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Introduction

The HPS&ST Newsletter is sent monthly to about 12,000 emails of individuals who directly or indirectly have an interest in the contribution of history and philosophy of science to theoretical, curricular and pedagogical issues in science teaching, and/or interests in the promotion of innovative, engaging and effective teaching of the history and philosophy of science. The newsletter is sent on to different international and national HPS lists and international and national science teaching lists. In print or electronic form, it has been published for 40+ years.

The Newsletter, along with RESOURCES, OBITUARIES, OPINION PIECES and more, are lodged at the website: [HERE](#)

The newsletter seeks to serve the diverse international community of HPS&ST scholars and teachers by disseminating information about events and publications that connect to concerns of the HPS&ST community.

Contributions (publications, conferences, Opinion Piece, etc.) are welcome and should be sent direct to the editor: Michael R. Matthews, UNSW, m.matthews@unsw.edu.au .

IHPST 18th Biennial Conference, Lisbon, Portugal, July 6-10, 2026.

Scientific Literacy: Contributions from the History and Philosophy of Science



IHPST Biennial Conferences function as a forum of academics, researchers, PhD students and teachers coming from a variety of disciplines: history of science, philosophy of science, sociology of science and science education.

Conference Chair: Cláudia Faria; Conference Co-Chair: Ricardo L. Coelho
Conference website: [HERE](#)

Asian Philosophy of Science Association Conference 2026, July 22-24, Singapore

Registration is now open for the Asian Philosophy of Science Association Conference 2026 (APSA26) in Singapore from July 22-24!

We are delighted to invite scholars, researchers, and students working in philosophy of science and related fields to join us. The conference will bring together participants from across Asia and beyond for a lively exchange of ideas, new research, and collaborative discussion, featuring keynotes from Craig Callender (UCSD), Catarina Dutilh Novaes (VU Amsterdam), and Kevin Zollman (Carnegie Mellon).

Participants are encouraged to register early. Please complete your registration through the following link: <https://www.ntu.edu.sg/soh/news-events/conferences/apsa-2026/registration>. Please note that you must be an APSA member to attend the conference. You may register for APSA

membership at:

<https://www.philsciasia.org/>. <https://www.philsci.org/> Your membership ID will be required during conference registration.

Further information on the conference programme, keynote speakers, accommodation, and travel will be made available on the conference website: [HERE](#)

If you have any questions, please contact us at: soh-apsa2026@ntu.edu.sg <<mailto:soh-apsa2026@ntu.edu.sg>>.

Society for Philosophy of Science in Practice (SPSP) Conference, 15-17 July, University of Cambridge

The 11th biennial conference of the Society for Philosophy of Science in Practice (SPSP) will be on 15-17 July at the University of Cambridge, with a post-conference workshop on 18 July.

The program will feature a number of symposia, contributed papers and posters, and the following keynote talks:

- *Uljana Feest* (Leibniz Universität Hannover), "The Fine Print of Experimental Inferences in Psychology"
- *Matthew Lund* (Rowan University), "How Scientific Practice Unlocks the History of Science: The Case of the Personal Equation"
- *Hasok Chang* (University of Cambridge), "SPS (Philosophy of Science in Practice), Inquiry and Science Education"

All further details and the registration portal can be found on the conference website: <https://spspcambridge2026.com/>

Please note that the early-bird rate ends on 31 May. For non-local delegates, we strongly recommend arrival in Cambridge on 14 July, as the conference will open on the morning of 15 July.

If you have any questions please contact us on <spsp2026@hps.cam.ac.uk>.

We look very much forward to welcoming you to Cambridge in a few short months!

Best regards,

Hasok Chang
(on behalf of the Local Organizing Committee for SPSP2026)

Society for the History of Alchemy and Chemistry, Conference, 5-6 November, Munich

The Society for the History of Alchemy and Chemistry (SHAC) is delighted to announce that its next meeting will take place at the Deutsches Museum, Munich on 5 and 6 November. Following the success of the meeting at the Science History Institute in Philadelphia in 2025, SHAC is continuing its programme of holding meetings outside of Britain and welcomes offers of papers from all with a scholarly interest in the history of alchemy and chemistry.



The first day of this two day meeting will cover the history of alchemy and early modern chemistry, while the second day will discuss the history of chemistry from then to the modern period. A tour of the museum's collections will also be arranged as part of the meeting. Offers of papers on any aspect of the history of alchemy and chemistry, including their historiography, should be sent, with a short description, by 31 May 2026 to:
Details: [HERE](#)

Conference. HPS: Past, Present, and Future, 24-26 June, Hong Kong

Registration is now open for the conference *History and Philosophy of Science: Past, Present, and Future* taking place from 24 to 26 June 2026 at The Hong Kong University of Science and Technology, Academic Building.

Registration deadline: 24 May 2026



Keynote Speakers

Theodore Arabatzis (University of Athens, Greece)
Uljana Feist (University of Hannover, Germany)
Greg Radick (University of Leeds, UK)
Alan Richardson (University of British Columbia, Canada)

Organising Committee Keith Chan Zaza
Doborjginidze Yafeng Shan (chair) Qinyi Wang
Qiyue Zhang Funders Center for Philosophy of Science HKUST HKUST Jockey Club Institute for Advanced Study

Conference Description History and Philosophy of Science (aka HPS) emerged in the 1950s and greatly promoted the historical approach to the philosophy of science. Despite its rapid institutionalisation in the 1960s, HPS did not become a full-fledged academic discipline eventually. There have been axiological, institutional, methodological, and practical challenges. That said, some historically minded philosophers of science and philosophically minded historians of science never stop making efforts to promote the dialogue across the boundaries and develop HPS approaches (e.g. integrated HPS, HOPOS, and PHS). This conference aims to reflect on the nature, methodology, development, and prospect of HPS.

For more information, please click here<<https://www.shanyafeng.com/hps26>>.

Registration

To register, please click here<<http://eventbrite.co.uk/e/1979375495390?aff=oddtcreator>>.

Contact

If you have any questions, please contact Qiyue Zhang (qiyue.zhang@connect.ust.hk<<mailto:qiyue.zhang@connect.ust.hk>>).

Robert Boyle 400th Anniversary Conference, London, January 2027

Robert Boyle was born at Lismore Castle on 25 January 1627. To mark the 400th anniversary of this event, a one-day conference celebrating Boyle and his achievements will be held at the Royal Society of Chemistry, Burlington House, London, on Monday, 25 January 2027.

This event is organised by the Historical Group of the Royal Society of Chemistry and the Society for the History of Alchemy and Chemistry. Speakers will include Peter Anstey, Michael Bycroft, Michele DiMeo, Sachiko Kusukawa and Lawrence Principe, and it is hoped that there will also be a round-table discussion on Boyle.

There is no charge for registration, but those wishing to reserve a place should send an e-mail, with 'Boyle meeting' in the subject line to the SHAC administrative assistant at meetings@ambix.org.

For any other information about the conference, please contact Professor Michael Hunter at m.hunter@bbk.ac.uk.

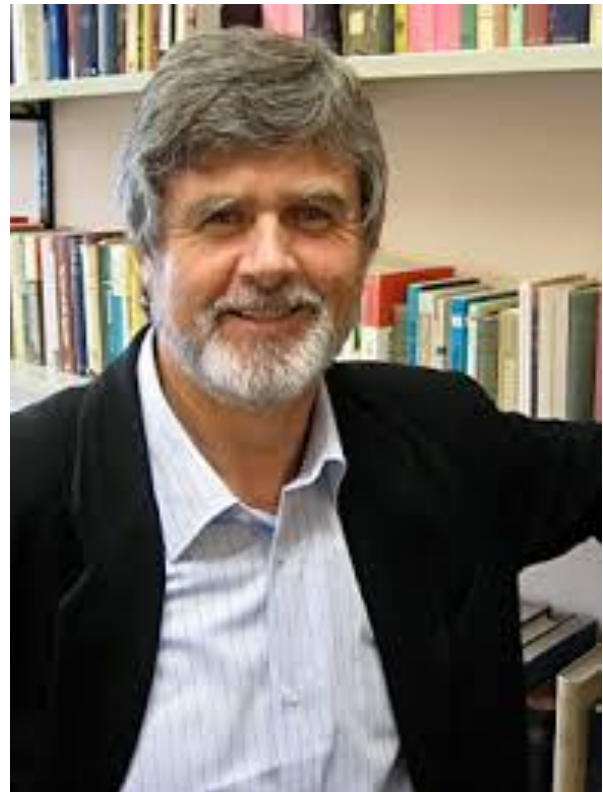
Opinion Page: Is Science Western?

