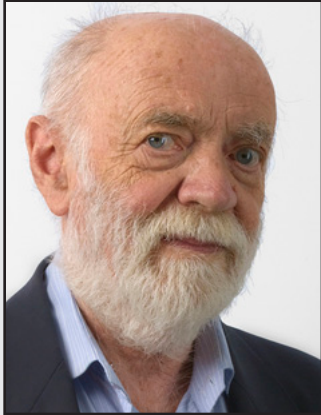


2010 MEDALS & AWARDS

MARY C. RABBITT HISTORY OF GEOLOGY AWARD

Presented to
Gabriel Gohau



Gabriel Gohau
Lycée Janson de Sailly, Paris (emeritus)

Citation by Kennard B. Bork

We live in an increasingly “Global World,” but barriers of language and culture do still exist. It is therefore possible that many members of the Geological Society of America (GSA) will not be familiar with French historians of geology. My pleasant task today is to introduce Dr. Gabriel GOHAU, a French colleague and renowned scholar, as the 2010 recipient of the Geological Society of America’s “Mary C. Rabbitt Award.” This honor, bestowed by GSA’s History of Geology Division, is an excellent example of our recognition of valued work in an international context.

Professor Gohau’s insightful writings, and his leadership of COFRHIGEO (*Comité français d’histoire de la géologie*), are celebrated in France and among Francophone readers around the world. Americans may be familiar with Gabriel’s superb book, *Histoire de la géologie* (1987), translated into English (1990) by Albert and Marguerite Carozzi. Also in 1990, Gohau published *Les sciences de la Terre aux XVIIe et XVIIIe siècles*. His important book on *Naissance de la géologie historique* appeared in 2003.

I can tell you that American and British members of COFRIGEO, such as Ken Taylor, Martin Rudwick, Hugh Torrens, and yours truly, have profited immensely from a long line of important articles produced by Dr.

Gohau. Hallmarks of his writing are clear explications of major issues and fresh insights into significant historical contexts. Early in his career he illuminated the development of ideas concerned with the origin of mountains. That topic will be revisited in an upcoming book on the prehistory of tectonics. From the late 1970s to the present, Prof. Gohau also has generated valuable biographic analyses of major figures in the history of the geosciences. Subjects of his informative portraits include Buffon, Constant Prévost, Jean-André De Luc, Élie de Beaumont, Lamarck, Dolomieu, Lavoisier, Cuvier, and, in Britain, Rev. Thomas Burnet, and James Hutton. They provide helpful factual frameworks, but also integrate biographic details with larger intellectual and cultural issues. The reader often thinks, “Aha! That is an interesting insight!”

For those not familiar with Prof. Gohau’s impressive background, a bit of biography is in order. He was born in Nantes, in the Loire Atlantique region of western France. After schooling in Nantes, he moved to Paris and graduated from the *École normale Supérieure de Saint-Cloud* in 1959, achieving a prized *Agrégation de sciences naturelles*. A French-professor colleague of mine used to delight in listening to speeches or reading texts by *agrégés*, because of their clarity, Cartesian rigor of logic, and linguistic poetry. From 1959 through 1995, Gabriel taught at the *Lycée Janson de Sailly* in Paris. For those not familiar with the French educational system, it is worth noting that the school is one of the most prestigious in France. Its aim is to educate the very best students in areas ranging from science to politics. In 1983, Prof. Gohau completed his doctoral *Thèse d’État* on “Ancient ideas on the formation of mountains.” The *Société géologique de France* recognized his many contributions to understanding the history of geology by awarding him the “Prix Wegmann” for 1994. Three years later, Gabriel Gohau took over as President of the *Comité français d’histoire de la géologie*, succeeding COFRHIGEO’s founder and leading light, François Ellenberger, our Division’s History of Geology Award winner in 1994. Fittingly, Gohau edited the 1997 book *De la géologie à son histoire* that paid homage to Ellenberger’s many contributions to the history of geoscience.

