

**Changing Channels:
Constructing and comparing
national identities in French
and British mathematics, c.
1800-1840 / Des effets de
Manche: sur la construction et
la comparaison d'identités
nationales dans les
mathématiques françaises et
britanniques, 1800-1840**

**Rapport sur les
contributions**

ID de Contribution: 1

Type: Non spécifié

The construction of national, cultural, and philosophical divides between French and British mathematics: a historiographical reassessment

vendredi 24 mai 2024 10:00 (1 heure)

A locus classicus in the historiography of (early) 19th century mathematics is that of the divide between French and English practices and conceptions of that science – a divide often framed in terms of foundational approaches, and pedagogical practices, and cultural matrices. A closer look at this historiography, however, reveals that it draws on a rather narrow conception of its subject: be it by the limited sample of mathematical topics it engages with or by the few locales it visits – to put it bluntly, calculus and its foundations in Paris and Cambridge exclusively. This paper proposes to reassess this narrative in light of a more expansive selection of episodes in the history of mathematics, and, in doing so, to question the relevance of such sweeping national and cultural categories.

Orateur: MICHEL, Nicolas (Bergische Universität Wuppertal)

ID de Contribution: 2

Type: **Non spécifié**

Reconsidering the “decline of 18C British mathematics”

vendredi 24 mai 2024 11:00 (1 heure)

The historiographical notion of a “supposed decline of ‘British mathematics’ after the death of Isaac Newton” has been “thoroughly nuanced, if not outright debunked”, as Brigitte Stenhouse and Nicolas Michel write in the seminar prospectus. At present, we can read several historical accounts of the development of 18th-century calculus and algebra, and even accounts in which not only “pure” mathematics is considered, but in which “importance is given to other disciplines such as geometry, mechanics, or applied mathematics” (seminar prospectus). Indeed, we can refer to several histories of 18th-century calculus, algebra, the analytical mechanics of extended bodies, and celestial mechanics. However, notwithstanding the “debunking” of the “decline thesis”, when we read the above accounts, even the recent fine chapters by June Barrow-Green, Jeremy Gray and Robin Wilson, and by Jeanne Peiffer (see the References), we are struck by the fact that very few British mathematicians active in the second half of the 18th century are mentioned, and those few only in passing. Note: this is not a criticism of the above chapters!!! Quite the contrary. I am referring to these chapters as examples of the best we can hope to read in this field. I simply love them, and I think there is much to be learned from studying them, as I will try to do in my talk. This talk is proposed as an attempt to discuss the “decline of 18th century British mathematics thesis” in the light of the best recent historiography of 18th-century mathematics (viz. the above chapters). I will also draw freely on two of my own papers (see the References) in order to reconsider them with a critical eye.

References

June Barrow-Green, Jeremy Gray, Robin Wilson, Chapters 7, “The 18th century”, Chapter 8 “18th Century number theory and geometry,” Chapter 9 “Euler, Lagrange and 18th Century Calculus,” Chapter 10 “18th Century Applied Mathematics,” Chapter 11 “18th Century Celestial Mechanics,” in *The History of Mathematics: A Source-Based Approach*, MAA Press, Volume 2, 2022, pp. 191-330.

Niccolò Guicciardini, “Dot-Age: Newton’s Mathematical Legacy in the Eighteenth Century,” *Early Science and Medicine* 9(3) 2004, pp. 218-56.

Niccolò Guicciardini, “The Quarrel on the Invention of the Calculus in Jean E. Montucla and Joseph Jérôme de Lalande, *Histoire des Mathématiques (1758/1799-1802)*,” in *The History of the History of Mathematics*, B. Wardhaugh (ed.), Peter Lang, 2012, pp. 73-88.

Jeanne Peiffer, “Inventing Mathematics,” in *Volume 4: A Cultural History of Mathematics in the Eighteenth Century*, edited by Maarten Bullynck, Bloomsbury Press, 2024 [part of a 6 volumes set edited by David Rowe and Joseph Dauben].

Orateur: GUICCIARDINI, Niccolò (Università degli Studi di Milano)

ID de Contribution: 3

Type: **Non spécifié**

Lending authority from 'French analysis' in the work of Mary Somerville

vendredi 24 mai 2024 13:45 (1 heure)

As a woman in late eighteenth- to early nineteenth-century Britain, Mary Somerville was almost unique in cultivating for herself a reputation as an expert mathematician. Much of this reputation relied upon recognition of her studies of mathematics recently developed in Paris, especially the work of Pierre-Simon Laplace in physical astronomy. Indeed in 1827, the President of the Society for the Diffusion of Useful Knowledge stated that if Somerville was not to translate Laplace's *Mécanique Céleste* into English, then 'none else can, and it must be left undone'. Restricted from other forms of legitimisation, such as the title of Wrangler for successful Cambridge students or the full membership of a learned society, Somerville deftly positioned herself as an expert in the science and mathematics that was seen by some as the answer to a perceived decline in British science. Rather than critiquing delineations between French and British mathematics, this talk will treat them as actors' categories and investigate how they were used by Somerville to find community and respect as a mathematician.

Orateur: STENHOUSE, Brigitte (The Open University)

ID de Contribution: 4

Type: **Non spécifié**

Professional mathematical circulations between France, England and the United States. Discussions on the national identities of carriage-makers through the place of descriptive geometry in coach design (1850-1900)

vendredi 24 mai 2024 14:45 (1 heure)

This paper examines the circulation of descriptive geometry - a mathematical theory formalizing projection techniques for the flat drawing of three-dimensional objects - in carriage woodworkers and makers' drawing practices at the end of the 19th century. The use of descriptive geometry in this professional milieu was first documented in France; the mathematical theory then circulated in England and the United States with a different fervor and intensity. English and American carriage makers were not unambiguous in their assessment of the relevance of the "French Rule" , a discrepancy that I will attempt to explain by examining the use of stereotomic representation of volumes on both sides of the Channel, as well as American carriage makers representations of so-called "English mathematics" and "French mathematics".

Orateur: PREVERAUD, Thomas (Université d'Artois)

ID de Contribution: 5

Type: **Non spécifié**

Table ronde

vendredi 24 mai 2024 16:15 (1 heure)

Orateurs: SMADJA, Ivahn (Nantes Université); CHEMLA, Karine (CNRS - SPHERE)