GREGORY W. DAWES, Department of Philosophy, University of Otago, New Zealand

Dawes gained his first graduate degree at the Pontifical Biblical Institute in Rome (SSL,1988)

before returning to New Zealand, where he completed PhD degrees in both Biblical Studies (1995) and Philosophy (2007).

He taught for some years in both the Theology and Religion programmes, as well as in Philosophy. In 2010 he obtained a joint appointment with Philosophy and Religion, working across the two departments.



His research focuses on the interaction between scientific modes of thought and those characteristic of religion. This has given rise to two books, one on the historical Jesus debate and another on the possibility of theistic explanations (explanations that appeal to a divine agent).

His books include *Galileo and the Conflict between Religion and Science* (Routledge 2016) which offers a new defence of the 'warfare thesis', arguing that religious and scientific communities exhibit very different attitudes to knowledge. A more recent work, *Deprovincializing Science and Religion* (Cambridge Elements) sets the science and religion discussion in a broader historical context.

This Opinion Piece is Chapter One of his recent [Is Science Western? An Inquiry](#), Palgrave Macmillan (2026). It is reproduced with permission.

.....

The question I address in the body of this work arises from a usage that has become common in the humanities: the practice of labelling modern science as ‘Western’. A recent Google Scholar search, for example, yielded more than 127,000 instances of the phrase ‘Western science’. This way of speaking is particularly common among writers in postcolonial studies, many of whom speak of the need to ‘decolonize epistemology’ (the theory of knowledge) (Mignolo 2012: 20). Advocates of decolonization commonly speak of ‘knowledges’ in the plural, often referring to differing ‘knowledge systems’ (Barnhardt and Kawagley 2005: 9). They argue that different societies have differing ‘ways of knowing’, ‘Western science’ being merely one among many.

Some such writers go further, claiming that Western science cannot claim to be in any way superior to other ways of knowing. This idea is often buttressed by the claim that these differing forms of knowledge are incommensurable: they cannot be directly compared (Durie 2004: 1138).

The claim that differing knowledge systems are incommensurable is part of a wider tendency to reject claims to universality (Waters 2001: 145). Postcolonial writers regard the idea that science has universal applicability – that it is a form of knowledge for all peoples – as a colonial imposition, whose effect is to marginalize the ways of knowing found in indigenous societies (Seuffert 1997: 98). Rather than being universally applicable, such writers argue, modern science is itself a form of ‘local knowledge’ (Canagarajah 2002: 245), ‘the ethnoscience of the West’ (Watson-Verran and Turnbull 1995: 115). I shall refer to this as the ‘relativizing’ view of science.

The historian cannot help but note a certain irony here. It consists in the fact that the relativizing view has itself emerged from a distinctively European tradition of thought. In its suspicion of claims to universality it follows in the footsteps of the nineteenth-century German Romantics and,

before them, Johann Gottfried Herder (1744–1803). Herder argued that each nation has its distinctive way of thinking – its *Nationalgeist* – and vigorously rejected the idea that ‘one single culture ... is the epitome of civilization’ (Sikka 2005: 312).

Herder’s criticisms of European imperialism are as forceful as those of any of today’s postcolonial writers (Beiser 1992: 203). But while Herder insists on a plurality of culturally-distinctive ways of knowing, it is less clear that he thought they were incommensurable. Despite what Isaiah Berlin suggests (2013: 264), Herder seems to have believed that there are universal human needs (and corresponding goods) that can establish culture-transcending standards of judgements (Sikka 2005: 331).

Romanticism contributed to the rise of a second movement in whose footsteps the relativizers are following: that of historicism. The word ‘historicism’ is used in a bewildering variety of ways (Leerssen 2004: 119). But in one of its uses it refers to the recognition that all human values, institutions, and practices are contingent, having emerged from particular social and political contexts. Long before the rise of postcolonial thinking, writers in the historicist tradition were arguing that the ‘scientific world-picture is itself only one among many and, like all the others, it has been produced by a certain society under definite conditions’ (Landgrebe 1940: 44).

The challenge of historicist thinking went much deeper than a challenge to the universality of science. It called into question all ‘moral, political, and religious beliefs and practices’, suggesting that had no ‘purpose, meaning and validity’ beyond the culture in which they arose (Beiser 2011: 11).

Those who oppose the relativizing view of science – I shall call them ‘universalists’ – do not deny the insights of historicist thinking. They do not deny, for instance, that scientific theories reflect the social and political contexts from which they emerge. If we ask, for example, why Darwin’s theory of natural selection emerged in Great Britain (rather than elsewhere), the answer may need to appeal to the competitive ethos of nineteenth-century British economic activity

(Greene 1981: 7). But universalists argue that a recognition of the historical character of modern science does not rule out the idea that its results are applicable everywhere (Ryn 2003: 63, 119).

A scientific theory may be applicable in every cultural setting, even if it originally emerged from a particular society, and was shaped by its concerns. Although Darwin's theory did owe much to the social world in which it emerged, it still had – universalists would argue – greater explanatory power than any of its rivals.

Which side of this debate has the better arguments? Even if science happens to have developed in 'the West', is it *merely* Western, a local rather than a universal form of knowledge? Does it have distinctively Western characteristics, or are its methods, procedures, and assumptions more widely shared? Those are the questions I shall be addressing.

1.1 The Term 'Science'

Let me begin with some distinctions, for the two terms being used in this debate – 'science' and 'Western' – have a range of possible meanings. I shall start with the various possible uses of the word 'science' (and cognate terms in other European languages). Following Theophilus Okere (2005), I shall begin with the broadest use of the term, examining progressively narrower senses, until I arrive at the family of practices I am referring to as 'modern science'.

1.1.1 Science as Knowledge

The broadest use of the word 'science' employs the term as a synonym for 'knowledge'. In English, this usage is now archaic, although it can still be heard in performances of Shakespeare's *Measure for Measure*. In Act 1, Scene 2, Vincentio remarks to Escalus: 'your own science exceeds, in that, the lists of all advice my strength can give you' (I.i.5). In this context, 'science' means simply 'knowledge' or 'learning'. The same use is found in other European languages. One can, for instance, speak in Italian of *la scienza del bene e del male* for 'the knowledge of good and evil', and in French of *la science infuse* for 'innate knowledge' (a phrase used ironically for a 'know-it-all'). All human beings (and arguably many

kinds of non-human animals) have 'science' in this sense, that is to say, knowledge in general.

There is, however, a qualification that needs to be made here, for the word 'knowledge' itself has two uses: one descriptive and the other normative. In the descriptive use – common among social scientists – 'knowledge' refers to the 'collective beliefs' of a particular community, no distinction being made between true and false beliefs (Pelto and Pelto 1997: 149). In its normative use, on the other hand, 'knowledge' refers to beliefs that emerge from practices that are 'truth-tracking' (Nozick 1981: 172).

Philosophers customarily use the term in its normative sense: they do not regard false beliefs as instances of knowledge. Take, for example, the idea that the earth is stationary while the sun moves, a belief held by practically every astronomer before the work of Nicolaus Copernicus (1473–1543). During that period, it could be described as having been knowledge in the descriptive sense. But since it is a false belief, it would not count as 'knowledge' in the normative sense.

I shall not, however, dwell on this distinction here. If we understand 'science' in the broadest sense of the word, as knowledge or learning, then we may safely assume that all peoples have had science, even in the normative sense of the term. They must have had at least some well-founded true beliefs. Without, for example, well-founded beliefs regarding their physical environment, it seems unlikely that any people could have survived for any length of time. In my book, I look more closely at what kinds of beliefs these are.

1.1.2 Science as *Scientia*

So much for science in the broadest sense of the term, as 'knowledge'. There is, however, a second use of the word, in which 'science' refers to a more particular kind of knowledge. This sense of the word corresponds to that of the medieval Latin *scientia*, which was itself used to translate the Greek *epistēmē*. Both *scientia* and *epistēmē* referred not just to any body of knowledge, but to a systematic body of beliefs, grounded in reasoning that (ideally) yields certainty, and which

show why things are as they are (Pasnau 2010: 23).

Medieval thinkers realized that certainty could not always be obtained (Pasnau 2013: 994): in practice the natural philosopher could be content with a lesser degree of confidence (Pasnau 2010: 37). But a body of knowledge was thought of as a *scientia* only if it took the form of a systematized set of general principles which had an explanatory role.