It is not possible in these brief remarks to pay full tribute to the impact of Prof. Gohau’s extensive scholarship in our discipline, but both Ken Taylor and I have strong recollections about how Gabriel’s clear prose and keen analyses helped us

deepen our appreciation for the maturation of geology. Topics such as Actualism versus Catastrophism, Lamarckian evolution, the duration and calibration of geologic time, Theories of the Earth, evolving understanding about metamorphism, and paleontology as a key to unlocking Earth history were all treated in eloquent depth by Gohau. He also helped decode the philosophy behind geological concepts, as he commented on the epistemology of Karl Popper and the philosophical grounding of Lamarck’s work. When I was working on a paper about the merit of studying the history of science, it was helpful to have his 2005 discussion of that exact topic, as published in the *Dossiers de l’Union Rationaliste*. Which introduces the point that the significant role of rationalism is built into Gohau’s vision of historical and current events. And that he appreciates the power of history to inform and excite students.

Although retired from classroom teaching, Prof. Gohau remains active as a scholar and leader of the French history of geology community. He retains his love of hiking in the mountains and vacationing along the Atlantic coast of France. Those attuned to French history will be amused to realize that Prof. Gohau’s home in the Paris suburbs is on Avenue Bernard-Palissy, named in honor of the great Renaissance potter and proto-geoscientist.

Our Awardee cannot be with us physically today, but he is pleased to be with us in spirit. It is truly a privilege to recognize Professor Gabriel Gohau as the recipient of our Division’s “Mary C. Rabbitt Award” for 2010.

Response by Gabriel Gohau

I wish first to express my gratitude to the Geological Society of America and its History of Geology Division for this unexpected award. Let me also express my very great regret that I am unable to receive it in person, for reasons of health. François Ellenberger, my French colleague upon whom you bestowed this distinction sixteen years ago, was similarly obliged to remain at home instead of crossing the Ocean. And my friend David Oldroyd also had to be absent when the award was presented to him a decade ago, although in his case for the reason that he was at the time making a journey in a distant desert on the back of a dromedary. I am much less of an outdoor adventurer than David.

The list of the award’s previous recipients is impressive, and in reading it

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I sense the magnitude of the honor you are doing me. I will refrain from arguing that the award is undeserved, even though that is what I think; this could not help seeming to be false modesty, and lacking in respect for your judgment.

I was educated as a naturalist; in France the study of biology and geology are strongly linked. As a lycée professor in Paris, I acquired a taste for the history of science during the 1970s through the works of two distinguished French philosophers of science, Gaston Bachelard and Georges Canguilhem. In 1972 I met Canguilhem, who suggested that I undertake to write a *thèse d'Etat* under the supervision of one of his most noted students, François Dagognet. Thus I owe my philosophical education to this French school of historical epistemology, a school characterized by study of epistemological obstacles that produce intellectual discontinuities separated by periods of stasis or equilibrium, to borrow from Gould's way of speaking. Robert Dott and Ken Bork both mentioned, on receiving this prize, that there exist two categories of historians of science: scientists themselves, and professional historians. In France, philosophers also play an important role.

My 1983 thesis was entitled "Past ideas on the formation of mountains—the prehistory of tectonics." In 1976, meanwhile, François Ellenberger had founded the French Committee for the History of Geology, our national subgroup within INHIGEO. He appointed our friend Jean Gaudant as secretary, a post he continues to fill with great devotion. I joined COFRHIGEO, as our Committee is known, and in the years that followed this gave me the opportunity to meet American and British friends who have preceded me in winning this award. Ken Bork came to Paris in 1980 for the International Geological Congress. Another participant in the 1980 Congress was Ken Taylor. Right away we got on well together, finding that we had ideas in common about geology during the second half of the 18th century. I also encountered Hugh Torrens, when François Ellenberger organized a repeat performance of his memorable historical field trip from the 1980 Congress. Similarly, I came to know Martin Rudwick, who came to France frequently, and of course Albert Carozzi who often travelled to Geneva. Together with his wife Marguerite, in the late 1980s, Albert translated my *History of Geology*, and this brought my name to the attention of American readers. Perhaps this book helped in turn to

raise American consciousness of Continental European characters in geology's history, and French ones in particular. But if so this may be seen as repayment of a debt, for so many of these francophone figures have been studied by researchers from the English-speaking world. Martin Rudwick on Cuvier, for example, or Ken Taylor on Desmarest, or Albert Carozzi who has written so extensively on Saussure, as well as on other Swiss figures, such as Elie Bertrand, who has been analyzed also by Ken Bork. And as is well known, Carozzi has translated de Maillet and Lamarck, among others, into English.

