

## Obituary

Heinz Malz • Alan Lord

Published online: 28 April 2011

© Senckenberg Gesellschaft für Naturforschung and Springer 2011

### Helmut BARTENSTEIN

(1914–2010)

Helmut Bartenstein passed away on 3rd November 2010 at the age of 96 from his age and general infirmity. Up to the last days he was determined to live as mentally vital a life as he had always done and his brain was as keen as ever in any disputation. This reflects the German saying *Der Geist ist willig, aber das Fleisch ist schwach*, which is the same as the English saying *The spirit is willing but the flesh is weak*. In one of his last letters to one of us (HM) Helmut Bartenstein remarked that typewriting was replacing hand writing just as his hearing aid supported his ears. The stairs to and from the first floor had to be mastered with the help of Waltraut, his devoted wife who nursed him with great self-sacrifice. The gradual diminution of his physical strength in the last three years became evident from his handwriting when signing a letter. Nevertheless, despite physical infirmity he had continued to publish up to the age of 91, his last contribution to foraminiferal research dealing with Middle Jurassic lenticulines, some of the same group treated in his 1937 doctoral thesis. That was 68 years ago and leads us to the year 1937 when Bartenstein and Erich Brand published their first ‘*Abhandlung*’ volume together. At first sight this implies joint authorship, but actually it is ‘two in one’, meaning the summary of two separately prepared theses, one dealing with the Lower Jurassic (Brand) and the other with the Middle Jurassic (Bartenstein). It was the



Helmut Bartenstein (right) and Erich Brand (left), the long-term author-duo, together for a joint 75th birthday party (Frankfurt, August 1989)

---

H. Malz is deceased.

H. Malz  
Neulandstrasse 3,  
49565 Bramsche, Germany

A. Lord (✉)  
Senckenberg Forschungsinstitut und Naturmuseum,  
Senckenberganlage 25,  
60325 Frankfurt-am-Main, Germany  
e-mail: alan.lord@senckenberg.de

first and most comprehensive micropalaeontological and biostratigraphical publication, mainly based on material from German oil companies, and over the decades became a bestseller as a standard tool, indeed setting the standard, for micropalaeontological biostratigraphy.

Helmut Bartenstein was born in Eilenburg (Kreis Delitzsch; Saxony) on 21st January 1914. His Father, Dr Rudolf Carl Bartenstein, a school teacher in Frankfurt and

at that time a colleague of Dr Rudolf Richter (later Director of the Senckenberg Forschungsinstitut und Naturmuseum Frankfurt a. M.), was killed in 1915 during the First World War. As a result his Mother, who lived close to the museum in Frankfurt, had to care for her son alone while working as a nursemaid in a kindergarten. The young Helmut, having finished high school in 1932, decided to study natural sciences at the nearby Goethe-University where he took courses in geology and palaeontology as well as mineralogy and geography. At that time the Geological Institute of the Goethe-University was organisationally linked and housed with the Senckenberg Natural History Museum, he joined the Senckenberg Natural History Society (Senckenbergische Naturforschende Gesellschaft) and as an honorary volunteer assisted with a variety of museum tasks. It is from this time that he published his first micropalaeontological studies, in *Senckenbergiana*, on Devonian sponge spicules and Lower Jurassic holothurian sclerites.

After acceptance of his doctoral thesis Bartenstein's scientific career was interrupted, essentially stopped, by military service where he was assigned to 'Nachrichten-Truppe' (messenger unit) and the Pioneers. He succeeded in publishing short articles, including a joint paper on Mesozoic ostracods with Erich Triebel (1938), but from 1939 to 1948 there was a scientific silence due to the Second World War. In 1941 he was subordinated directly to the OKW (Oberkommando der Wehrmacht, or Armed Forces High Command) and posted to a 'Mineralöl' battalion specialising in exploration and exploitation of foreign oil fields. In this capacity he followed his temporary duty in the then Soviet Union (Ukraine and Caucasus) as well as Rumania, Hungary, Austria, Poland, The Netherlands and France. As an oil-geologist in uniform he worked for short periods with Wintershall AG, Kontinentale Öl AG and Régie Autonome des Pétroles (Aquitaine).

After a short wartime marriage to Irma Stuhl (1941–1947) [son Uwe], Bartenstein married Waltraut Steinhagen (1949) [son Rolf, daughter Beate Susanne].

In 1946 Helmut Bartenstein gained employment as an oil geologist (Erdölgeologe) with the "Deutsche Vacuum Oel AG", which later became Mobil Oil AG, based near Celle in north Germany, and was professionally engaged with oil exploration and production geology with the company until his retirement in January 1979. As an employee his activities were naturally directed by the company, so that micropalaeontological research and scientific literature became 'hobbies' carried out in his private time with the forbearance and understanding of his family. Common micropalaeontological interests reunited Bartenstein with Erich Brand, a friend since student days, resulting in fruitful postwar teamwork culminating in 1951 in their contribution to the Rudolf Richter Festschrift, dedicated to their 'Doctor-Father' (research supervisor) on the occasion of his 70th birthday.