The terms ‘systematized’ and ‘systematic’ themselves have a variety of meanings (Hoyningen-Huene 2013: 26–27). But as a first approximation we can say that a body of knowledge is systematic if it ‘embodies some kind of order’: it is not ‘purely random or accidental, it is not chaotic, not arbitrary’ (Hoyningen-Huene 2013: 26). A systematic body of knowledge will normally be founded on a set of general principles. It may speak, for example, of the varieties of soil that yield good crops, rather than merely asserting that ‘this soil here yields good crops’.

Science as *scientia* will also include ‘second-order’ reflection, directed not to its target domain (such as animals or plants or heavenly bodies), but to the claims made about it (Elkana 1986: 40). It will, in other words, not merely make claims; it will reflect on what is required for its claims to be true.

Second-order reflection is presumably practised in all societies, with regard to at least some beliefs (Elkana 1986: 41). What is characteristic of a science is that such reflection is undertaken in a self-conscious fashion, by means of procedures for testing knowledge claims and generating new knowledge. Those procedures will include principles (such as those of formal logic) against which knowledge claims can be assessed (sect. 3.4.1).

This use of the word ‘science’, referring to any systematic body of knowledge, can still be found in modern English. A recent historical work, for example describes the medieval ‘liberal arts’ – those of the *trivium* (grammar, logic, and rhetoric) and *quadrivium* (arithmetic, geometry, music, and

astronomy) – as ‘the liberal sciences’ (Peltonen 2002: 97).

The same idea can be found in German in the use of the term *Wissenschaft*. In the words of a standard dictionary, a *Wissenschaft* is ‘[an] ordered, logically structured, and coherent field of knowledge’. The academic study of religion, for example, is described in German as *Religionswissenschaft*, while what we call ‘linguistics’ is *Sprachwissenschaft*. Do all societies have ‘science’ (or ‘sciences’) in this sense: systematic bodies of knowledge? That is a question to which I shall briefly return (sect. 1.3).

1.1.3 Modern Science

We come, finally, to the narrowest sense of the word ‘science’. I devote an entire chapter of this book to describing the practices to which this use of the term refers. But my initial definition will be a historical one. ‘Science’ in the narrowest sense of the word refers to the family of knowledge-related practices – what I shall call ‘epistemic practices’ – that began to take on their present form in seventeenth-century Europe.

This definition is modelled on a common understanding of the biological term ‘species’, in which the criterion for regarding organisms as members of a single species is that they have a common ancestry (Baum and Donoghue 1995: 560). In a similar way, epistemic practices fall into the category of modern science when they, too, have a common ancestry: when they constitute research traditions dating back to developments that occurred in seventeenth-century Europe. Those developments were particularly focused on a study of the physical world by way of measurement, mathematical modelling, and experiment.

Modern science would be regarded by medieval thinkers as just one form of *scientia*, one variety of systematized knowledge. The nearest medieval equivalent was *scientia naturalis* – systematized knowledge of the natural world (Maurer 1985: xv) – which medieval thinkers distinguished from other forms of *scientia*. Thomas Aquinas (ca. 1225–74), for instance, also regarded theology as a science (*STI* 1.2), but one that drew its

principles from divine revelation rather than from observation and reflection.

Today's everyday English usage of the word 'science' resembles the medieval use of *scientia naturalis* in so far as it excludes other forms of systematic inquiry. As W. G. Ward wrote in 1867, 'we shall, for convenience' sake, use the word "science" in the sense which Englishmen so commonly give to it; as expressing physical and experimental science, to the exclusion of theological and metaphysical' (Ward 1867: 255n).

1.2 The Term 'Western'

The next term that requires disambiguation is 'Western'. What meanings does this term have and which of these are intended by those who speak of 'Western science'?

For better or for worse, the idea of 'the West' comes burdened with more than 2000 years of myth, metaphor, and allegory. Within this history, the West has designated a location, a direction, and an idea (Baritz 1961: 619). As the location to which the sun daily descended, the West was naturally associated with death, an idea already found among the Egyptians (Baritz 1961: 620–21). But death could also signify a rebirth to a new life and the West could therefore be a place of promise, a paradise on earth. Such were the Elysian Fields, 'at the ends of the earth', to which – in a tradition established by Homer (*Odyssey* 4.561–568) – heroes could be transported while still alive (Lovejoy and Boas 1965: 291).

The biblical tradition of the Garden of Eden 'in the East' (Gen. 2:8) confounded this classical idea, although the two directions could be reconciled by a moment's reflection on the spherical shape of the earth (Baritz 1961: 624). But the West was also the direction of the progress of empire, as in Virgil's account of Aeneas's journey from Troy to Italy to Rome, a journey extended by Geoffrey of Monmouth (ca.1095–1155) to England (Baritz 1961: 621, 624).

Early modern Europeans came to think of the West as the seat of 'God's word and religion', which having come from the East would, with the European voyages of exploration, move eastwards again, to enlighten the New World (Baritz 1961:

635). The idea that Christian enlightenment would move from west to east was picked up by the theologian Jonathan Edwards (1703–1758), but now from a new location, in which the American colonies were 'the West' (Baritz 1961: 637).

It is difficult to know whether these historical and mythological usages continue to influence today's debates. If they do, it may help account for their vigour. But whatever the influence of such mythic themes, it is to today's debates that I must now turn. How are the terms 'the West' and 'Western' used today?

1.2.1 Geographical Use

A first use of the term 'Western' is *geographical*. In this usage, 'Western' refers (in the words of the *Oxford English Dictionary*) to 'any part of the world to the west of one's own region; applied specifically to the Americas and the Caribbean, or to Europe, as opposed to the Middle East and Orient'. As the same dictionary notes, this geographical usage is now merely historical, except when coupled with what I shall call the *cultural* use of the term. It is, in any case, fatally imprecise. As we have just seen, any place is west of any other on a spherical globe. As a geographical term, its only (more or less) precise use is as an indexical, a term (like 'yesterday') whose referent varies from one context to another.

Using the word as an indexical, one can specify its geographical meaning by reference to the European continent, as in the phrase 'Western Europe'. But the boundaries of the region designated in this way are also unclear. The phrase 'Western Europe' became widely used only at the time of the Cold War, when 'an "iron curtain" divided the continent into West and East' (Berger 2017: 16). Once that curtain was lifted, the boundaries of Western Europe were up for negotiation. This was nowhere clearer than in the expansion of the European Union (EU). While membership in the EU had originally been restricted to countries to the West of the 'iron curtain', the changed situation after 1989 opened up this barrier, to allow former 'Eastern European' countries (such as Poland) to gain membership.

1.2.2 Cultural Use

In practice, however, the geographical use of the term ‘Western’ has rarely been separate from its *cultural* use. In the cultural use of the term ‘the West ... is not to be found by recourse to a compass’ (Berman 1983: 2). It refers to a set of ideas, practices, and institutions whose origins are believed to lie in Western Europe. It is this meaning of the term ‘Western’ that seems to underlie the use of the phrase ‘Western civilization’. In practice, the cultural use of the term ‘Western’ is most commonly joined with a third, the ‘genus and species’ use, to which I shall return in a moment. In the meantime, it will be useful to look more closely at what the cultural use entails.

The idea of the West as a cultural unity – a ‘repertoire’ of ideas and practices – is relatively new (Bonnett 2004: 25). It emerged both in ‘the West’ itself – in Europe and North America – and in ‘non-Western’ societies, particularly those of Asia. While the sense of the idea differed according to the context of its use, the cultural use of the term ‘Western’ has been rarely (if ever) merely descriptive. It was, and continues to be, heavily laden with judgements of value, originally positive but more recently negative.

In Europe and North America, the idea of ‘Western’ culture emerged (in part) as a response to the decline of the category of ‘whiteness’. Nineteenth century writers commonly spoke of a ‘white civilization’ (Bonnett 2004: 14) to identify what they regarded as a distinctive set of ideas, practices, and institutions. But this racial category was undermined by both class conflict, which divided European societies, and warfare, which set European peoples in conflict with one another.

Rather than forming a single civilization, ‘white’ people seemed divided by political ideology and struggles for power. The more abstract idea of ‘the West’ offered a way of transcending these differences. Although critics recognized that ‘Westerners’ often failed to live up to their own ideals, it was the very possession of these ideals that set them apart from other peoples (Bonnett 2004: 28).

