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At the *vernissage* viewing of the exhibition, its initiator Prof. Adolf Seilacher talks to the outstanding Polish paleontologist and specialist on Mesozoic mammals Prof. Zofia Kielan-Jaworska

## Album Set in Stone

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**Although the Museum of Evolution has existed since 1984, its history stretches back to 1968, when the first paleontology exhibition was put on display in Warsaw's Palace of Culture and Science. In March and April 2008 the museum played host to the Fossil Art exhibition by world-famous paleobiologist Prof. Adolf Seilacher**

Fossils are the remains (most frequently shells and bones) left behind by our planet's inhabitants in

bygone eras, fixed in stone. Paleontologists seek them out, extract them from the surrounding rocks, and then study them in their laboratories using modern methods and technologies. The latter are becoming increasingly important: scanning electron microscopes, mass spectrometers, and even super-fast computers are all now commonly used in modern paleontology.

### Fossil Collector

Yet Prof. Adolf Seilacher, an eminent lecturer at the universities of Tübingen (Germany) and Yale (US), has not moved ahead with the times. His work most frequently involves traditional field observations supported by hand-drawn sketches in his own characteristic style. But there is a simple reason for this – the objects Seilacher studies simply resist treatment by more state-

of-the-art analysis techniques: they are various traces and imprints left behind by ancient organisms, such as tracks, burrows, and crawl marks preserved on the surface of rock layers of varying age.

### Geology's Nobel Prize

Despite these limitations of method, Seilacher is among the world's most highly regarded paleontologists, a much sought-after speaker at international conferences, and the author of more than 230 papers in leading scientific journals. In 1992 he became the only paleontologist to have been awarded the Crafoord Prize (which may be seen as the earth sciences' equivalent of a Nobel), in recognition of Seilacher's unconventional interpretation of certain famous Precambrian fossils from Ediacara in Australia as representing a separate kingdom of life forms (*Vendobionta*), among other achievements.

The Crafoord Prize enabled Seilacher to undertake another ambitious project: making the kind of objects he studied accessible to the wider public in the form of a traveling exhibition. The idea of exhibiting original rock slabs bearing traces of ancient life forms was out of the question from the outset, as extracting and transporting heavy original stones strewn around the world would have cost a fortune. Yet very accurate replicas of ancient trace fossils can be made: first a light latex or silicon "skin" is made in the field, which can be easily rolled up for transport. Once in the laboratory, each such "skin" is used to cast a faithful, life-sized epoxy copy of the original. And so the "Fossil Art" exhibition was born.

The more than 50 items encompassed in the exhibition include the world's first organic structures called stromatolites, a kind of Precambrian Pompeii (an ash-covered "cemetery" of *Vendobionta* from Newfoundland), false medusas from the Precambrian rocks of Australia (which are actually fossilized mud volcanoes), the trail of a large mollusk feeding on a Cambrian beach which is amazingly reminiscent of motorcycle tire tracks, the imprints of the first land animals, pirouettes left behind on the Cambrian sea floor by a kind of arthropod called trilobites, a spectacular weave of burrows made by Triassic crabs, and also footprints of a strange Triassic lizard from Germany. Practically each of the objects on exhibit constitutes a wonderful illustration of an interesting chapter in the book of life, inscribed in stone.

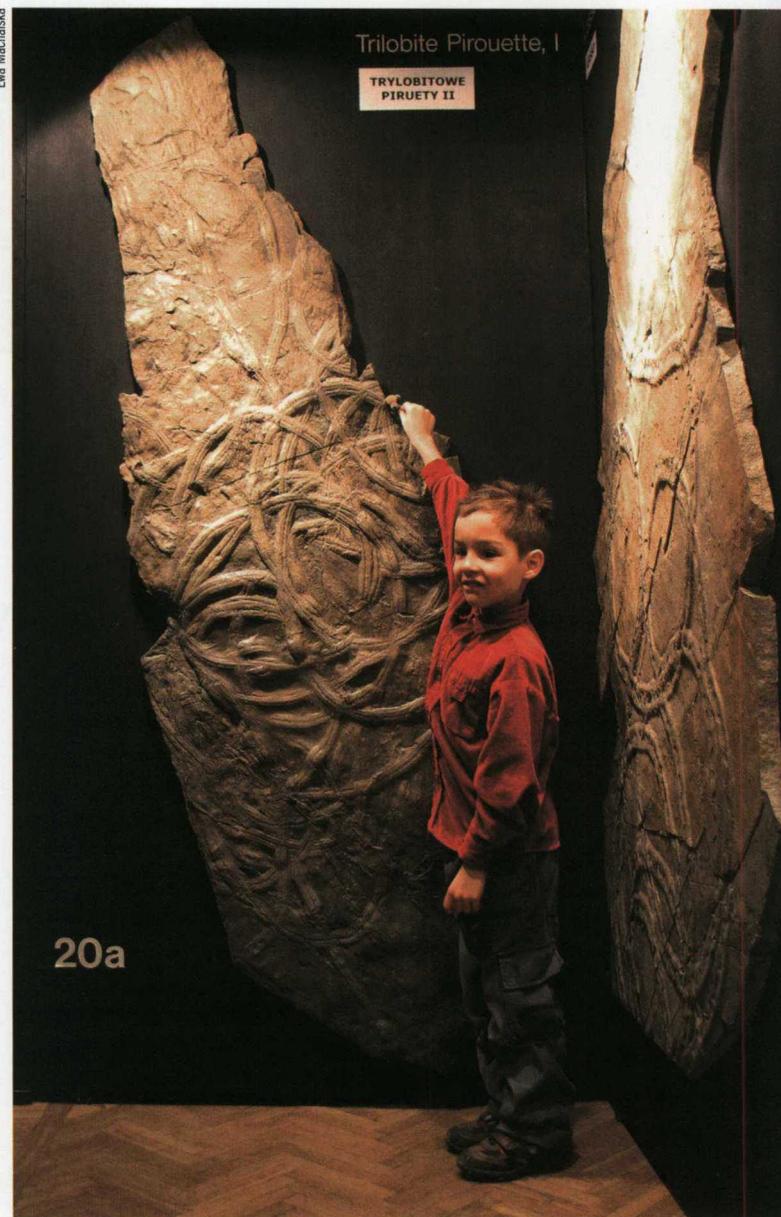
### Art meets science

Apart from their scientific value, the objects assembled in the Fossil Art exhibition are all aesthetically intriguing in terms of their unusual shapes, textures, and colors. Each is captivating as a sort of "snapshot" of nature's own works of art, captured in stone, invoking

visitors' aesthetic sensibilities in addition to piquing their scientific curiosity.

The Fossil Art exhibition is one of the world's most successful traveling natural science exhibitions. Having already been shown in more than 30 natural science museums in Europe, both Americas and Japan, in March and April 2008 it was on display at the Museum of Evolution of the Institute of Paleobiology, Polish Academy of Sciences, in Warsaw. This unconventional exhibition attracted much attention from aficionados of paleontology, and also highlighted the existence of the many signs of ancient life other than dinosaur skeletons. ■

Ewa Machalska



A seven-year-old visitor to the exhibition admires a replica of the traces left behind on the sea floor by trilobites, extinct Paleozoic arthropods