

Multimedia Library Collection: Art & Graphics

## Mass Spectrometry and Geological Eras

Korniyenko, Nika

From climate change to synthetic biology, today's Earth is rife with phenomena that blur the boundary between nature and culture, between life and technology. Since the Industrial Revolution, the collective impact of environmental changes caused by humans has reached a degree to which it can now be identified in the sediments. Geologists from the International Commission on Stratigraphy (ICS) are responsible for deciding how the Earth's history should be categorized into epochs and eras based on geological deposition in the earth. Each era must be clearly identified according to layers in the ground that are identical throughout the world. An ICS working group is currently examining evidence to decide whether we are living in a new, human-made era, the Anthropocene.



Geologic Eras

*Nika Korniyenko*

Drawn by Nika Korniyenko, 2014.

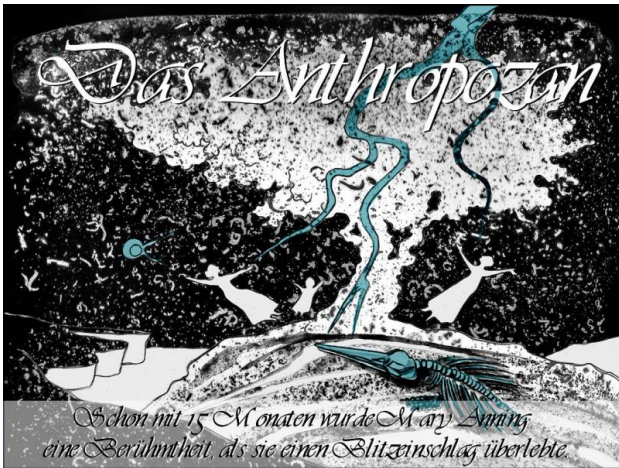


This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

### Mass spectrometry and geological eras

*Text and images by [Nika Korniyenko](#)*

*University of the Arts (UdK), Berlin*



### The Anthropocene

Mary Anning became a celebrity at the age of 15 months when she survived being hit by lightning.



Drawn by *Nika Korniyenko*, 2014. This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

*Weil Marys Familie sehr arm war, sammelte sie  
Fossilien an der Küste, die sie an Touristen verkaufte.*



Mary's family was very poor, so she collected fossils at the coast and sold them to tourists.

Drawn by Nika Korniyenko, 2014.



This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).



One day, Mary and her brother found the skeleton of a Ichtyosaurus. She was only 12 years old at the time.

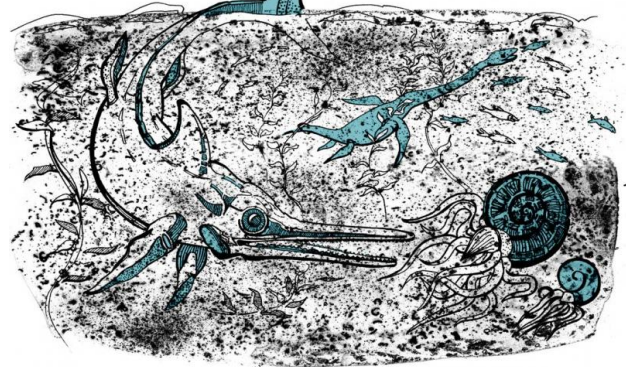
Drawn by Nika Korniyenko, 2014.



This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

---

*Das altzeitliche Meeresreptil sollte nicht ihr letzter  
außergewöhnlicher Fund sein.*



This ancient sea reptile would not be her last extraordinary discovery.



Drawn by *Nika Korniyenko*, 2014. This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).



Mary's fossils contributed to the understanding of the Earth's age.

Drawn by Nika Korniyenko, 2014.



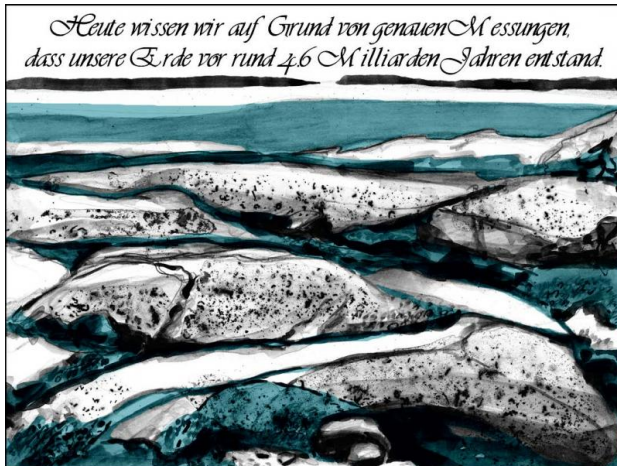
This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).



A new squad of geologists discovered more and more deeper and older layers of the Earth.



Drawn by *Nika Korniyenko*, 2014. This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).



Today we know through exact measurements that our Earth is about 4.6 billion years old.

Drawn by Nika Korniyenko, 2014.



This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).



Humans will leave their mark in rocks. What will be found lies in our responsibility.

Drawn by Nika Korniyenko, 2014.



This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

### Artist's comment

Mary Anning's story rekindled my own childhood fascination with geology and the exploration of the distant past. I can imagine how much stimulation Mary got from her scientific work, which gave her strength in the face of the struggle for survival. For my illustrations, I chose pencil and watercolor to echo the style of late eighteenth and early nineteenth century diary drawings.

### How to cite

Korniyenko, Nika. "Mass Spectrometry and Geological Eras." Environment & Society Portal, Multimedia Library, 2014. <http://www.environmentandsociety.org/node/6660/>.

The comic also appears in Alexandra Hamann, Reinhold Leinfelder, Helmuth Trischler, and Henning Wagenbreth, eds., *Anthropozän – 30 Meilensteine auf dem Weg in ein neues Erdzeitalter. Eine Comic-Anthologie* (Munich: Deutsches Museum, 2014).



This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0](https://creativecommons.org/licenses/by-nc-nd/4.0/)

## International License .

### Further readings:

- [Sources and Literature for the Anthropocene Milestone Comics](#)

### Related links:

- Welcome to the Anthropocene. The Earth in Our Hands. Special exhibition at the Deutsches Museum  
<http://www.deutsches-museum.de/en/exhibitions/special-exhibitions/archive/2015/anthropocene/>
- Welcome to the Anthropocene. The Earth in Our Hands. Virtual exhibition on the Environment & Society Portal  
<https://www.environmentandsociety.org/node/6354>
- International Commission on Stratigraphy  
<http://www.stratigraphy.org/>
- Comic-Anthology, Deutsches Museum Website  
<http://www.deutsches-museum.de/sammlungen/entdecken/comics/>

### Websites linked in image captions:

- <http://www.deutsches-museum.de/sammlungen/entdecken/comics/geologische-zeitmessung/>