While the cultural use of the term ‘Western’ has always denoted a set of social practices, the practices to which it refers have been many and

varied. Nineteenth-century Russia, for example, experienced arguments between ‘Westernizers’ (*západniki*), who urged the adoption of European ways, and ‘Slavophiles, who warned against the rationalism and materialism of ‘the West’ (Galaktionov and Nikandrov 1967: 25, 28). Consistently with this usage, the Bolshevik revolutionaries initially categorized socialism as ‘Western’ (Bonnett 2004: 47). But in the aftermath of the Russian revolution and two world wars, there was a narrowing in the range of institutions regarded as ‘Western’.

In countries outside of the Soviet Union, ‘the West’ was now thought to be characterized by a capitalist economy and liberal democracy: its ideals were those of ‘non-authoritarian government and an open society’ (Bonnett 2004: 42). In this context, the United States came to be regarded as the paradigmatically ‘Western’ country, the leader of an ‘Atlantic alliance’ (Bavaj 2011: 17), opposing communism, fascism, and Nazism (Bonnett 2004: 42–43). We hear echoes of this view of the West in a recent *New York Times* opinion piece:

What we call ‘the West’ is a centuries-long conversation – Socrates searching for truth, Rembrandt embodying compassion, Locke developing enlightenment liberalism, Francis Bacon pioneering the scientific method. This is our heritage. For all of our history America understood itself as the culmination of the great Western project. (Brooks 2025)

Within the Soviet Union, on the other hand, ‘the West’ came to be thought of as the home of bourgeois and anti-revolutionary forces, a society characterised by ‘decadence’, ‘imperialism’, ‘reaction’, ‘aggression’ and ‘greed’ (Bonnett 2004: 54).

Such was the emergence of the cultural idea of ‘the West’ in Europe and North America. But the present use of the term owes much of its meaning to thinkers in Asian countries (Bonnett 2004: 81). Here, too, the use of ‘Western’ was heavily value-laden. At times, it, too, involved a positive evaluation of the practices to which it referred. We find this, for example, among the modernizing Chinese thinkers of the late nineteenth and early twentieth centuries who regarded their own

traditional practices as ‘backward’ (Elman 2003: 104).

But Asian thinkers also developed a less positive view of the practices deemed ‘Western’. In India, for example, Rabindranath Tagore (1861–1941) argued that Western modernity ‘was a misguided form of modernity’ (Bonnett 2004: 80), marked by a lack of true spirituality. In a similar way, the Japanese art historian Okakura Kakuzō (1862–1913), often known as Okakura Tenshin, contrasted the Asian love for ‘the Ultimate and Universal’ with the Westerner’s love of the particular and his neglect of the purpose of life (Bonnett 2004: 83). In China, too, the modernizers were opposed by those who were cautious about ‘Western’ science, arguing that it needed to be complemented by a recovery of China’s own moral and spiritual traditions (Elman 2003: 101).

1.2.3 Genus and Species Use

I have spoken of the *geographical* and *cultural* uses of the term ‘Western’. But there also exists what I shall call a *genus and species* use. This overlaps the cultural use, since it assumes that the practices called ‘Western’ have distinctive characteristics. But it also assumes that the practices described as ‘Western’ are also found, in differing forms, among ‘non-Western’ peoples. More precisely, it assumes that there are some general categories (‘genera’) of cultural forms which have both Western and non-Western manifestations (their various ‘species’).

One can argue, for instance, that all complex societies – those whose activities have become distributed among distinct institutional spheres (Eisenstadt 1964: 376) – have systems of law. On this view, Western legal systems would be a species of a genus, a particular version of an institution also found in other societies.

I mentioned a moment ago the phrase ‘Western civilization’. In the days when ‘civilization’ was used in the singular, to refer to a state of being civilized (as opposed to being a barbarian), there would have been no need to attach the qualifier ‘Western’. Civilization was thought to be ‘confined to a few privileged peoples or groups, humanity’s “elite”’ (Braudel 1994: 7), a group to which Europeans were assumed unquestionably to

belong. But beginning in the early nineteenth century, the word came to be used in the plural, with talk of differing ‘civilizations’ (Braudel 1994: 6).

In this new usage, the term resembles the anthropologist’s use of ‘culture’ – the idea of different ‘civilizations’ is akin to that of different ‘cultures’ – but with reference to complex societies and a focus on historical persistence. When the term ‘civilization’ is used in this way, the qualifier ‘Western’ is required, to indicate which species of the genus is being referred to: that which began in Europe or the civilizations of Africa, the Muslim world, or Asia.

1.3 ‘Western Science’

Drawing together these possible meanings of the terms, what could it mean to call science ‘Western’? A first interpretation takes the term ‘Western’ in its *geographical* sense. Here ‘Western’ could refer to the region in which science is practised, in the same way as one could speak of ‘Chinese agriculture’, to refer to the farming practices found in China. But this can hardly be what is intended by the phrase ‘Western science’. Science is geographically Western insofar as it took on its present form in a particular region. But its practice is no longer restricted to any one part of the world. Indeed, one of the striking features of modern science has been its ability to be take root and flourish in societies that differ widely with regard to language, customs, and legal and political institutions.

Authors vary in their explanations of this fact. Joseph Needham, for instance, argued that insofar as it relies on observation and mathematical modelling, modern science is inherently ‘ecumenical’, ‘the common property of all men everywhere’ (Needham 1978: 112). But this positive view has recently fallen out of favour. It has become more common to claim that science travelled in an alliance with ‘capital and political power’ as an instrument of Western hegemony (Brockway 1979: 461). But however one explains the geographical spread of modern science, there is no doubt that this has occurred. The practice of modern science is no longer restricted to one part of the globe.

Another way of interpreting the phrase ‘Western science’ understands ‘Western’ in a geographical sense, but in the purely historical fashion to which I alluded a moment ago. . On this view, even if science is now practised everywhere, it is Western in origin. While this seems a more plausible claim, it suffers from the ambiguities of the geographical usage. Does ‘Western’ here mean ‘Western European’? The astronomer Tycho Brahe (1546–1601) came from Denmark, while Nicolas Copernicus (1473–1543) came from Poland. Are Denmark and Poland ‘Western’ countries? Perhaps they are, if we understand the term broadly.

But there is more serious objection to this idea, which I shall develop later. It is that modern science was not a *creatio e nihilo*. The pioneers of modern science wove together existing ideas and practices into new institutional forms and the ideas and practices they wove together came from far beyond whatever boundaries one can plausibly assign to ‘the West’.

A second interpretation of the phrase ‘Western science’ understands ‘Western’ in a *cultural* sense. On this view, one can admit that the origins of modern science are not purely Western, while still insisting that it has features that are not shared by epistemic practices in other societies. It is this cultural use of ‘Western’ that appears to be the most common one: those who speak of ‘Western science’ generally do so in order to contrast it with other forms of knowledge.

One author, for example, claims that the Chinese view of causality is very different from that found in ‘Western science’ (Cheng 1976: 4), the former being ‘holistic’ while the latter is ‘atomistic’ and ‘mechanistic’ (Cheng 1976: 18). Other writers argue that because of its particular character, the scope of Western science is limited. While it may be ‘useful for prediction, control, and the design of manipulative technologies’, it ‘is in no way qualified to provide a worldview adequate to guide individual and societal decisions’ (Harman 1996: 31).

Is science Western by origin? Is science Western in character? Those are the two questions to which my book is devoted, the first question being addressed in chapter three and the second in chapter four. The first is a historical question,

asking about the origin and development of modern science in relation to European societies. The second is an analytical question, asking about the character of the practices we customarily call ‘scientific’. The answers I give to these two questions will be interwoven, insofar as the history has shaped the character. But I shall treat them separately for the sake of clarity.

What about the third sense of ‘Western’, the *genus and species* use the term? Any argument that science is Western in origin or character assumes that it differs in some respects from epistemic practices found in non-Western societies. But today’s postcolonial writers often make a further claim, arguing that other societies have their own form of science. Insofar as these are thought of as differing forms of science, this *genus and species* usage overlaps the *cultural* use. Insofar as it distinguishes the sciences that are alleged to have developed in differing parts of the world, this usage overlaps the *geographical* use. What is distinctive about the *genus and species* usage is its assumption that there are, elsewhere, epistemic practices comparable to modern science.

Such practices could, of course, be simply variant forms of the science which began to take on its current form in early modern Europe. This appears to have been what Stalinist thinkers meant when they contrasted ‘Western science’ with ‘Soviet science’ (Krementsov 1997: 179). They were suggesting that the modern scientific tradition had taken on different forms under capitalism and communism. But the more interesting question is whether there exist epistemic practices comparable to modern science that have developed independently from the science found in ‘the West’.

