



Testimony on the history of scientific cooperation in Europe through the lens of the European Science Foundation

Martin Hynes
9 May 2019, Rome



But what sort of lens?

We must avoid chromatic aberration and rose tints!

Scientific Cooperation

Can there be science without cooperation?

- Almost certainly, yes. But one cannot call inquiry science without corroboration
- Reproducibility – the essential test. By implication, there must always be some inefficiency in research
- To cooperate, one needs to share results– and increasingly data

The Grand Tour

Fascinating how many times a great trip sparked the fundamental discoveries.

1799 Alexander von Humboldt "***Personal Narrative of a Journey to the Equinoctial Regions of the New Continent***"

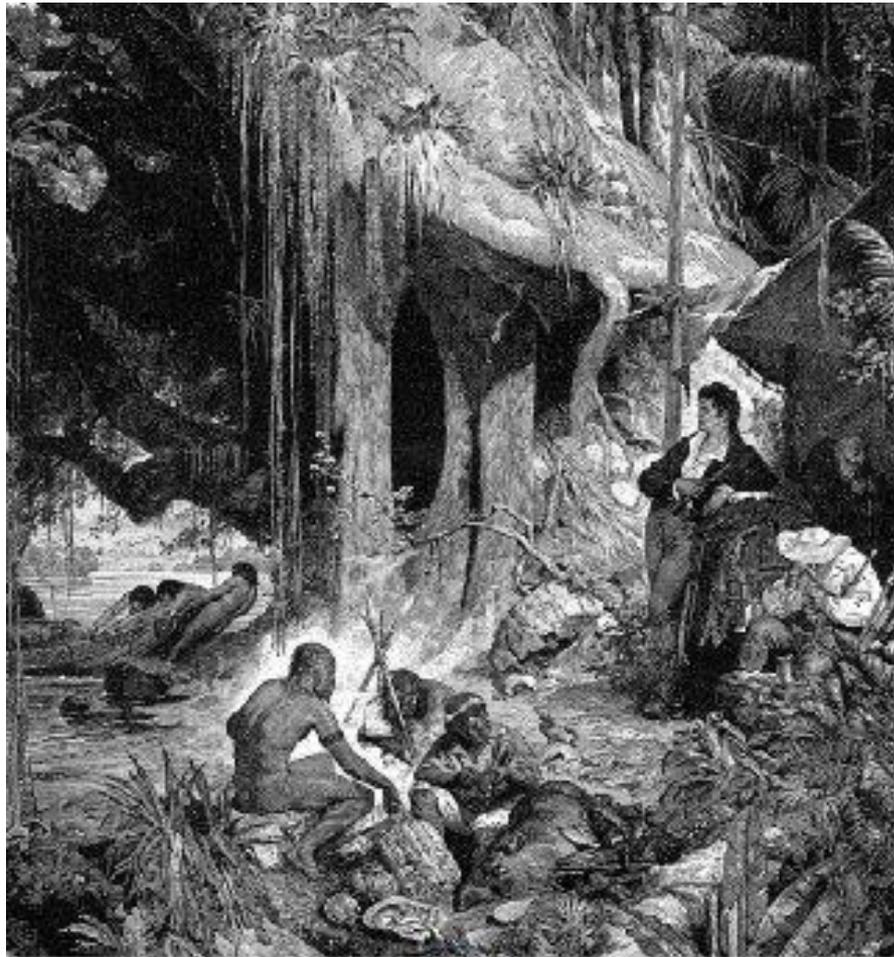
Met Jefferson in 1804, subsequently corresponded

Some influence on Corps of Discovery Expedition Lewis and Clark?

1839 Darwin's "***Journal and Remarks***"

1848 Alfred Russel Wallace and Henry Bates voyage to Brazil aboard the *Mischief*

1904 Wallace "***Man's Place in the Universe***"



PENGUIN  CLASSICS

ALEXANDER VON HUMBOLDT

*Personal Narrative of a Journey to the
Equinoctial Regions of the New Continent*



Printing had been well established, but still expensive
Drawing was still a dominant means of communicating images.

