

# **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**

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## **Programme Scientifique**

Much has been written about the supposed decline of “British mathematics” following the death of Isaac Newton, especially in light of the rise on the Continent of ever more powerful algebraic methods. This decline has long been put in perspective with a revival of said British mathematics in the 1810-1840s, enacted through the collective import and reworkings of Continental methods—and, more specifically, “French” analysis—in a bid to reclaim for Britain its status as a leading mathematical nation.

In recent decades, such narratives have been thoroughly nuanced, if not outright debunked. Beyond mapping the construction and circulation of such images of decline and revival, historians have demonstrated the limitations of viewing this episode exclusively from this perspective. They have done so by refuting the decline thesis through highlighting the continental influence of the works of Newton's followers well into the 18th century; by providing a more complex picture of the efforts to rejuvenate British mathematics at the onset of the 19th century; and by convincingly undermining the idea of a key break at this very juncture.

However, even in these revisionist historiographies, there endures a framework fundamentally structured by analytical categories corresponding to nation-states and large “cultural areas”: British vs Continental mathematics, Englishness vs Frenchness etc. While the actors of this period did indeed construct and employ such national(ist) categories, much remains to be said about the strategic role they played in the creation of collective identities, the socio-political backdrop to their formation, the historiographical stakes involved in their recuperation by present-day scholars, and the possibility or even the necessity of doing without them. These are the questions this workshop is concerned with.

Such questions matter on several interrelated levels. Firstly, images of distinctly British mathematics (whether that epithet carries a negative or positive connotation) must be viewed in relation to the emergence of a ‘British’ identity during the 18th and early 19th centuries, alongside or including other identities such as English, Welsh, or Scottish. This common identity was largely constructed against an external, sometimes hostile ‘Other’; a role often attributed to France in the context of the Revolutionary and Napoleonic Wars. In many cases, British perceptions of the enviable state recognition and remuneration given to those conducting scientific research in France, and thus of the expertise and authority of French mathematicians, fueled such nation-based narratives. On the other hand, the military and intellectual successes of a transformed, post-Revolutionary France threatened the ruling classes in Britain whose power relied on the belief that the aristocracy were inherently suited to positions of authority. In sum, a fine-grained analysis of the socio-political determinants of these national constructs is necessary to seriously engage with historical actors' own perspectives on this episode, whilst remaining cognizant of their ideological provenance and underpinnings.

Secondly, the construction of contrasting images of “British” and “French” mathematics in these narratives was accomplished through the selection of a narrow set of places, actors, and subjects. More specifically, this often required placing the focus exclusively on sites of prestige such as Cambridge and the École Polytechnique, on towering figures such as Peacock and De Morgan (in Britain) or Lacroix and Cauchy (in France), on specific theories such as the differential calculus and symbolic(al) algebra. What happens to these national categories, however, when they are made to include and account for mathematicians from a broader social or geographical background? Or when priority is given to other disciplines such as geometry, mechanics, or applied mathematics? A transversal and comparative study of these other locales will yield a richer picture of the circulation of mathematical knowledge between France and Britain.

Lastly, recent scholarship in history of science has done much to caution against essentialist, “culturalist” uses of analytical categories predicated upon ready-made collectives such as “cultures”

defined by nationality or language. Scientific cultures, this scholarship shows, are not merely to be observed as the form that scientific practice takes in a pre-existing "culture"; rather, they are dynamic objects to be carefully constructed by the historian, through the description of concrete practices and the study of their circulation. By eschewing static, naive concepts of culture, and by focusing on circulations and shared practices, this workshop will open new historiographical perspectives on the interrelation of mathematics developed in Britain and in France at this time.