It is crucial, in answering this question, to keep in mind the three senses of the term ‘science’ (sect. 1.1). A society could have well-founded bodies of knowledge without having science in the second and narrower sense of the word: that of the Latin *scientia* (or the German *Wissenschaft*). It has been argued, for example, that the development of systematic bodies of knowledge is practically inconceivable in societies that lack writing (Goody 1977: 43; Lloyd 1990: 132–33). But even if all societies have something akin to *scientia*,

they may not have developed the particular form of *scientia* I am calling ‘modern science’.

There have been clear instances of ‘sciences’ in the sense of the Latin *scientia* (or the German *Wissenschaft*) in at least some non-Western societies. An early example would be the astronomical (and astrological) sciences developed in ancient Mesopotamia (Rochberg 2018: 9), to which elements of modern ‘Western’ science can be traced. A second example is the correlative cosmology developed in ancient China, which continues to serve as a foundation for Chinese traditional medicine (Bodde 1991: 11–12). A third example is the collection of disciplines that developed in India known as *śāstras* (Pollock 1985: 402). Insofar as these are systematically arranged bodies of knowledge that can have an explanatory role, they count as instances of what medieval writers called *scientia* (Pingree 1992: 559).

What about science in the third and narrowest sense of the term? Do other societies have epistemic practices comparable to modern science? What I argue in later chapters of the book is that the elements of modern scientific practice are found in many non-Western societies. As it happens, they came together into the particular institutional forms that English speakers call ‘science’ in Western Europe.

Did a comparable coming together happen in any other cultural context? At first sight, it would appear that it did not, that these practices came together only in Western Europe as a result of peculiarly European social and political developments. But if (as I shall argue) the practices of modern science are refined versions of epistemic practices found in all societies, this will help bridge any apparent gap between ‘the West’ and ‘the Rest’.

References

- Baritz, Loren. 1961. ‘The Idea of the West.’ *The American Historical Review* 66(3): 618–640.
- Barnhardt, Ray and Angayuqaq Oscar Kawagley. 2005. ‘Indigenous Knowledge Systems and Alaska Native Ways of Knowing.’ *Anthropology and Education Quarterly*, 36(1): 8–23.
- Baum, David A. and Michael J. Donoghue. 1995. ‘Choosing among Alternative “Phylogenetic” Species Concepts.’ *Systematic Botany* 20(4): 560–573.
- Bavaj, Riccardo. 2011. “‘The West’: A Conceptual Exploration.’ *Europäische Geschichte Online*. <<http://www.ieg-ego.eu/bavajr-2011-en>>
- Beiser, Frederick C. 1992. *Revolution and Romanticism: The Genesis of Modern German Political Thought, 1790–1800*. Cambridge, MA: Harvard University Press.
- Beiser, Frederick C. 2011. *The German Historicist Tradition*. New York: Oxford University Press.
- Berlin, Isaiah. 2013. *Three Critics of the Enlightenment: Vico, Hamann, Herder*, edited by Henry Hardy, 2nd edition. Princeton, NJ: Princeton University Press.
- Berman, Harold J. 1983. *Law and Revolution: The Formation of the Western Legal Tradition*. Cambridge, MA: Harvard University Press.
- Berger, Stefan. 2017. ‘Western Europe.’ In *European Regions and Boundaries: A Conceptual History*, edited by Diana Mishkova and Balázs Trencsényi, 15–35. New York: Berghahn.
- Bodde, Derk. 1991. *Chinese Thought, Society, and Science: The Intellectual and Social Background of Science and Technology in Pre-modern China*. Honolulu, HI: University of Hawaii Press.
- Bonnett, Alastair. 2004. *The Idea of the West: Culture, Politics and History*. London: Palgrave Macmillan.
- Braudel, Fernand. 1994. *A History of Civilizations* (1987), translated by Richard Mayne. London: Penguin Books.
- Brockway, Lucile H. 1979. ‘Science and Colonial Expansion: The Role of the British Royal Botanic Gardens.’ *American Ethnologist* 6(3): 449–465.
- Brooks, David. 2025. ‘America is Surrounded by Enemies ... That We Created.’ *The New York Times*, 13 March, Section A, p. 25.
- Canagarajah, Suresh. 2002. ‘Reconstructing Local Knowledge.’ *Journal of Language, Identity, and Education* 1(4): 243–259.
- Cheng, Chung-ying. 1976. ‘Model of Causality in Chinese Philosophy: A Comparative Study.’ *Philosophy East and West* 26(1): 3–20.
- Durie, Mason. 2004. ‘Understanding Health and Illness: Research at the Interface between

- Science and Indigenous Knowledge.’ *International Journal of Epidemiology* 33(5): 1138–1143.
- Eisenstadt, Shmuel N. 1964. ‘Social change, Differentiation and Evolution.’ *American Sociological Review* 29(3): 375–386.
- Elkana, Yehuda. 1986. ‘The Emergence of Second-Order Thinking in Classical Greece.’ In *The Origins and Diversity of Axial Age Civilizations*, edited by S. N. Eisenstadt, pp. 40–64. Albany, NY: State University of New York Press.
- Elman, Benjamin A. 2003. “‘Universal Science’ Versus ‘Chinese Science’: The Changing Identity of Natural Studies in China, 1850–1930.’ *Historiography East and West* 1(1): 68–116.
- Galaktionov, A. A. and P. F. Nikandrov. 1967. ‘Slavophilism, its National Roots and its Place in the History of Russian Thought.’ *Soviet Studies in Philosophy* 6(2): 22–32.
- GoGwilt, Christopher. 2022. ‘A Brief Genealogy of the West.’ In *Westernness: Critical Reflections on the Spatio-temporal Construction of the West*, edited by Christopher GoGwilt, Holt Meyer and Sergey Sistiaga, 231–257. SpatioTemporality/RaumZeitlichkeit 12. Oldenbourg: De Gruyter.
- Goody, Jack. 1977. *The Domestication of the Savage Mind*. Cambridge: Cambridge University Press.
- Greene, John C. 1981. *Science, Ideology, and World View: Essays in the History of Evolutionary Ideas*. Berkeley, CA: University of California Press.
- Harman, Willis W. 1996. ‘The Shortcomings of Western Science.’ *Qualitative Inquiry* 2(1): 30–38.
- Hoyningen-Huene, Paul. 2013. *Systematicity: The Nature of Science*. Oxford Studies in Philosophy of Science. Oxford: Oxford University Press.
- Krementsov, Nikolai. 1997. *Soviet Science*. Princeton, NJ: Princeton University Press.
- Landgrebe, Ludwig. 1940. ‘The World as a Phenomenological Problem.’ *Philosophy and Phenomenological Research* 1(1): 38–58.
- Leerssen, Joep. 2004. ‘Literary Historicism: Romanticism, Philologists, and the Presence of the Past.’ *MLQ: Modern Language Quarterly* 65(2): 221–243.
- Lloyd, G. E. R. 1990. *Demystifying Mentalities. Themes in the Social Sciences*. Cambridge: Cambridge University Press.
- Lovejoy, Arthur O. and George Boas. 1965. *Primitivism and Related Ideas in Antiquity. Contributions to the History of Primitivism*. New York: Octagon Books.
- Maurer, Armand. 1985. ‘Introduction’. In *St Thomas Aquinas, The Division and Methods of the Sciences – Questions V and VI of his Commentary on the De Trinitate of Boethius*, edited by Armand Maurer, 4th ed., vii–xli. Toronto: Pontifical Institute of Medieval Studies.
- Mignolo, Walter. 2012. ‘Decolonizing Western Epistemology / Building Decolonial Epistemologies.’ In *Decolonizing Epistemologies*, edited by Ada María Isasi-Díaz and Eduardo Mendieta, pp. 19–43. New York: Fordham University Press.
- Needham, Joseph. 1978. ‘Address to the Opening Session of the XV International Congress of the History of Science, Edinburgh, 11 August 1977.’ *The British Journal for the History of Science*, 11(2): 103–113.
- Nozick, Robert. 1981. *Philosophical Explanations*. Cambridge, MA: Harvard University Press.
- Okere, Theophilus. 2005. ‘Is There One Science, Western Science?’ *Africa Development* 30(3): 20–34.
- Pasnau, Robert. 2010. ‘Medieval Social Epistemology: *Scientia* for Mere Mortals.’ *Episteme* 7(1): 23–41.
- Pasnau, Robert. 2013. ‘Epistemology Idealized.’ *Mind* 122(488): 987–1021.
- Pelto, Pertti. J. and Gretel H. Pelto. 1997. ‘Studying Knowledge, Culture, and Behavior in Applied Medical Anthropology.’ *Medical Anthropology Quarterly* NS 11(2):147–163.
- Peltonen, Markku. 2002. ‘Citizenship and Republicanism in Elizabethan England’ In *Republicanism: Volume I, Republicanism and Constitutionalism in Early Modern Europe: A Shared European Heritage*, edited by Martin van Gelderen and Quentin Skinner, vol. 1, 85–106. Cambridge: Cambridge University Press.
- Pingree, David. 1992. ‘Hellenophilia versus the History of Science.’ *Isis* 83(4): 554–563.
- Pollock, Sheldon. 1989. ‘The Idea of Śāstra in Traditional India.’ In *Shāstric Traditions in*

Indian Arts, edited by Anna Libera Dallapiccola, 17–26. Stuttgart: Steiner Verlag.

