

## Friend raising for physics

Charles Day

**M**y title comes from a column by particle physicist Sijbrand de Jong in the most recent issue of *Europhysics News*. His topic was a report that the European Physical Society (EPS) released last year on the contributions of physics to the European economy.<sup>1</sup> Even though the study was undertaken by an independent consultant and was therefore independent of the EPS, and even though the EPS held a press conference to tout the report, it failed to attract much media coverage.

Disappointed by the lack of interest, De Jong urged his fellow EPS members to cultivate influential friends in the hope that subsequent EPS reports and statements would be better received.

Friend raising—to use De Jong’s term—is a sound tactic. Physics needs friends in the corridors of power, and not just in Europe. But getting newspapers, radio stations, and other media outlets to pay attention requires more than friends. Understanding how the media operate is just as important.

Media outlets are businesses whose well-being depends on satisfying audiences and, in some cases, advertisers. Even the BBC, Al Jazeera, NPR, Raidió Teilifís Éireann, and other state-supported outlets are more or less businesslike in their strategies and operations. Producing what audiences expect and want is paramount. How might that priority come into play in the case of an EPS report on physics and the European economy?

When contemplating a possible news item, feature article, or opinion piece, an editorial decision maker asks, Will my audience be interested? The fact that physics-based industries contribute significantly to Europe’s economic health might seem of general interest. But newspaper editors, TV producers, and other gatekeepers could regard the EPS report as being not so much about physics in particular but about one sector’s economic impact. They have likely seen other reports about other sectors. Indeed, without much trouble I found ones on the economic impact of biology, chemistry, and materials science.

Then there’s the matter of news media’s skepticism. In essence, every press release is a self-serving bid for attention, regardless of the worthiness of the cause it promotes. Even if the EPS press conference succeeded in inducing journalists to read the report, they could still have declined to cover it if their skepticism was aroused and validated. In the case of the EPS report, that outcome was likely. Physics-based industries identified in the report include the extraction of crude petroleum, the building of ships and floating structures, and the manufacture of central heating radiators and boilers. Those and others in the report seem a stretch to me.

Besides friend raising, what else might the EPS or any other scientific society do to raise awareness of its activities? In the



case of the EPS economic impact report, I would have recommended submitting op-ed columns to major European business newspapers. The largest by circulation are the UK’s *Financial Times*, Italy’s *Il Sole 24 Ore*, Germany’s *Handelsblatt*, and France’s *Les Echos*. They publish op-eds by outsiders. And because they do so daily, they need a constant stream of prime content.

What would get past an opinion page editor? A grabby opening is essential. If I were touting the EPS report, I’d begin in the 1850s with the purported exchange between Michael Faraday and William Ewart Gladstone, who was in charge of Britain’s treasury at the time. After the physicist had explained electromagnetism, the politician questioned its use. “‘Why, sir,’ replied Faraday, ‘there is every probability that you will soon be able to tax it!’”<sup>2</sup>

My op-ed would go on to mention James Clerk Maxwell’s prediction of electromagnetic waves, Heinrich Hertz’s detection of them, and Guglielmo Marconi’s use of them to transmit messages wirelessly. By the time radio was a mass medium in the 1930s, physicists were already doing the basic research that would lead to the transistor. And when the first PCs were in offices, physicists already were working on the nanomagnetic phenomena that would revolutionize data storage.

What might the physicists of Europe discover now that will beget new products? We can’t be sure, I’d say. But we do know, thanks to the EPS report and similar ones by the UK’s Institute of Physics<sup>3</sup> and the American Physical Society,<sup>4</sup> that physics increases prosperity. We need to keep funding it.

**“Why, sir,” replied Faraday, “there is every probability that you will soon be able to tax it!”**

### References

1. Centre for Economics and Business Research, *The Importance of Physics to the Economies of Europe: A Study by Cebr for the Period 2011–2016*, European Physical Society (September 2019).
2. W. E. H. Lecky, *Democracy and Liberty*, vol. 1, Longmans, Green (1899), p. xxxi.
3. Deloitte, *The Importance of Physics to the UK Economy*, Institute of Physics (October 2012).
4. American Physical Society, *The Impact of Industrial Physics on the U.S. Economy* (January 2019).