Age of Enlightenment

[Isaac Newton](#)'s [Principia Mathematica](#) (1687).

French historians 1715 to 1789, from [Louis XV](#) until the [French Revolution](#).

Circulated ideas through meetings at [scientific academies](#), [Masonic lodges](#), [literary salons](#), [coffeehouses](#) and in [printed books](#), [journals](#), and [pamphlets](#).

Principles: almost an exact opposite to those described by Chris Mooney in ***“The Republican Brain”!***

Despite separation of Church and State, natural Philosophers seemed to thrive in my own small island.



Eating and thinking

An enjoyable introduction to the Enlightenment ideas of a group of people who have fascinated scholars for centuries. By Emily Jones

Imagine a time in which new economic ideas are developing rapidly; Britain is at war over the possession of the Falkland Islands; politicians face attacks over charges of corruption; and broader significant questions relating to Britain's relationship with

artists such as Joshua Reynolds and dramatists including Richard Sheridan, Oliver Goldsmith and David Garrick. At the centre of *The Club* was the literary giant Samuel Johnson, and the man who immortalised his words of wisdom: Johnson's biographer, the prolific



money. Boswell excepted, they were self-made men from around the British Isles, many of whom stood as outsiders thanks to their Irish and/or Roman Catholic identities in a period of Protestant ascendancy. It was much easier to become an English gentleman if you were both British and Anglican. Even mastery of the oratorical arts of rhetoric and civilised conversation would only take you so far if they were deployed with an Irish brogue.

The Club is an unusual book: part group biography, part literary criticism and the cultural history of ideas, and part political and social history of 18th-century Britain. It is, in Damrosch's words, "a book with pictures" – and lots of them, used to great effect. It takes the style of literary biography while recognising how the development of that

But they were also spaces that operated according to subtle rules of class and status, and not-so subtle rules of sex and gender. One of the many merits of this book is that Damrosch, emeritus professor of English literature at Harvard, is able to integrate the vital role played by women such as Hester Thrale (a close friend of Johnson and who held an alternative gathering at Streatham), the novelist Fanny Burney (who counted Burke among her biggest fans), the classicist Elizabeth Carter, the enormously popular evangelical writer Hannah More, and the portrait painter Frances Reynolds – women who lacked the social freedom if not the intellectual abilities of their male counterparts.

In fact, *The Club* itself, Damrosch states, lived on under the name of the London Literary Society and is the

Natural Philosophers prospered

- Fr. Nicholas Callan 1799 –1864 of St. Patrick's College, Maynooth, who developed the Maynooth battery, manufactured in London.
- Sir William Rowan Hamilton 1805-1865, fostered to his uncle, Rev James Hamilton, a schoolmaster and linguist in Trim.
- John Tyndall, 1820 –1893. Early education in Ireland, finishing school in Marburg because of the greater development of the natural sciences there.
- George Johnstone Stoney 1826-1911, NUI Galway.

Maynooth Battery

Developed by priest scientist Nicholas Callan. He had a novel method for determining EMF—

Alleged to have demonstrated induction coil before Faraday



--whereas literature seemed to demand mobility!

- Abraham "Bram" Stoker 1847 –1912. Played rugby with Bective Rangers.
- Oscar Wilde 1854 –1900; penury Hôtel d'Alsace!
- George Bernard Shaw 1856 –1950 *"Schools and schoolmasters were prisons and turnkeys in which children are kept to prevent them disturbing and chaperoning their parents."* **Social Media---**
Shavian
- James Joyce 1882-1941: Dubliners-Trieste, Ulysses-Paris
- Even in my time, Edna O'Brien (December 1930) was pilloried for her social commentary *"The Country Girls"* (1960).

Publishing dynamics-

- Late middle ages- illuminated manuscripts
- ~1460 Gutenberg press
- 1888 Kodak- simple box camera

- Resisted at RDS and Engineers Ireland
- Plan to develop archives

Academies

Christopher Wren



- 1660 Invisible College
- 1663 'The Royal Society of London for Improving Natural Knowledge'
- '**Nullius in verba**' 'take nobody's word for it', an expression of the determination of Fellows to withstand the domination of authority and to verify all statements by an appeal to facts determined by experiment.