Rochberg, Francesca. 2018. ‘Science and Ancient Mesopotamia’. In *The Cambridge Companion to Science*, vol. 1, edited by Alexander Jones and Liba Taub, pp. 7–28. Cambridge: Cambridge University Press.

Ryn, Claes G. 2003. *A Common Human Ground: Universality and Particularity in a Multicultural World*. Columbia, MO: University of Missouri Press.

Seuffert, Nan. 1997. ‘Circumscribing Knowledge in Aotearoa/New Zealand: Just Epistemology.’ *Yearbook of New Zealand Jurisprudence 1*: 97–125.

Sikka, Sonia. 2005. ‘Enlightened Relativism: The Case of Herder.’ *Philosophy and Social Criticism* 31(3): 309–341.

Ward, W. G. 1867. ‘Science, Prayer, Free will, and Miracles.’ *The Dublin Review* (April edition): 255–298.

Waters, Lindsay. 2001. ‘The Age of Incommensurability.’ *boundary 2* 28(2): 133–172.

Watson-Verran, Helen and David Turnbull. 1995. ‘Science and Other Indigenous Knowledge Systems.’ In *Handbook of Science and Technology Studies*, edited by Sheila Jasanoff, et al. (revised edition), 115–39. London: Sage Publications.

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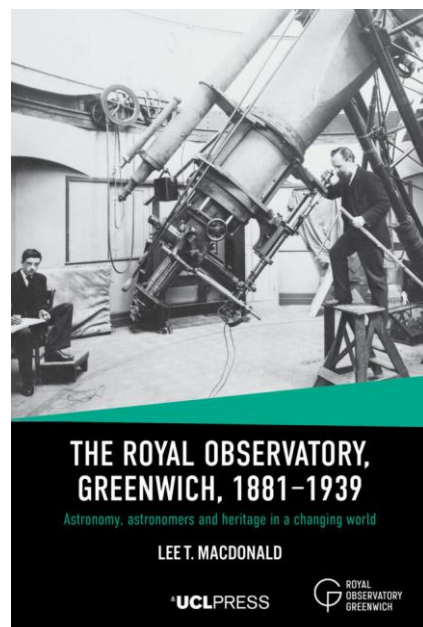
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Between the late nineteenth century and the outbreak of the Second World War, astronomy underwent a radical change, from a science

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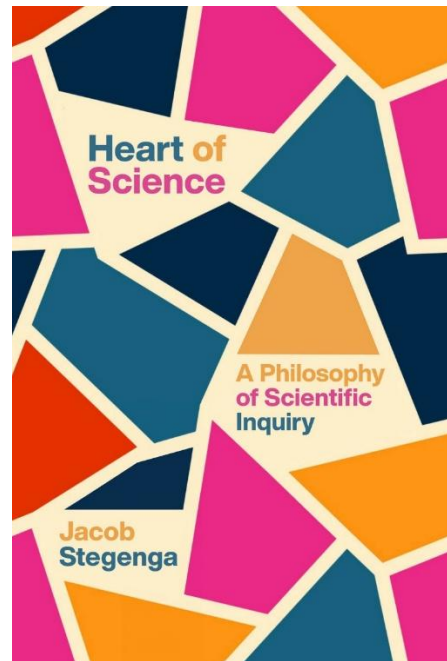
Using a wealth of primary-source research in the Royal Observatory's archives and elsewhere, Lee T. Macdonald describes and analyses how the Observatory, originally founded in 1675 to tackle the problem of finding longitude at sea, branched out into areas at the cutting edge of astronomical research, including photographic mapping of the sky and the study of solar eclipses. He shows how the Observatory remained committed to the traditional missions in navigational and positional astronomy, and how its work became increasingly challenged by the growth of London, culminating in relocation. The story is a valuable exemplar of how a working observatory gradually transformed into a heritage institution, which thrives to this day.

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This novel epistemology of science contends that good science need not attain its aims, but it must justify its claims.



In *Heart of Science*, philosopher Jacob Stegenga breaks with the most dominant epistemologies of science to argue that in judging scientific activity, we should focus on its justification, not the achievement of truth or knowledge. Yet, Stegenga argues, the aim of science goes far beyond justification and is, instead, a special kind of truth—common knowledge, a broadly shared and mutually justified scientific finding.

Drawing on both historical examples and recent events like the COVID-19 pandemic, Stegenga outlines his approach before delving into its implications for scientific evaluation, testimony, values, progress, and credit, as well as the nature of science during times of crisis.

Truth, he shows, may not be easily identified in the short term. However, an evaluation of scientific justification, grounded in shared standards, *is* possible. This framework helps us appraise—and appreciate—historical theories that ultimately weren't accurate and offers fresh insights about appropriate science communication and public trust in scientific research. Justification and scientific rigor are not just means to an end, Stegenga writes, but the very heart of good science.

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“This book brings together leading philosophers and scientists to explore the implications of open systems across physics, metaphysics, and methodology. How do interactions shape the behaviour of physical systems? What are the consequences of idealizing real systems as closed? How does openness affect our understanding of fundamental theories, such as quantum

mechanics and statistical physics? And what does it mean for the broader philosophical concepts of reduction, explanation, and emergence?

“At the heart of this volume lies the recognition that open systems require a shift in perspective—one that acknowledges the limits of traditional approaches and embraces new ways of thinking about complex, dynamic systems. Through interdisciplinary contributions, the book offers fresh insights into topics such as non-unitary evolution in quantum mechanics, the role of decoherence in the quantum-to-classical transition, and the challenges of modeling open systems in scientific practice.

“Written for scholars and students in philosophy and physics, as well as anyone interested in the foundations of science, *Open Systems: Physics, Metaphysics, and Methodology* invites readers to rethink fundamental concepts in light of the inherent openness of the systems that shape our world. (From the Publishers)

More information [HERE](#)

Humboldt, A. von (2026). *On the geographical distribution of plants* (S. T. Jackson, Ed. & Intro.; P. Holt, Trans.). Chicago, IL: University of Chicago Press. ISBN: 9780226502526

“In the nineteenth century, Alexander von Humboldt was arguably the world’s most famous celebrity after Napoleon. What started in 1799 as a serendipitous trip to the New World tropics with his friend Aimé Bonpland to collect plants and minerals expanded into a five-year exploration of Venezuela, Colombia, Ecuador, Peru, Mexico, and Cuba. The discoveries the two amassed were nothing short of staggering, and much of our knowledge of tropical botany, zoology, geography, and geology can be traced back to these journeys. The voyage, and the publication of Humboldt’s travel narratives and scientific studies from these expeditions, which totaled dozens of books, elevated Humboldt to cult status.

“In the last two decades, Humboldt’s writings have been rediscovered in multiple fields,

including biogeography; Earth and environmental sciences; American and Latin American studies; nineteenth-century art, poetry, and literature; and transatlantic cultural history. His ideas are profoundly relevant to twenty-first-century thought on the relationship between humans and nature, and the ecological framework in which he viewed the world remains essential two centuries after his travels.

