional de Ciencias de la República Argentina en Córdoba*, 6:xxxii + 1-1027, 32 figs.; Atlas:[xi], pls. 1-98. Buenos Aires.
- Bronn, H.G. 1848. *Handbuch einer Geschichte der Natur*. III. Band. I. Abt. I Hälfte. III. Theil: Organisches Leben (Fortsetzung). Index palaeontologicus oder Uebersicht der bis jetzt bekannten fossilen Organismen, bearbeitet unter Mitwirkung der Herren Prof. H. R. Goepper und Herm. v. Meyer. A. Nomenclator palaeontologicus, in alphabetischer Ordnung, in Bischoff, G. W., J. R. Blum, H. G. Bronn, H. C. v. Leonhard, F. S. Leukart & F. S. Voigt: *Naturge-*

- schichte der drei Reiche*, 15: Der Geschichte der Natur, (1:A-M): vi + i-lxxxiv+1-775. E. Schweizerbart's Verlagsbuchhandlung, Stuttgart.
- Bronn, H.G. 1853. 4. Caeno-Lethaea: VI. Theil: Mollassen-Periode, in Bronn, H. G. & F. Roemer: H. G. Bronn's *Lethaea geognostica, oder Abbildung und Beschreibung der für die Gebirg-Formationen bezeichnendsten Versteinerungen*, 3:viii + 1-1130. E. Schweizerbart'sche Verlag, Stuttgart.
- Dejean, [P.F.M.A.] 1821. *Catalogue de la collection de Coléoptères de M. le Baron Dejean*. Pp. viii + 1-136. Imprimerie d' Abel Lanoe, Librairie Crevot, Paris.
- Gesellschaft deutscher Naturforscher und Aerzte. 1839. *Bericht über die Versammlung der teutscher Naturforscher und Aerzte abgehalten in Freiburg im September 1838, verfaßt von Dr. F. S. Leuckart*. Pp. iv + 1-94. Verlag der Universitäts-Buchhandlung von Adolph Emmerling, Freiburg.
- Gesellschaft deutscher Naturforscher und Aerzte, 1840. *Amthlicher Bericht über die siebenzehnte Versammlung der deutschen Naturforscher und Aerzte zu Pymont, im September 1839. Isis von Oken, 1840(XI-XII):801-950*. Leipzig.
- Gesellschaft deutscher Naturforscher und Aerzte. 1841. *Amthlicher Bericht über die achtzehnte Versammlung der Gesellschaft deutscher Naturforscher und Aerzte zu Erlangen im September 1840 erstattet von den Geschäftführern derselben Dr. J. M. Leutpold und Dr. L. Stromeyer*. Pp. x + 1-187. Jungschen Universität-Buchdruckerei, Erlangen.
- Gesellschaft deutscher Naturforscher und Aerzte. 1842. *Amthlicher Bericht über die neunzehnte Versammlung deutscher Naturforscher und Aerzte zu Braunschweig im September 1841 erstattet von den Geschäftführern derselben F. K. V. Strombeck und Dr. med. Mansfeld*. Pp. xiv + 1-249. Friedrich Vieweg und Sohn, Braunschweig.
- International Comission on Zoological Nomenclature. 1999. *International Code of Zoological Nomenclature*. Pp. xxix + 1-306. International Trust for Zoological Nomenclature, London.
- Lund, P.W. 1839. Coup-d'oeil sur les espèces éteintes de mammifères du Brésil; extrait de quelques mémoires présentés à l'Académie royale des Sciences de Copenhague. *Annales des Sciences Naturelles*, (Zoologie, 2)11(Avril):214-234. Paris.
- McKenna, M.C. & S. Bell. 1997. *Classification of mammals above the species level*. Pp. xii + 1-631, fig. 1. Columbia University Press, New York.
- Mones, A. 1986. *Palaeovertebrata Sudamericana*. Catálogo sistemático de los vertebrados fósiles de América del Sur. Parte I. Lista preliminar y Bibliografía. *Courier Forschungsinstitut Senckenberg*, 82:iii + 1-625. Frankfurt am Main.
- Nodot, L. 1857. Description d'un nouveau genre d'édenté fossile renfermant plusieurs espèces voisines du *Glyptodon*, suivie d'une nouvelle méthode de classification applicable à toute l'histoire naturelle et spécialement à ces animaux. *Mémoire de l'Académie Impériale des Sciences, Arts et Belles-Lettres de Dijon*, (2, Section des Sciences)5, 1856:1-170; Atlas, 2 pp., láms. 1-12.
- Owen, R. 1841. Description of a tooth and part of the skeleton of the *Glyptodon clavipes*, a large quadruped of the edentate order to which belongs the tessellated bony armour described and figured by Mr. Cliff in the former volume of the Transactions of the Geological Society; with a consideration of the question whether the *Megatherium* possessed an analogous dermal armour. *Transactions of the Geological Society of London*, (2)6(1):81-106, láms. 10-13.
- Owen, R. 1845. *Descriptive and illustrated catalogue of the fossil organic remains of Mammalia and Aves contained in the Museum of the Royal College of Surgeons of England*. Pp. vii + 1-391, láms. 1-10. R. & J. E. Taylor, London.
- Palmer, T.S. 1904. Index generum mammalium: A list of the genera and families of mammals. *North American Fauna*, 23:1-984. U.S. Department of Agriculture, Division of Biological Survey, Washington.
- Roger, O. 1896. Verzeichniss der bisher bekannten fossilen Säugethiere. 32:1-272. Augsburg. *Bericht des Naturwissenschaftlichen Vereins für Schwaben und Neuburg (a. V.)*.
- Sherborn, C.D. 1929. *Index animalium sive index nominum quae ab a.d. MDCCCLVIII generibus et speciebus animalium imposita sunt*, 2(18):4451-4690. Trustees of the British Museum, London.
- Simpson, G.G. 1945. The principles of classification and a classification of mammals. *Bulletin of the American Museum of Natural History*, 85:xvi + 1-350. New York.
- Trouessart, E.L. 1898. *Catalogus mammalium tam viventium quam fossilium. Nova editio (prima completa)*. 2(5, 1898):999-1264. R. Friedländer & Sohn, Berolini.
- Trouessart, E.L. 1905. *Catalogus mammalium tam viventium quam fossilium. Quinquennale supplementum*. 3-4(1905):547-929. R. Friedländer & Sohn, Berolini.
- Wagner, A. 1843. Bericht über die Leistungen in der naturgeschichte der Säugethiere während des Jahres 1842. *Archiv für Naturgeschichte*, 9(2):1-67. Berlin.

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