▲ Anniversary News ▲ A look back at the Anniversary ▲ Timeline ▲ Contact us



▲ Photo Gallery

To help celebrate ESF's 40th anniversary, we have created photo albums for each decade, starting in the 1970s. Make sure you come back as more photos will be added here in the weeks leading up to the celebration event.



[See gallery >>>](#)

▲ Anniversary News

- ▲ Opening of the exhibition of Nobel Laureate Portraits photographed by Peter Badge
- ▲ Photographic portrait exhibition of Nobel laureates
- ▲ ESF book will make a perfect gift!

[All news](#)

Files to download

[ESF: A Celebration of 40 Years of European Science](#)

PDF - 2.1 MB

[40th Anniversary Programme](#)

PDF - 1 MB

[40th Anniversary - Practical-Information](#)

Timeline



To honour ESF's first 40 years, we have created an online timeline. We hope you take the time to relive our glorious past.

[See Timeline >>>](#)

Share your memories



For those who would like to share any memories of a particular moment that stands out during your time affiliated to the ESF, please follow the link below.

[Share your memories >>>](#)

What's new on Twitter ?

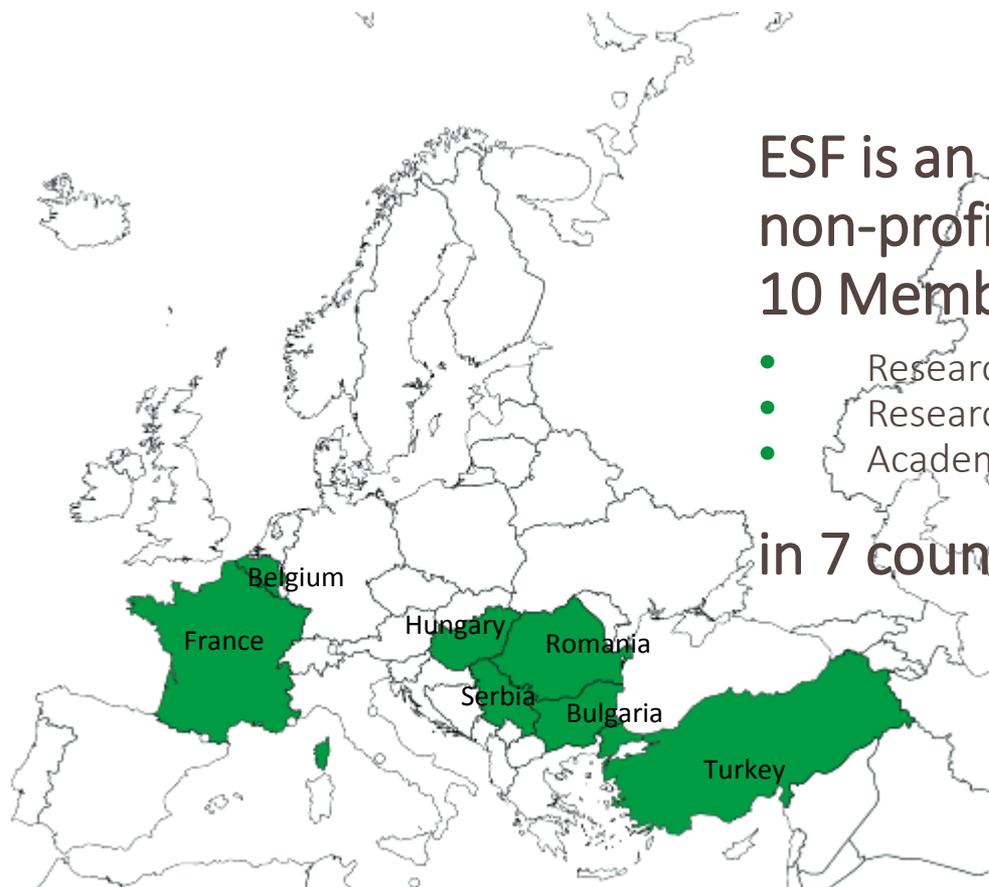
Tweets by @ESF_news

ESF-Science Connect Retweeted

MERIL
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🔴 Newly published **#MERIL2** case study 📄 Find out more about how the @MERILdatabase helped the EU-funded ROAMER project map mental health **#ResearchInfrastructures** across **#Europe** 🇪🇺 outreach.meril.eu/meril-case-stu... **#EU_RI** **#ResearchMatters** @EU_H2020