“Among his many interests and explorations, Humboldt invested considerable effort in explaining the underlying causes of the uneven distribution of plant species across the globe. His extended essay, *On the Geographical Distribution of Plants*, is among his least known but most important works, laying the foundations for the development of ecology, climatology, and evolutionary biology in the following decades. It was published originally in 1815 as an introduction to a seven-volume Latin botanical monograph, *Nova Genera et Species Plantarum*. The essay, republished in 1817 as a standalone volume, held great influence over nineteenth-century naturalists. It is his most comprehensive and detailed treatment of plant geography. In the essay, Humboldt applies botanical arithmetic to reveal ecological and biogeographic patterns of plants, applications that still ground modern macroecology, and provides frameworks to link vegetation patterns and climate, essential in modern Earth system science. Introduced and organized by ecologist Stephen T. Jackson and translated from Latin to English by Philip Holt, this book is essential for the libraries of scientists, historians, and all Humboldt admirers.”

More information [HERE](#)

Fábregas-Tejeda, A. (2026). *The organism-environment pairing: A historical and philosophical reappraisal*. Cambridge, MA: The MIT Press. ISBN 9780262052825.

“In this first systematic book-length examination of the organism-environment relationship in the life sciences, Alejandro Fábregas-Tejeda addresses a crucial gap in our understanding of a foundational building block of modern biology. Taking an integrated history

and philosophy of science (&HPS) approach, he asks questions such as: Are organisms and environments symmetrically related, or do fundamental asymmetries underlie this relationship? Can we draw clear boundaries between organism and environment, or are they inseparable? What precisely constitutes an organismal environment? These issues have gained urgency in light of postgenomic research revealing complex environmental influences on development and organism-environment interactions.

“Fábregas-Tejeda examines early twentieth-century theoretical biology and contemporary debates across evolutionary biology, ecology, developmental biology, and philosophy of biology. Contrasting the two periods, he illuminates the epistemic and ontological nature of the organism-environment relationship and its explanatory and heuristic roles in biology. *The Organism-Environment Pairing* shows how new insights from evolutionary developmental biology, ecology, niche construction theory, and phenotypic plasticity research have further complicated our understanding of this relationship.” (From the Publishers)

More information [HERE](#)

Feest, U. (2025). *Operationism in psychology: An epistemology of exploration*. Chicago, IL: University of Chicago Press. ISBN 9780226838397

“Psychology has seen an intense debate about the lack of replicability of results in recent years. Uljana Feest uses history and philosophy of science to shed light on the nature of experiment in psychology in general, but her aim reaches beyond debates about replication to provide a novel and comprehensive analysis of the investigative process in experimental psychology. She shows that the central unit of analysis for our epistemological considerations of psychological research should be not theories but, rather, concepts. Her guiding question is: How do psychological concepts figure in the experimental exploration of the objects of psychological research?

“For Feest, this question has two intertwined aspects: What role do concepts play in the design of experiments and the production of data, and how can concepts be revised or adapted in response to experimental results. Following the historical trajectory of debates about operationism in psychology, she argues that this debate was not concerned with philosophical theories of meaning but, instead, closely connected to the investigative practices of experimental psychologists.

“The book offers a broad analytical framework for thinking philosophically about the investigative process in psychology, including analyses of the relationship between data and phenomena in psychology, the relationship between folk- and scientific psychological concepts, the relationship between genuine results and experimental artifacts, and the nature and exploration of psychological kinds.” (From the Publishers)

More information [HERE](#)

Krauss, A. (2026). *The engine of scientific discovery: How new methods and tools spark major breakthroughs*. Oxford, United Kingdom: Oxford University Press. ISBN 9780197829790.

“How do we spark new scientific discoveries? How can we accelerate new breakthroughs in science? These are some of the biggest unsolved questions in science.

“Many believe that discoveries arise by chance or serendipity. *The Engine of Scientific Discovery* illustrates, for the first time, how we can actively speed up the pace of new breakthroughs by developing better methods and tools of discovery which enable us to see and think in entirely new ways. New tools are the lenses through which we discover what we often did not even know existed: improved microscopes uncovered microorganisms and viruses, x-ray methods exposed the structure of DNA, particle accelerators detected subatomic particles, and advanced telescopes revealed galaxies.

“This book explores science's biggest discoveries—spanning all Nobel Prize discoveries and over 200 other major discoveries. The findings are striking: science's over 750 major discoveries have been triggered by first developing a new method or instrument that made the breakthrough possible. In fact, most discoveries are now uncovered within just a few years after designing the needed tool. This pattern reveals how our transformative new tools are *The Engine of Scientific Discovery*—a fundamental principle of scientific progress overlooked until now.

“By shifting our attention to inventing new tools as the key to advancing new breakthroughs, we can spark a methodological revolution in science. Instead of waiting for breakthroughs, we can actively design and build new tools of discoveries. What if the next great breakthroughs depend not just on asking better questions, but developing better tools to ask and answer them—on entirely new ways of discovering? A new theory of discovery emerges, offering a roadmap for accelerating progress across science.” (From the Publishers)

More information [HERE](#)

Krishna, V. V. (2026). *The Indian science community: Historical and sociological studies* (1st ed.). New Delhi, India: Routledge India. ISBN 9781032844268

“This book focuses on the historical and sociological dimensions of scientists working in laboratories in India, offering insights into the historical, sociological and policy factors that shape scientific pursuits. It illuminates the challenges, accomplishments and the evolving role of science in societal development.

“The author initiates a broader discourse on the interplay between scientific advancements, societal contexts and policy frameworks. The book fosters a deeper understanding of science's role in shaping India's social fabric and contributing to the global scientific dialogue. It also explores issues such as brain drain, science activism and the conflict between university- and government-run models of science.

“Lucid and topical, the book will be of considerable interest to both social and natural scientists, as well as the general academic community, including research students in science, technology, history, social history of science, science and technology studies and innovation policies.” (From the Publishers)

More information [HERE](#)

McCaskey, J. P. (2026). *Induction: Socrates to Popper*. Chicago, IL: University of Chicago Press. ISBN 9780226854137

“The problem of induction continues to vex and beguile. How can we reliably draw universal conclusions from limited observations? In *Induction*, John P. McCaskey steps back and rethinks long-held assumptions, tracing the ideas of Socrates and Aristotle in ancient Greece to those of Karl Popper in the twentieth century.

“This comprehensive account does not look at how people of the past answered the questions we ask today. Instead, it asks: How did they understand the very meaning of the words epagōgē in Greek, inductio in Latin, istiqrā' in Arabic, Induktion in German, and induction in English? McCaskey's careful treatment of texts in their context dispels many long-standing myths, and importantly, he introduces us to a now-unfamiliar way to think about what induction is—a way in which there simply is no “problem of induction.” McCaskey reveals that the problem was one of our own making and that an accurate history may help us recover old ways—and thereby introduce new ways—to think about the whole idea. A must-read for philosophers, historians of ideas, and anyone interested in the scientific method.” (From the Publisher)

More information [HERE](#)

Orsi, C. (2026). *What science says about astrology*. New York, NY: Columbia University Press. ISBN 9780231221399.

“For thousands of years, people have believed that the configuration of stars and planets in the

sky influences earthly events. Today, astrology is a lucrative global market, with newspaper columns, mobile apps, and professional counselors weighing in on everything from love life to health to the stock market. Yet scientific evidence shows indisputably that it is simply superstition. Why does astrology appeal to so many people? What makes its prognostications seem persuasive? Is there any harm to believing in astrology anyway?

“This book aims a scientific lens at astrology, from its colorful history to experimental tests of its predictions through the social and psychological factors that explain its enduring popularity. Carlos Orsi explores the importance of astrology to the history of science and the reasons it has been categorized as a pseudoscience. He investigates its tenets, recounting how scientists debunked common claims. With both empathy and skepticism, Orsi illuminates the psychological, rhetorical, and emotional mechanisms that cause people to find astrological predictions convincing. He also addresses the dangers of irrational beliefs and the risks of applying astrology to serious decisions. Wide-ranging and entertaining, this book offers a critical look at the modern appeal of an ancient superstition.” (From the Publishers)

More information [HERE](#)

Plümper, T., & Neumayer, E. (2026). *The credibility crisis in science: Tweakers, fraudsters, and the manipulation of empirical results*. Cambridge, MA: The MIT Press. ISBN 9780262051279.

“In *The Credibility Crisis in Science*, leading social scientists Thomas Plümper and Eric Neumayer argue that the most impactful fraud is crucially under-recognized. While data fabrication and manipulation are widely recognized as fraudulent, “tweaks”—the intentional selection of research designs and model specifications based on the results they give—are not. As a consequence, the credibility crisis in science is even more severe than both scientists and the public believe.