In the early 1950's Bartenstein also renewed acquaintance with French micropalaeontologists he had met and helped during the German occupation. In collaboration with Maurice Lys and Jacques Sigal it was agreed to initiate a "réunion" in the form of a collecting expedition in the Paris Basin. The group became enlarged with other international colleagues including Erich Brand, Nicolas Grekoff and Tom Barnard. So it was in 1954 that the European Micropalaeontological Colloquium was born. The first meeting was followed by invitations to Germany (1955) and England (1956) and in the following decades the colloquia became larger and more international, including colleagues from behind the "Iron Curtain". The latter development led to collecting excursions to Poland and to the Soviet Union (Moldavia and the Crimea, 1971). By the time of the 20th EMC in Bavaria in 1987 the founding fathers had all retired and participants came from as far afield as the USA, PR China and Japan.

In the late 1950's Bartenstein conceived the idea of publishing an illustrated microfossil biostratigraphical guide. At his instigation a team of specialists from oil companies, geological surveys and the Senckenberg Museum collaborated to produce in 1962 the '*Leitfossilien der Mikropaläontologie. Ein Abriss*', a two volume book lavishly illustrated with photographs and drawings of, especially foraminifera and ostracods, together with range charts covering Palaeozoic to Neogene strata. Bartenstein himself was involved with three of the chapters, especially for the Lower Cretaceous. This book provided the inspiration fifteen years later for the stratigraphic guides of The Micropalaeontological Society, a series that continues to be produced.

Helmut Bartenstein's interest in the Lower Cretaceous had been stimulated by his oil exploration duties. Thus, material from NW-Germany, France, England, Switzerland and more remotely Trinidad (1957, 1966, 1973, 1977) resulted in various publications, with a particular interest in the Jurassic/Cretaceous boundary developing. In some of these publications ostracods were used as time-markers in addition to foraminifera, for instance in samples from the English (1956) and NW-German Lower Cretaceous (1959), including Heligoland (1975 together with his friend H.J. Oertli).

When Bartenstein retired (31 January 1979), true he had finished his professional career, but he was invited to give lectures in 'Micropalaeontology and Oil Geology' at the Geological Institute of the Technical University of Braunschweig (1979–1983). Two of his students from this period prepared a voluminous publication (Meyn and Vespermann 1994) revising historical types of Lower Cretaceous foraminifera, partly based on new collecting, which go back to a 'nursery of micropalaeontology' from the work of Roemer, Koch and Reuss.

In retirement, in addition to teaching, Bartenstein published on many other subjects that interested him: coalification, gas potential and its future prospects in the NW-European Palaeozoic, especially with respect to NW-Germany (e.g. 1980). He continued and completed his foraminiferal studies of Trinidad (1986, 1987). His wide-ranging knowledge and interests are evident in contributions to ‘*Natur und Museum*’ on Stonehenge (with B.N. Fletcher), Mesopotamian natural pitch seeps, on volcanism in the Azores and pseudovolcanoes on Iceland (with son Rolf). — Nevertheless, he always returned to what he had started with: Foraminifera. At the age of 87 he published (2001) a revision of Bajocian species from Western Australia using material collected by one of us (AL). — Finally, in 2005 his ‘swan-song’ was an evaluation of three lenticuline Foraminifera from the NW-German Bajocian, thus completing a circle he had started 70 years previously.

Scientists within and beyond Europe dedicated new species’ to Helmut Bartenstein in recognition of his micropalaeontological contributions: 13 Foraminifera, 2 ostracods, one holothurian and one fish otolith are named after him. — On the occasion of the 150th anniversary of Senckenbergische Naturforschende Gesellschaft in October 1967 he was awarded the ‘Eiserne Senckenberg Medaille’ for his long-term promotion of Senckenberg and its Micropalaeontology Section. He continued this support when donating ‘2.5 Zentner’ (= 125 kg) of books and reprints and finally in 2005 all his remaining slides and samples. — Helmut Bartenstein’s membership of SNG lasted for 78 years (since 1932), surely a Biblical age for membership of any organisation.

#### Erich BRAND (1914–2011)

The ‘ink was not dry’ on our tribute to Helmut Bartenstein when the bad news arrived that his long-term collaborator and friend Erich Brand had also died. For almost seven decades these two scientists had carried out micropalaeontological and regional stratigraphical research which led to numerous co-authored publications. They were both born in 1914, EB was just three months younger than HB, and they shared a lifelong friendship from student days (doctoral theses 1937) through careers in oil exploration to their last co-publication (2004), and the friendship extended to their families.

