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**Documentation Of The Bolton Museum**  
**Frederick Reigen Mollusc Collection**  
**- Bente T. Loudon**

[Extract from Curatorial Project by Bente T. Loudon, submitted in part fulfilment of requirements of the M.A. in Museum Studies, Leicester]

I gratefully acknowledge support from former Keeper of Zoology Kathryn Berry who also identified the project, and introduced me to Modes.

Note: Since this work was carried out, this documentation process has become considerably out of date. Bolton Museum and Art Gallery have invested in a new database system (TMS) and no longer use Modes. All the old records from MODES have been transferred to this new system.

Note courtesy of Matthew Constantine, Senior Manager, Museum & Archive Collections, Bolton Museum & Archive Service.

**Background**

This historic collection of 144 accessions is stored separately from other mollusc material, which is arranged taxonomically. Specimens were counted and examined and a small handwritten minimum data label (archival quality card and ink) placed in each box. Relevant data was entered on MODES for Windows 1.5. Although a previously made card catalogue was in existence it was decided instead to work directly from the specimens, and to incorporate detail researched from documents in the History file.

Accession number was assigned using the year of acquisition (not of cataloguing as is usually the case <sup>Davis 1994</sup>), the accession number in the accession register and an ascending serial number assigned in the same order as the original species numbers. These could not be used directly because there are only 144 species in the Bolton collection and 692 species in the Catalogue and it was felt that the Modes software would not perform with missing numbers. Thus an entry was numbered, for example, BOLMG 1879.8.10

The specimens in Bolton are no longer mounted on glass tablets, but largely boxed and the boxes marked with the species number of the Catalogue <sup>Carpenter 1857</sup>; no shells are individually marked. The scientific name and its authority corresponding to the species number found with the specimens was researched from the Catalogue and entered as the Classified name. In some cases the boxes also contain labels that appear to have accompanied the shells on exhibit. If a different scientific name is included on such a label this was entered as subsequent field entry(ies) of Classified name.

Following the adoption of Carolus Linnaeus's binominal nomenclature <sup>Knapp 2000, Winston 1999</sup> a zoological specimen is given 2 names, a genus name and a species- or trivial- name. Following the trivial name is the author of this trivial name and the date of publication <sup>Abbott 1974</sup>. This trivial name was sometimes started with a capital letter but here we changed them to lower case. Evidence of redetermination was copied carefully onto the database, again as subsequent field entry(ies) of Classified name; regrettably there are no dates recorded.

Carpenter's names were used throughout and no revision or updating of the nomenclature attempted; thus Lamellibranchiata was used in preference to the later Bivalvia; the spelling Gasteropoda upheld.

The standards for documentation recommended by the MGC <sup>1992</sup> and Carter & Walker <sup>1999</sup> were thus followed: data recorded was that inherent in the specimen and global to the collection, whereas unfortunately there was no data associated with the specimens nor post-accessional information.

**References:**

Abbott, R.T. 1974. *American Seashells- The Marine Mollusca of the Atlantic and Pacific Coasts of North America*. Van Nostrand Reinhold Company

Carpenter, P.P. 1857. *Catalogue of the Collection of Mazatlan Shells in the British Museum collected by Frederick Reigen Described by Philip P. Carpenter*. London: Printed by Order of The Trustees

Davis, P.S. 1994 'Documentation of Collections' in: Stansfield, G., Mathias, J. and Reid, G. (eds.) *Manual of Natural History Curatorship* HMSO

Carter, D.J. and Walker, A.K. 1999 'Documentation' Appendix 1 in: Carter, D. and Walker, A. (eds.) *Care and Conservation of Natural History Collections* Butterworth-Heinemann

Knapp, S. 2000 'What's in a Name?' *Nature* **408**: 33

Museums and Galleries Commission 1992 *Standards in the Museum Care of Biological Collections*.

Winston, J. 1999. *Describing Species: practical taxonomic procedure for biologists*. Columbia University Press, New York

### **A description of the collection, identifying its historical, scientific and cultural value, and its place in relation to the rest of the Museum's collection.**

The Belgian collector Frederick Reigen made his huge collection of shells in Mazatlan, Mexico in 1848-50. An entire share was bought by Philip Pearsall Carpenter and from these about 8873 specimens (representing 692 species, of which 215 were described as new <sup>Dean 1936</sup>), which became the first or type set <sup>Palmer 1951</sup> were presented to the British Museum by him in 1857 <sup>ANON 1906, Gunther 1912</sup>. At that time it would have gone to Bloomsbury, the Zoology Collection not being moved until 1881-4 <sup>ANON 1904</sup>. The donation was subject to four conditions: 1) That it be preserved separate and intact 2) that it always be open to the use of students 3) that the donor be allowed to arrange the collection 4) that a descriptive catalogue be published -this he wrote (552 pages) <sup>Carpenter 1857</sup>. In developing improved but still separate storage and if web-publishing the Bolton part we would be paying tribute to these wishes.

Further duplicate suites of air-dried shells reached other museums in Britain and America. The Bolton specimens were purchased by the Library Committee in 1854, predating the foundation of the first museum in Bolton, the Chadwick Museum, by 29 years <sup>History File</sup>. This intact molluscan collection of 47 species of bivalve and 97 species of gastropod has exciting potential waiting for a researcher: it has scientific value as yet unexplored and it has a clear historical setting in time, place and social milieu <sup>Fenton 1995</sup>. It constitutes a valuable scientific and cultural resource. As a collection it has been kept in its entirety, and physically apart from the rest of the museum's taxonomically arranged mollusc collections.

