

IUGS International Commission on the History of Geological Sciences (INHIGEO)

"Anniversaries": The Geological Survey in Vienna (k.k. Geologische Reichsanstalt) – an Imperial Geology, 170 years ago

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If we were to decide who benefited from the fact that geology had been established as a new academic discipline in 19th century, the *Reichsanstalt* in the Austrian capital would be the main candidate of such a success story. The Imperial Geological Survey in Vienna, founded in 1849, had its origins in the Mining Museum (*Montanistisches Museum*) and was the first of its kind as a state-founded institution on the European continent after a similar initiative had been established in England in 1835 (Oldroyd 1996). The main task of the *Reichsanstalt* was explicitly defined as the geological investigation of all territories under the Habsburg crown through stratigraphy, the language of geology. Covering this enormous and geologically extremely diverse space of about 600000 km² (about 240.000 square miles) within 18 years was a great achievement. It resulted in a unified overall geological image of the territories ranging from the Lombardy to Bukovina and from Dalmatia to the Gorge of the Elbe. Before the actual map was printed (*Geological Survey Map of the Austrian-Hungarian Monarchy 1867*) (Hauer 1867–74), a detailed set of negotiated relationships had to be implemented during the fieldwork that was organised in six sections with many geologists (Klemun 2012).

Cooperation between the geologists was considered a priority hinting at the political slogan *viribus* unitis (with united force) coined by the emperor. In the beginning, five employees worked at the *Reichsanstalt*, in 1869 this number had risen to 14. The Geological Survey Map of the Austrian-Hungarian Monarchy was compiled as a scale map of 1:144,000. The map, in 12 sheets in the scale

1: 576.000, was printed in five editions until the end of the century. Also, the geologists had compiled military maps on which they incorporated their fieldwork results. Maps are abstract visualizations of temporal dimension. They are determined by nature but, at the same time, profoundly political. The common efforts of local administrations used to make the 'Geological Survey Map of the Austrian-Hungarian Monarchy' would 'allow us to see the Imperial Geological Survey as the embodiment of a great united Austria' (Haidinger 1850), as Haidinger, the head of the *Reichsanstalt*, put it in a speech. In accordance with the political attitude of the *Reichsanstalt* headquarters, as a scientific institution superior to the individual territories considerable value was placed on cooperating with the scientific associations in the provinces organised and run by members of the bourgeois middle class, with parts of the administration and with local experts in the provinces. Even though the Habsburg monarchy was a multi-national state and the different national groups gradually emphasised their independence and started fighting for their autonomy, the *Reichsanstalt* maintained its policy of a 'cultural nation' (Feichtinger 2010, 39) under German leadership superior to conflicting nationalities.

Further readings:

Bachl-Hofmann, C., Cernajsek, T., Hofmann Th., Schedl. A. (eds) 1999. *Die Geologische Bundesanstalt in Wien. 150 Jahre Geologie im Dienste Österreichs (1849–1999)*. Böhlau Verlag, Wien.

Feichtinger, J. 2010. Wissenschaft als reflexives Projekt. Von Bolzano über Freud zu Kelsen: österreichische Wissenschaftsgeschichte 1848–1938. Transcript Verlag, Bielefeld.

Haidinger, W. 1850. Vorwort. *Jahrbuch der Geologischen Reichsanstalt*, **1.** without page number. Hauer, F. 1867–1874. *Geologische Übersichtskarte der Österreichisch-Ungarischen Monarchie nach den Aufnahmen der k.k. geologischen Reichsanstalt 1: 576.000*, Vienna 1867–74.

Hofmann, Th. & Klemun, M. 2012 (eds) *Die k. k. Geologische Reichsanstalt in den ersten Jahrzehnten ihres Wirkens. Neue Zugänge und Forschungsfragen.* Berichte der Geologischen Bundesanstalt, **95**, Wien.

Klemun, M. 2012. National ,Consensus'As Culture and Practice: The Geological Survey in Vienna and the Habsburg Empire (1849–1867). *In:* Ash, M. & Surman, J. (eds) *The Nationalization of Scientific Knowledge in the Habsburg Empire*, 1848–1918. Palgrave Macmillan, New York, 83–101.

Oldroyd, D. 1996. Thinking about Earth, a history of Ideas in geology. Athlone, London.



Figure 1: The staff of the Geological Survey ("k.k. Geologische Reichsanstalt") in Vienna, by permission of the Geological Survey (Geologische Bundesanstalt, Bibliothek und Archiv).