WELCOME AND INTRODUCTION TO THE FIRST MEETING OF FISH SPECIALISTS WITHIN THE FRAMEWORK OF I.G.C.P. PROJECT 124

by

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In this introductory talk to the participants of the first meeting of fish specialists within the framework of I.G.C.P. project 124, held at Leyden, The Netherlands, from 19 to 20 October 1978, some personal details are given on the two pioneers in the study of fossil fishes, viz. Louis Agassiz and Ernst Koken.

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Dear colleagues,

I am glad that you all could come to join this meeting of the Vertebrate subgroup, section of fishes, of the IGCP-project 124. We may say that this meeting is a unique happening, for as far as I know this is the first time that specialists working on fossil fishes come together in a meeting. It has been a dream of me for several years to bring together all those who study fossil fishes. This meeting is the first step towards the realization of this dream. Therefore I see a double purpose for this congress: not only a meeting in the framework of the IGCP-project, but also a beginning of a closer cooperation and fraternization among fish specialists in general.

In this introduction I would like to tell you something about two people who can be considered to be very important investigators in palaeoichthyology: Louis Agassiz, who gave the impulse to the study of shark and ray teeth and skeletons, and Ernst Koken, who was the pioneer of the study of otoliths of bony fishes and who gave a solid base to this branch of palaeontology.

First I shall tell you about Louis Agassiz (fig. 1). His full name was Jean Louis Rodolphe Agassiz. He was born May 28, 1807, at the parsonage of Motier-en-Vuly, on the lake of Morat, Canton of Fribourg, Switserland. He died the 14th of December 1873 at Cambridge, Massachusetts, U.S.A.

He was a pupil of the famous palaeontologist Cuvier. In contrast to Cuvier who preferred to lead a retired life, Agassiz was a man who loved to associate in society and to be admired by people. He was tall and well-built and by that he always automatically attracted attention in a company. He was a man with a magnetic power.

Agassiz' first intention was to work on living and fossil fishes. His first publications came out in 1828. That was the beginning of a large series of papers on fossil fishes. Up to 1844 his main interest was the study of fishes, but after that year he never again took up the study of fossil fishes. Already long before he ceased studying fishes he started the investigation of fossil echinoderms and afterwards also the living ones. All the rest of his work came accidentally or incidentally, but not as a result of a unity of plan. He studied glaciers as a pastime. He studied molluscs, like Mya and Trigonia. As soon as he arrived in America, he turned to turtles and jelly-fishes. Agassiz' problem was that he was too easily diverted from one study to another. He did not open new roads to natural history, but he enlarged greatly those pointed out by others. He made science more popular: he rose very high in his popularisation of natural history in North and South America and he created a large museum at Cambridge, Massachusetts, and an important marine biological laboratory at Penikese. He gave a strong impulse to the development of questions very little known before him, and created a more elementary method of teaching. His two principal passions in natural history were teaching and collecting specimens.

Now I come to Ernst Koken (fig. 2). Because of his many merits he was raised to the peerage and was allowed to call himself Ernst von Koken. He was born May 29, 1860, in Braunschweig, which is nowadays situated in Western Germany. He died the 21st of November 1912.

His teachers in geology were Von Seebach in Göttingen, Albert Heim in Zürich and Beyrich and Dames in Berlin. In Berlin he started his thesis on the Oligocene fish otoliths of Northern Germany. With this work and the following publications on otoliths he is beyond any doubt the pioneer of what I want to call with a neologism – otolithology. Hardly anything had been published on otoliths before and so he had to establish the scientific base for it by extensive investigations on recent fishes. He partly obtained his material by often eating fish of which he prepared the skeleton afterwards. This practical way of collecting otoliths (and fishes) from fish shops and markets is still important in our days, for many biologists studying fishes still underrate the importance of otoliths for identification or they simply forget to study them. Sometimes it is even possible to buy deep-