I may say I owe my choice of tectonics as a subject of research to the realization that Buffon could think of a syncline as a hole in the ground. Also, I wanted to fathom his idea of irreversible epochs, and I discovered that the cyclic conception of history in nature, which I had thought arose with Hutton, had a prior history. So I studied tectonic ideas from ancient Greek times forward. Thus I encountered classic authors who wondered if mountains date from the Deluge or even the Creation, a subject on which I learned much from the famous *Earth in Decay* by Gordon Herries Davies, recipient of this award in 1996. Lately I returned to this subject in a brief history of tectonics that was published this past summer.

In contradistinction to mountain formation, another subject that has occupied me a great deal is geohistory. Receiving this award in 2008, Gregory Good noted an advantage held by historians of geology over those concerned with physics: geology is an historical science, and geologists are readily drawn to think about time. The historical sciences have always been a preoccupation of mine. I learned from reading the philosopher Antoine Cournot that all history is contingent. And I concluded that geohistory must be constructed from the Earth's archives, which is in fact a double sort of archiving: stratigraphic archives marking different points in time, and facies archives indicating spatial distinctions. On these grounds I judged that the birth of a real geohistory must be situated around 1780. I share both the subject and the judgment with others, including Ken Taylor (from his thesis on Desmarest and his attention to geology in 1776), and David Oldroyd, with whom I was long acquainted through reading his work and by correspondence before meeting him personally. David's separation of "genetic" from genuinely "historical" systems of temporal thinking remains central to my conception of geohistory and historical

science. I wrote a book on this topic in 2003, and organized a conference on it with my friend Stéphane Tirard.

Of course, the birth of geohistory is now a sphere we cannot consider without engaging Martin Rudwick and his two large volumes on the reconstruction of geohistory. He and I agree on the centrality of the contingency of history. Our religious convictions differ, of course, as I am an atheist. But I am prepared to agree that the Genesis story served as an outline sketch or template for some early histories of the world. Provided, that is, that cultural conditions permitted liberties to be taken in interpreting the Bible, something Burnet did, as only an Englishman could do at the time. This was pointed out by the historian of biology and geology Jacques Roger, who was for me a scholarly model and guide.

I see in the statement of thanks by Davis Young, on receiving the award in 2009, that he came to the history of geology through critical responses to young-Earth creationism. In my research I have encountered figures who held to the creationists' short time scale; such is the case for instance of the abbé Maupied, who sought to adapt to this view the work of the geologist Constant Prévost (well known to Ken Bork) and of his friend the biologist Blainville. But others like the Biblicist Jean-André Deluc whom I examined with Ellenberger, and Cuvier who derived much from Deluc, represent the prevalent attitude among serious scientists in having accommodated their religious convictions to their scientific investigations.

One more word on my acquaintance with American and British colleagues. At an early stage of my career I inquired into the geology and chemistry of Lamarck; and I formed a valued acquaintance with the American-trained specialist in evolution, Jon Hodge, who has made his career in England. More recently I studied Darwin's geology. For the latter it was a pleasure to work through the fine book by Sandra Herbert, herself a recent recipient of this award, with whom I first became acquainted years ago, at a meeting held for the centennial of Darwin's death.

I am writing this response at Saint-Brévin, a Breton town where the Loire flows into the Atlantic, near Nantes. I look out on the vast Ocean that separates us. It is now some 200 million years since the New World began to distance itself from Europe and Africa. When this message reaches you the distance will have increased by perhaps a half-millimeter. Thank you for staying close in spirit.