It is accompanied by a copy of Carpenter's descriptive Catalogue, and is exceptionally well provenanced: all the shells originate from only one small site and the authenticity of the collection is not in any doubt <sup>BAAS 1857</sup>. Reigen deliberately collected many examples of each species, the large series illustrating variation in particular species and the aim being to exhibit all that was known of a local fauna; "...where objects are carefully noted that a collector of "good shells" would cast aside as worthless" <sup>Carpenter 1857</sup>.

The practice by Carpenter of giving the species numbers may well reflect the view commonly held from the time at least of Carl von Linne that species were fixed and unchangeable <sup>Kardong 1998</sup> - and hence of finite number: it was not until Darwin had at last made public his theory of organic evolution; together with Wallace in 1858 <sup>van Oosterzee 1997</sup>, "without question the scientific happening of the century" <sup>Allen 1976</sup>, "powerfully separating natural selection from the divine genesis" <sup>Kardong 1998</sup> that this view began to change.

Thus academic analysis of this collection can help illustrate the development of approaches to collecting, and history of scientific thought and method <sup>University of Leicester 2000, Stansfield 1994</sup> as well as "stimulate interest and awareness about our natural heritage" <sup>Stansfield & Howard 1994</sup>.

At the time of formation of the collection, and of the writing of the Catalogue, the term 'type' reflected the degree of similarity of the specimen to some *ideal* or *type* (the typological concept of species: species were perceived as immutable entities that could be defined by some perfect *type* and all the specimens that were *typical* belonged to that species or other category); it was not until the early twentieth century that the concept of *typification* (the system that makes objective identification possible by linking the name with an actual specimen) was formally introduced into botanical and zoological codes of nomenclature <sup>Winston 1999</sup>, that true taxonomic status <sup>Davis 1994</sup> was achieved. Hence, reference to 'types' in the Catalogue certainly need expert revision; it is likely that this collection represents a voucher collection <sup>Stansfield, Mathias and Reid/Petit/Mathias 1994</sup>, and as such can have importance for taxonomic research <sup>Report on the BM(NH) 1981-3</sup>. Other possible future uses cannot be ruled out <sup>Reid 1994</sup>.

**References:**

- Allen, D.E. 1976 'The Naturalist in Britain' *Princeton University Press* 1994
- ANON 1904 'The History of the Collections contained in the Natural History Departments of the British Museum' Vol. 1. The Libraries, The Department of Botany, The Department of Geology, The Department of Minerals. London: *Printed by order of the Trustees of the British Museum*
- ANON 1906 'The History of the Collections contained in the Natural History Departments of the British Museum' Vol. 2. Separate Historical Accounts of the Several Collections included in the Department of Zoology. London: *Printed by order of the Trustees of the British Museum*
- BAAS 1857 Meeting at Cheltenham Report: 'On Mollusca of the West Coast of North America', no exact reference, Bolton Museum History File
- Carpenter, P.P. 1857 'Catalogue of the Collection of Mazatlan Shells in the British Museum Collected by Frederick Reigen Described by Philip P. Carpenter'. London: *Printed by Order of the Trustees*
- Carter, D. and Walker, A. (eds.) 1999 Preface in: *Care and Conservation of Natural History Collections* Butterworth-Heineman
- Davis, P. 1994 'Documentation of Collections' in: Stansfield, G., Mathias, J. and Reid, G. (eds.) *Manual of Natural History Curatorship* HMSO
- Dean, Davy J. 'Conchological Cabinets of the Last Century'. *Journal of Conchology* Vol 20, No.8, July, 1936: 240-241
- Fenton, A. 1995 'Collections research: local, national and international perspectives' in: Fahy, A. (ed.) *Collections Management* Routledge
- Gunther, A. 1912. 'The History of the Collections contained in the Natural History Departments of the British Museum ' Vol 2 Appendix. General History of the Department of Zoology from 1856 to 1895. London: *Printed by order of the Trustees of the British Museum* .
- Kardong, K. 1998 'Vertebrates: comparative anatomy, function and evolution' McGraw-Hill
- Mathias, J.1994 'Housing and Maintenance of Collections' in: Stansfield, G., Mathias, J. and Reid,G. (eds.) *Manual of Natural History Curatorship* HMSO
- Meester, J. 'The Importance of Retaining Voucher Specimens' In: Herholdt, E.M. (ed.) *Natural History Collections: their management and value* Transvaal Museum Special Publication No. 1, Transvaal Museum , Pretoria
- van Oosterzee, P.1997. 'Where Worlds Collide- the Wallace Line'. *Cornell University Press*
- Palmer, K. V.W. 1951 'Catalog of the First Duplicate Series of the Reigen Collection of Mazatlan Shells in the State Museum at Albany, New York'. *New York State Museum Bulletin* 342:1-79
- Pettitt, C. (1994) 'Using Natural History Collections' in: Stansfield, G., Mathias, J. and Reid,G. (eds.) *Manual of Natural History Curatorship* HMSO
- Reid, G. (1994) 'The Preparation and Preservation of Collections' in: Stansfield, G., Mathias, J. and Reid, G. (eds.) *Manual of Natural History Curatorship* HMSO.
- Stansfield, G. 1994 'Functions and Organisation of Natural History Museums', in: Stansfield, G., Mathias, J. and Reid,G. (eds.) *Manual of Natural History Curatorship* HMSO
- Stansfield, G., Howard, P. 1994 'Natural History Museum Exhibition' in: Stansfield, G., Mathias, J. and Reid, G. (eds.) *Manual of Natural History Curatorship* HMSO
- Stansfield, G., Mathias, J., and Reid, G. (eds.) 1994 Preface and Introduction in: *Manual of Natural History Curatorship* HMSO
- University of Leicester, Department of Museum Studies: Option: Science 2 Natural Science Curatorial Course Material 1999/2000
- Winston, J. 1999 'Describing Species: practical taxonomic procedure for biologists'. *Columbia University Press* New York