# IN CELEBRATION OF MARTIN RUDWICK'S 90<sup>TH</sup> BIRTHDAY

# **Earthly Things**



View of the great eruption of Vesuvius from the mole of Naples in the night of the 20th of October 1767.

From William Hamilton, Campi Phlegraei (1776), Plate VI

Venue: Winstanley Lecture Theatre, Trinity College, Cambridge, 19 April 2022

Free tickets for in-person participation: <a href="https://www.eventbrite.co.uk/e/earthly-things-a-workshop-in-celebration-of-martin-rudwicks-90th-birthday-tickets-291164128747">https://www.eventbrite.co.uk/e/earthly-things-a-workshop-in-celebration-of-martin-rudwicks-90th-birthday-tickets-291164128747</a>.

#### On Zoom:

https://trin-cam-ac-uk.zoom.us/j/96772023698?pwd=L0pUT2VLNIZmcmJtblc5aXJXeDBmZz09

Meeting ID: 967 7202 3698

Passcode: 250555

#### Calendar entry:

 $\frac{https://outlook.office365.com/owa/calendar/30fb6da37539414aa10fb007eb745f5f@cam.ac.uk/de7ba68c5a5441e58f4d7fd80271862b13815877894738284475/calendar.ics$ 

Organisers: Professor James Secord (jas1010@cam.ac.uk), Dr Emma Spary (ecs12@cam.ac.uk), Professor Sachiko Kusukawa (sk111@cam.ac.uk)

## Introduction and Welcome (10:00-10:30)

Session 1 (10:30-11:30)

#### **Figures of Stone**

Jeremy Schneider (Department of History, Princeton University): "Extinctions Compared: Visual analogies in early paleontology"

This paper unpacks analogy as a tool within early paleontology. Drawing on Martin Rudwick's distinction between the "easy" and "hard" cases, I argue that visual comparisons between fossils and living species defined the controversy over extinction in the 17th century. Unlike today—where we separate extinct from living—finding likenesses for the extinct defined premodern attempts to "recover" lost forms. The paper will explore this theme through an analysis of ammonites and the central role they played in the early Royal Society of London.

Juan Pimentel (CSIC, Madrid): "The Rhinoceros and the Megatherium: Exotic fauna, extinct fauna, and the pleasures of imagination"

This paper is about two big quadrupeds: one living wonder, coming from the far East to Renaissance Lisbon, the other, a set of bare bones, coming from the deep past to an Enlightened cabinet of natural history in Madrid. As visual analogies are fundamental in the making of palaeontology, so too are they in the historiographical argument in this paper. Images and imagining pictures play a key role in order to see the unseen and "bursting the limits of time", as Martin Rudwick, following Cuvier, put it.

Claudine Cohen (École des Hautes Études en Sciences Sociales / Ecole pratique des Hautes Études, Université Paris Sciences Lettres (Laboratoire Biogéosciences)): "Cuvier on Myths"

In this paper, I will question the various—and to some extent contradictory—usages of myths in Georges Cuvier's *Recherches sur les ossemens fossiles de quadrupèdes* (1812). This 4-volume work introduces the practices, methods and concepts of a new scientific discipline, Vertebrate palaeontology: while it discards myths traditionally attached to the meaning of fossil objects, it also includes developments of *comparative mythology*, reviewing diluvial narratives from different historical traditions, and eventually stressing the pertinence of the biblical episode of the flood as a framework to palaeontological knowledge. I will analyze here the historical, epistemological and political significance of this reference in Cuvier's work.

Break (11:30-11:45)

Session 2 (11:45-12:45)

## **Imagining Earth's History**

**Speakers:** David Sepkoski (Department of History, University of Illinois), Ralph O'Connor (School of Divinity, History and Philosophy, University of Aberdeen), James A. Secord (Department of History and Philosophy of Science, University of Cambridge)

Lunch (12:45-14:00)

Session 3 (14:00-15:00)

#### **Underground Networks**

Tina Asmussen (Universität Rohr-Bochum): "Extractive Entanglements: Mining and the cosmologies of mineral resources in the early modern period"

From the late 15<sup>th</sup> century, mining helped redefine the notion of "nature" from the perspective of resource exploitation. Mining represents an early form of large-scale landscape transformation with far-reaching consequences. Early modern extractive industries differed from modern practices, yet they are often seen as the origins of a mentality that values nature as little more than a passive container of resources that had irreversible consequences for the environment. In this presentation, I open a broader perspective by focusing on the extractive entanglements between subsoil, surface, and cosmos, or between soils and souls, ores and spirits. It aims at an understanding of mineral resources that does not promote economic determinism, but connects materials, landscapes, people and cosmologies in a comprehensive perspective.