ESF MEMBER ORGANISATIONS



ESF is an independent
non-profit Association of
10 Member Organisations

- Research funding organisations
- Research performing organisations
- Academies and learned societies

in 7 countries

EU countries that have endorsed China's Belt and Road Initiative



* Have signed a formal memorandum of understanding with China endorsing the Belt and Road Initiative

Source: FT research

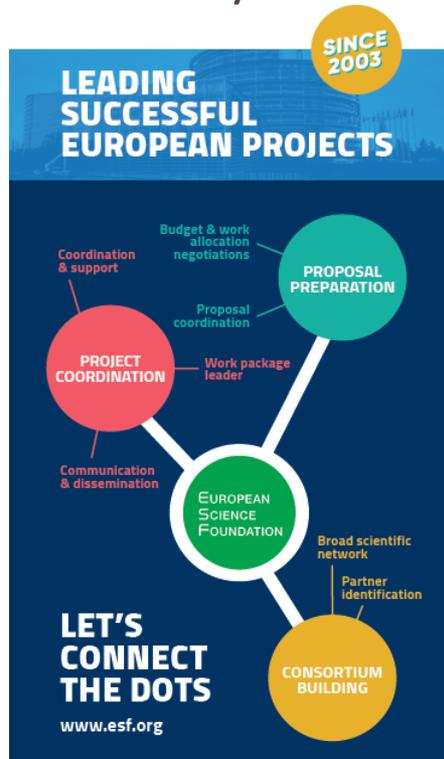
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ESF PARTNERS & CLIENTS



EUROPEAN PROJECT COORDINATION

Improve your proposal success rate, alleviate the administrative burden on your staff and run a better project

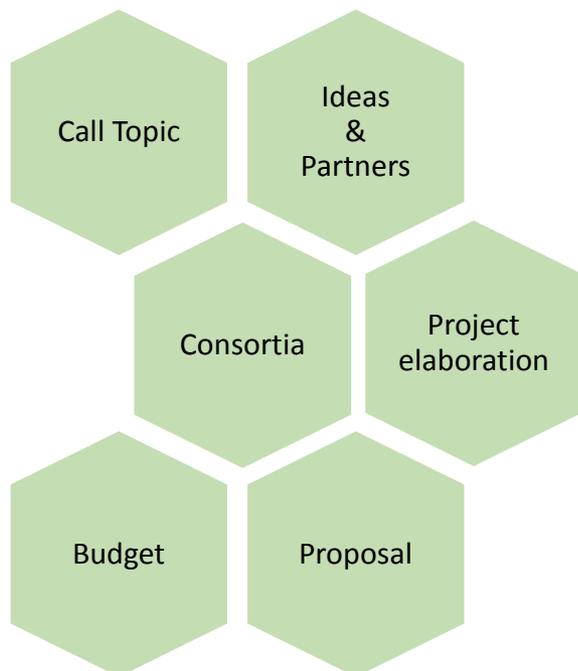


- ESF has been involved as a key partner or Coordinator in several successful proposals within FP6, FP7 and H2020
- The ESF office offers its key expertise and know-how to scientific consortia set up for these projects in the areas of, e.g. proposal writing, financial and HR management, networking, programme coordination, project office, conference organisation and consensus-building

We have been involved in over 45 European projects since 2003

EUROPEAN PROJECT COORDINATION

Current coordinated/supported EU projects



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Committee on Radio Astronomy Frequencies



European Space Sciences Committee



Nuclear Physics European Collaboration Committee



Europlanet Society

► <http://www.esf.org/scientific-support/scientific-platforms-administration/>