Although Jurassic foraminifera were his main business, Brand preferred ostracods of the same age. Thus it was that he published independently on Bajocian and Bathonian ostracods as stratigraphical tools. When he recently completed a regional stratigraphical correlation of NW-German boreholes (Brand and Mönnig 2009), he had plans to extend his research with Callovian ostracods and as recently as January 2011 was seeking advice by mail and telephone. Sadly, the final project was not completed.

#### References

Helmut Bartenstein published over 140 scientific contributions; a full publication list is housed with the Bartenstein Collection in the Senckenberg Forschungsinstitut und Naturmuseum Frankfurt a. M. and copies are available on request. Publications mentioned in the article (although not as usual formal citations) are given below.

- Bartenstein H (1956) Zur Mikrofauna des englischen Hauterive. *Senck leth* 37:509–533
- Bartenstein H (1959) Feinstratigraphisch wichtige Ostracoden aus dem nordwest-deutschen Valendis. *Paläontol Z* 33:224–246
- Bartenstein H (1980) Coalification in NW-Germany: Classification of the German oil and gas fields in relation to their coalification rank. *Erdöl Kohle Erdgas Petrochemie* 33:121–125
- Bartenstein H (1987) Micropalaeontological synopsis of the Lower Cretaceous in Trinidad, West Indies. Remarks on the Aptian/Albian boundary. *Newsl Stratigr* 17:143–154
- Bartenstein H, Bolli H (1973) Die Foraminiferen der Unterkreide von Trinidad, W.I. Dritter Teil: Maridaleformation (Co-Typlokalität). *Eclogae Geol Helv* 66:389–418
- Bartenstein H, Bolli H (1977) The Foraminifera in the Lower Cretaceous of Trinidad, W.I. Part 4: Cuche Formation, upper Part; Leupoldina protuberans Zone. *Eclogae Geol Helv* 70:543–573
- Bartenstein H, Bolli H (1986) The Foraminifera in the Lower Cretaceous of Trinidad, W.I. Part 5: Maridale Formation, upper Part; Hedbergella rohri Zone. *Eclogae Geol Helv* 79:945–999
- Bartenstein H, Brand E (1937) Mikro-paläontologische Untersuchungen zur Stratigraphie des nordwest-deutschen Lias und Doggers. *Abh Senckenberg Naturforsch Ges* 439:1–224
- Bartenstein H, Brand E (1951) Mikropaläontologische Untersuchungen zur Stratigraphie des nordwest-deutschen Valendis. *Abh Senckenberg Naturforsch Ges* 485:239–336
- Bartenstein H, Brand E (2004) *Citharina infraopalina*, eine wichtige Leitforaminifere an der Basis des mittleren Jura. *Senck leth* 84:75–83
- Bartenstein H, Luppold F (2005) Taxonomische Neubewertung dreier Foraminiferen-Arten im Dogger NW-Deutschlands. *Senck leth* 85:1–11
- Bartenstein H, Malz H (2001) Foraminiferen aus dem Newmarra-carra Limestone (Unter-Bajocium; W-Australien). *Senck leth* 81:25–57
- Bartenstein H, Oertli H (1975) Index ostracodes in the Lower Cretaceous of Heligoland. *Bull cent rech Pau SNPA* 9:5–25
- Bartenstein H, Bettenstaedt F, Bolli H (1957) Die Foraminiferen der Unterkreide von Trinidad, B.W.I. Erster Teil: Cuche- und Taco-Formation. *Eclogae Geol Helv* 50:5–67
- Bartenstein H, Bettenstaedt F, Bolli H (1966) Die Foraminiferen der Unterkreide von Trinidad, W.I. Zweiter Teil: Maridale-Formation (Typlokalität). *Eclogae Geol Helv* 59:129–177
- Brand E, Mönnig E (2009) Litho- und Biostratigraphie des Mittel-Jura (Dogger) in Bohrungen Norddeutschlands. *Schr dtsh Ges Geowiss* 54:5–73
- Meyn H, Vespermann J (1994) Taxonomische Revision von Foraminiferen der Unterkreide SE-Niedersachsens nach Roemer (1839, 1841, 1842), Koch (1851) und Reuss (1863). *Senck leth* 74:49–272
- Triebel E, Bartenstein H (1938) Die Ostracoden des deutschen Juras. 1. *Monoceratina*-Arten aus dem Lias und Dogger. *Senckenbergiana* 20:502–518
- Leitfossilien der Mikropaläontologie. Ein Abriss.* 1962. Vol. 1: 1–432, vol. 2: 61 plates, 22 tables. Gebrüder Borntraeger, Berlin.