# Knowledge Diplomacy and the Ambassadors of Science

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Over recent years, a new concept has emerged alongside traditional diplomacy and its offshoot, science diplomacy – the idea of knowledge diplomacy. A 2024 report defines knowledge diplomacy as "*an umbrella term which covers a wide range of research, education, cultural and scientific collaborations that also serve a diplomatic purpose*."[1] The Knowledge Diplomacy Project at the University of London Institute in Paris further distinguishes it from science diplomacy by "*its expansive scope, including scientific collaboration but also other forms of knowledge generation and exchange, such as social sciences, humanities, and professional education*."[2]

This rethinking prompts us to reflect on the complex ways science and knowledge shape relationships across borders. In this context, India offers a particularly compelling case study.

**India's Rising Scientific Power**

India is rapidly emerging as a global science superpower. Despite relatively low public R&D spending, the country has made extraordinary strides. A 2024 *Nature* paper reports that "*in 2021–22, India had the world's third-largest pharmaceutical industry by volume and was the leading supplier of affordable medicines and generic drugs, some of which were crucial to fighting the COVID-19 pandemic worldwide. Last year, India became the fourth country ever to achieve a soft Moon landing and the first to land near the lunar south pole. It also has the world's largest constellation of remote-sensing satellites. India is among the world's most prolific countries in terms of research output, after the United States and China. From 2014 to 2021, the number of universities increased from 760 to 1,113*."[3]

These achievements have not gone unnoticed. Increasingly, British universities view India not just as a place to recruit students, but as a long-term partner in education and research. The University of Southampton opened a campus in Delhi in 2025, while others—including the University of Liverpool, University of York, Newcastle University, Coventry University and Queen's University Belfast—have announced or approved plans to establish campuses in India. Such initiatives deepen partnerships and expand the exchange of knowledge.

**The UK–India Research Partnership**

For the UK, India is more than an emerging partner; it is already central to international research

collaboration. UK Research and Innovation (UKRI), the UK's largest public funder of research and innovation, has jointly supported nearly £400 million worth of research and innovation programmes with the Government of India over the past 15 years.

In 2024, UKRI announced a £7 million collaboration on telecoms research under the UK-India Science, Technology and Innovation Partnership[4], and in 2025, joined with the British High Commission and Indian colleagues to celebrate the International Day of Women and Girls in Science.

From telecoms and sustainable manufacturing to tackling farmed animal diseases and understanding geohazards, and driving innovation in sustainable materials, manufacturing and power electronics, the India-UK partnership is an example of how countries can collaborate for their own advantage but also for global good. India has the world's second-largest telecommunications network, and innovations in equity of access to digital services, improved rural coverage and connectivity, lower costs of deploying network infrastructure, and secure, cost-effective digital services at scale will have direct benefits for India, but the lessons learned can also shape global digital inclusion.

**Lessons from India's Interdisciplinarity**

As a member of the Governing Board of the Global Research Council, I have seen firsthand how the principles of Open Science, equitable partnerships and the pursuit of the Sustainable Development Goals unite scientists and provoke collaborations above and beyond political and economic ties. Trade deals can be valuable components of international diplomacy, and offer opportunities to manage regulatory differences, but it is curiosity—the human drive to learn, teach, discover and communicate—that sustains scientific diplomacy.

There are generic truths about the importance of scientific exchange, but each bilateral collaboration is shaped by the values of participating countries, their complementary strengths and epistemological methodologies. Understanding each other's paths to discovery is often as important and exciting as the discovery itself.

In this respect, India offers valuable lessons. A recent article in the *New Indian Express* highlighted how leading Indian Institutes of Technology are weaving the arts, humanities and social sciences into their STEM programmes. "*For decades, STEM disciplines were measured by quantifiable outputs: patents, products, and market impact. But that feels increasingly small in the wake of climate change, AI ethics, and social disconnection. Hence, the questions we face today are not only scientific; they are also social, cultural, and moral. What is emerging within these IITs is a conscious reframing for seeing code and computation in the larger context of history, ethics, language, and social practice.*"[5]

The UK could learn much from this reframing. Arts and humanities can serve as translators and cultural brokers—helping societies reimagine the future by drawing on history, ethics, and collective imagination. Just as we need science embassies between nations, perhaps we need knowledge (science) embassies between disciplines.

Here the long tradition of Indian knowledge is fascinating and deeply intertwined with notions of connectivity. Recent attention on the Silk Roads illustrates the role of trade and material exchange in fostering and accelerating the exchange of ideas. The Silk Roads carried not only goods but also ideas—religious, artistic, political, and scientific. The Indian subcontinent was a crucial hub in this east-west exchange, as William Dalrymple illustrates in *The Golden Road*, and as India's Foreign Minister S. Jaishankar emphasises in *The India Way*.

This spirit of interconnectedness is deeply embedded in Indian thought. The subcontinent has given rise to Hinduism, Buddhism, and Jainism—traditions that are diverse yet united by a fascination with nature, ethics, and human flourishing. Such plurality fosters a worldview that is comfortable with multiplicity and open to integration—a perspective the world sorely needs today.

### Towards Equitable Collaboration

Two key points arise. First, India should not be seen merely as an object of interpretation but as a partner with agency, one with whom we must co-curate narratives and equitable representations of heritage. Second, collaborations should not be confined to Western-prioritised technologies; they must also embrace India's civilisational traditions of ethics, community, and sustainability. Societal change requires patient engagement with moral and cultural questions; something we must embed in our cofunding strategies if they are to be both genuinely equitable and effective.

This scientific interdisciplinarity spirit is evident in Sunil Khilnani's *Incarnations: A History of India in 50 Lives*, which traces the questing mind of King Ashoka in the third century CE to the restless intellect of Rabindranath Tagore, thinkers who looked beyond disciplinary boundaries, combining science, spirituality and society in pursuit of broader truths.

I close with an example that symbolises my theme: Panini's *Ashtadhyayi*. Written in the fourth century BCE, this remarkable linguistic treatise distilled the workings of Sanskrit into a system so rigorous that it remains relevant today. Recitable in two and a half hours, yet spanning 1,300 pages in its latest English translation, it exemplifies the power of compression, structure and analysis. By making Sanskrit a lingua franca of the East—much as Latin was in the West—Panini laid intellectual foundations that still underpin coding and computational thinking today. This is the essence of knowledge diplomacy: rooted in culture, expressed through science, and projected into the future.

### Conclusion

Knowledge diplomacy, like science diplomacy, takes many forms. It can pursue strategic advantages, sovereign capability or specific technological goals. But its greatest value lies in fostering deeper, more meaningful partnerships that integrate diverse ways of knowing. For the UK and India, the path forward is rich with possibilities. It is a relationship which will become deeper and more meaningful if we learn to think with each other's mental apparatus and see the world through each other's eyes. If that means that UK learns from India about their values of plurality, interconnectedness and interdisciplinarity—where arts and humanities enrich technology and the past informs a sustainable future—then we will become better scientists and partners.

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