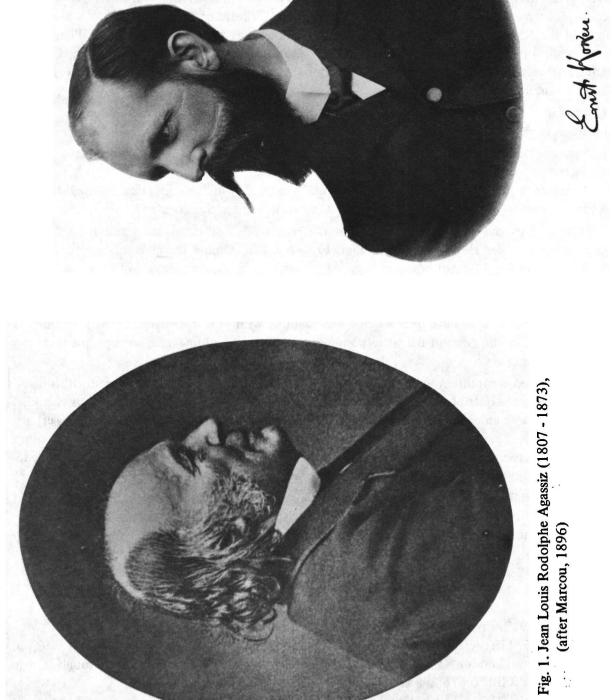


Fig. 2. Ernst Koken (1860 - 1912), (after von Huene, 1912)

frozen fishes from foreign seas. To my surprise I could buy for example fine sciaenid fishes on the Leiden fish market some time ago which proved to originate from China.

Koken had many interests in palaeontology and geology. Unfortunately he has not written more papers on otoliths after 1891 although his interest in otoliths continued to exist. In the winter of 1910/11 he has rewritten the part on the fishes in the second edition of Zittel's Grundzügen der Paläontologie. This was the last important thing he did for palaeoichthyology, as, unfortunately, he passed away soon afterwards. He has published many papers on fossil reptiles, molluscs and glaciology. Furthermore some publications on mammals, hyoliths, brachiopods and many general geological topics have to be mentioned like the Permian and Triassic of the Indian Salt Range and the geology of the South-Tirol Dolomites. In his later years he was highly interested in the Pleistocene and the evolution of mankind. For many years he was editor of the Neues Jahrbuch, of the Central-blatt für Mineralogie und Paläontologie, of Palaeontographica and of the Geologische und Paläontologische Abhandlungen.

Koken, just like Agassiz, was a talented and many-sided man, with a great eloquence, a great organization capacity and an enormous zest for work.

But now back again to our meeting. Of course Leiden was the most obvious choise for me as the place where this meeting could take place. But there is still another, peculiar thing that I have to tell you. The name of the burgomaster of Leiden namely is 'Vis', which means 'fish' in English. Thus what town would be better to choose as the site for a fish congress than Leiden?

I was asked to give you the greetings and the best wishes of Rostislav Brzobohatý, Jacques Herman, Fritz von der Hocht, Arnold Müller, Frederick Stinton and David Ward, who could not joint the meeting for different reasons. Especially I want to mention Arnold Müller from Eastern Germany, for whom it was impossible to come because the political situation did not allow him to at all. He would like very much to have contact with other specialists (he is working both on shark teeth and otoliths) and to have exchange of publications with you, for this is at the moment the only possibility for him (except for correspondences) to have communication with people from the western countries.

I have received written communications of Brzobohatý, von der Hocht and Ward for this meeting. Copies of these contributions are available for all participants. Ward's contribution 'A checklist of the sharks, rays and chimaeroids from the English Palaeogene' will be published in Tertiary Research, volume 2, part 2, which will appear at the end of this year. We intend to publish the other communications together with some or all of the lectures in a special issue of the journal 'Mededelingen van de Werkgroep voor Tertiaire en Kwartaire Geologie'.

I hope that this meeting will bring you what you have been expecting. Furthermore I hope that this will be the first of a series of future meetings of fish specialists and that it will serve as a means for coming to a newsletter of fish people which form a cycle of friends and scientists.

LITERATURE

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