Patrick Anthony (DAAD PRIME Fellow, LMU Munich / Cambridge University): "Imperial Orography: 'Liminal experience' in Central Asian borderlands"

Inspired by Martin Rudwick's analysis of liminal experience in geological travel (*Social Studies of Science* 26, no 1 (1996): 143-59), this talk explores Alexander von Humboldt's study of mountain formations in (and beyond) Imperial Russia's Siberian frontier in 1829. "Liminality," Rudwick writes, "gives the unfamiliar a 'sacred' aura, in which deeper significance may more readily be perceived." I suggest Rudwick's insights on liminality are especially useful in histories where the earth sciences were practiced along contested, ill-defined, and belligerent borderlands. I discuss the peculiar mix of familiar and unfamiliar circumstances that made it possible for Humboldt, joining a community of borderland surveyors, to project geological observations made *within* Russian Siberia into the disputed lands *beyond* its borders. In this case, the savant's "heightened expectations" of the Ural and Altai ranges were strongly determined by the underground networks that formed around fortified mining operations on the Russian frontier.

Hugh Torrens (Geology Department, Keele University): "The Vexed History of the George Bellas Greenough Archives 1855—2022"

Already in 1966, Martin & I had worked together in Sicily, where we were both already fascinated by the science of geology and its history (he on Lyell's work there, & I on the local Gemmellaro family). Martin had already been introduced to one half of the chaotic Greenough archives, despite its treatment by rats, which then lay in one of two houses (that of the Cottingham family) in the Essex village of Layer-de-la-Haye. He was soon responsible for getting this to its temporary home in Cambridge University Library, while the other half (that of the Greer family in the same village) soon went to University College London, where—since 1992—it has been united. But it was not until I hunted in C. D. Sherborn's book Where is the —— Collection (1940) that I discovered how these long divided archives had come to England, from County Cork, Ireland. Here the descendants of Greenough's father's sister had been major Protestant land owners since 1807 (when Greenough had founded his Geological Society of London). I will try and show how, when and what had happened to these archives, before and during the frightful events there, following the Easter Rising in 1916 up to the end of the Civil War, which followed. It was clearly a miracle that they had survived at all. This is also the reason I was born in England, to another family forced out of Ireland by the same Cork IRA brigade during these same terrible events.

## Session 4 (15:00-16:00)

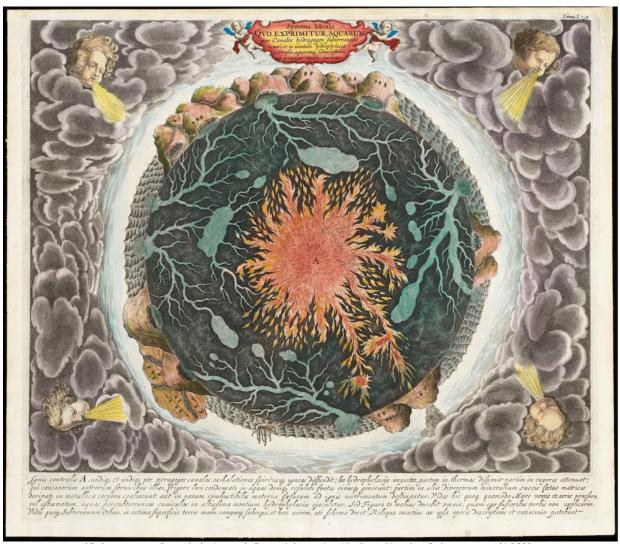
### **Imaging Knowledge**

**Speakers:** Monica Azzolini (Dipartimento di Filosofia e Comunicazione, Università di Bologna), Ludmilla Jordanova (Department of History, University of Durham), Nick Hopwood (Department of History and Philosophy of Science, University of Cambridge)

Concluding Remarks (16:00-16:30)

Wine Reception (17:00-18:30)

Wren Library, Trinity College



'Subterraneus Pyrophylaciorum'. From Athanasius Kircher, Mundus Subterraneus (1668).