“The authors show how easily observational data analyses, experimental designs, and causal models are tweaked in ways that are extremely difficult, often impossible, to detect. They also argue that conventional strategies to deter, prevent, and detect fraud will not work for tweaks. They put forth two potential solutions: first, a classification system that categorizes data based on its susceptibility to manipulation and the probability of such manipulation being identified; and second, the proposal that journal editors and reviewers, rather than authors, select robustness tests.” (From the Publishers)

More information [HERE](#)

Schaffer, S. (2026). *Working knowledge: A Simon Schaffer reader* (C. Bigg, J. Tresch, & S. Werrett, Eds.). Chicago, IL: University of Chicago Press. ISBN 9780226831794

“*Working Knowledge* is the first English-language collection of essays by Simon Schaffer, coauthor of *Leviathan and the Air-Pump*, a landmark text in the history of science. Though the latter may be his most famous book, Schaffer is also renowned for seminal articles on Isaac Newton and the cultures of popular spectacle, nineteenth-century physics and its practices of labor discipline and standardization, the history of anthropology and collecting, and the globe-spanning cultural interactions that have shaped modern science. *Working Knowledge* compiles these well-known pieces alongside newer selections, making them accessible in a single place and representing the huge scope and impact of Schaffer’s oeuvre.

“*The Reader* divides sixteen of Schaffer’s articles across five thematic sections, which take up timely issues like the turn toward global histories of science; the intersection of science and capitalism; the interaction between bodies and machines; and the connection between science, politics, and the environment. Eight new essays by notable historians such as Adrian Johns, Lissa Roberts, and Steven Shapin bring Schaffer’s pieces into discussion with current scholarship. Illustrations and brief commentaries by Schaffer and the artist Adam

Lowe, a longtime collaborator, are included throughout the volume.

“Bringing together essential articles that were previously scattered across several publications, *Working Knowledge* is an insightful introduction to Schaffer and his ever-relevant writing.” (From the Publisher)

More information [HERE](#)

Stegenga, J. (2026). *Heart of science: A philosophy of scientific inquiry*. Chicago, IL: University of Chicago Press. ISBN 9780226844053.

“In *Heart of Science*, philosopher Jacob Stegenga breaks with the most dominant epistemologies of science to argue that in judging scientific activity, we should focus on its justification, not the achievement of truth or knowledge. Yet, Stegenga argues, the aim of science goes far beyond justification and is, instead, a special kind of truth—common knowledge, a broadly shared and mutually justified scientific finding.

“Drawing on both historical examples and recent events like the COVID-19 pandemic, Stegenga outlines his approach before delving into its implications for scientific evaluation, testimony, values, progress, and credit, as well as the nature of science during times of crisis. Truth, he shows, may not be easily identified in the short term. However, an evaluation of scientific justification, grounded in shared standards, is possible. This framework helps us appraise—and appreciate—historical theories that ultimately weren’t accurate and offers fresh insights about appropriate science communication and public trust in scientific research. Justification and scientific rigor are not just means to an end, Stegenga writes, but the very heart of good science.

“Ambitious, authoritative, and accessible, *Heart of Science* offers a new vision for the philosophy of science.” (From the Publishers)

More information [HERE](#)

Szpiro, G. G. (2026). *Ignorance: What we do not know, cannot know, must not know, and refuse to know*. New York, NY: Columbia University Press. ISBN 9780231221658.

“Does the lack of evidence mean that aliens don’t exist? Why does an unproven mathematical hypothesis have profound consequences? Are humans capable of grasping the nature of divinity? Is it ethical to give a patient a placebo? Why do people persist in demonstrably false beliefs like flat earth theory? Should someone want to know when they will die?

“George G. Szpiro examines these questions and many others, offering an engaging and witty tour of what we can learn from ignorance. In a series of fast-paced chapters, he unravels problems ranging across science, mathematics, law, economics, politics, religion, psychology, and philosophy—some esoteric, others drawn from everyday life. Ignorance comes in many forms, Szpiro shows. Some questions are only temporarily unsolved; others are inherently unanswerable. Sometimes authorities keep answers from us, for good or ill. Often our assumptions and biases keep us from overcoming our ignorance, and occasionally we choose to remain ignorant—for surprisingly rational reasons.

“Ultimately, Szpiro argues, ignorance is not purely negative. It can motivate the pursuit of learning and wisdom—as long as we acknowledge it. Presenting sophisticated topics in an accessible way, this book shows how ignorance sheds light on the nature of knowledge.” (From the Publishers)

More information [HERE](#)

Turello, D. (2026). *Connection: How technology can make us better humans*. New York, NY: Columbia University Press. ISBN 9780231220163.

“Technology gets a bad rap. It is accused of being a dehumanizing force, a chief culprit in everything from mass commercialization to environmental crisis through the potential collapse of civilization. In *Connection*, Dan

Turello reflects on the origins and limitations of such views. He offers a philosophical and literary meditation on what technology is and can be, arguing that it provides surprising ways to strengthen and deepen what makes us human.

“Putting medieval Italian poets and Renaissance artists in conversation with contemporary philosophers and pop culture, this book traces the roots of our fascination with—and aversion to—technology. Turello shows how the moments that shaped Western views of technology offer perspective on our current predicaments, as figures such as St. Francis of Assisi and Dante grappled with problems that are strikingly reminiscent of the ones we face today. Challenging nostalgia for preindustrial innocence, he demonstrates that historically technology has enabled us to develop art, philosophy, religion, and culture. Today, technology can safeguard human creativity—if we choose self-awareness and community over consumption and exploitation. Wide-ranging and inviting, *Connection* makes a timely case for embodied experience in the age of AI.” (From the Publishers)

More information [HERE](#)

van der Heijden, M., & Monaghan, B. (2026). *The delight of thinking: The life of Tatiana Afanassjewa and Paul Ehrenfest*. Oxford, United Kingdom: Oxford University Press. ISBN 9780198927099.

“Paul Ehrenfest grew up in a middle-class Jewish family in Vienna. Tatiana Afanassjewa came from a wealthy family in St Petersburg. Their love of science brought them together at the beginning of the twentieth century and led them to Leiden in the Netherlands.

“There, the ebullient Ehrenfest built up an enormous international network of mostly physicists. Afanassjewa worked — inevitably — mainly at home, among the children, on the theory of heat, and thought about the didactics of geometry and how to 'teach children to think'. And as Europe grew darker and darker, the 'bright' Russian house that Afanassjewa had designed blossomed into an oasis for thinkers

from all over the world. The list of signatures on the wall of the guest room includes the names of sixteen Nobel Prize winners, including Niels Bohr and, of course, Albert Einstein, Ehrenfest's best friend.

“Over the past few years, Margriet van der Heijden has delved into the archives to tell the story of Ehrenfest and Afanassjewa and their microcosm, which fell apart when Hitler came to power in 1933. While on the run in England, Einstein heard that Ehrenfest had taken his own life. Afanassjewa had to survive without her professor, who, while "dancing in front of the blackboard", had made physics enchanting. Van der Heijden tells their story using many new documents from the Ehrenfest Family Archive and highlighting not only Ehrenfest's contributions to physics, but especially also those of Afanassjewa whose work on thermodynamics, dimensional analysis and the didactics of geometry has previously gotten less attention. (From the publishers)

More information [HERE](#)

Authors of HPS&ST-related papers and books are invited to bring them to attention of the Newsletter's assistant editor Paulo Maurício (paulo.asterix@gmail.com) for inclusion in these sections.

Golden Oldie: HPS&ST Research from 30+ Years Ago

Good HPS&ST research is clearly written, philosophically informed, well-argued, and has enduring value. Clarity encourages critique and evaluation so that flaws can be identified and corrected. This is a condition for the advance of knowledge.

Much education research is timely. This is useful. But an unfortunate consequence can be that what is timely today might not be timely tomorrow. Circumstances change. The research might leave

no trace. Conversely, some research can leave a big trace but be philosophically flawed and so do educational and, ultimately, cultural damage.

Good HPS&ST research has a long shelf-life. In defence of this claim, the [HPS&ST Newsletter](#) will identify 30+ years-old articles that had, and still have, philosophical, historical and educational value. These Golden Oldies are available, month-by-month [HERE](#)

18th in the series:

Martin, Michael: 1994, 'Pseudoscience, the Paranormal, and Science Education', *Science & Education* 3(4), 357-372.

ABSTRACT: The study of pseudoscience and the paranormal is an important but neglected aspect of science education. Given the widespread acceptance of pseudoscientific and paranormal beliefs, science educators need to take seriously the problem of how these can be combated. I propose teaching science students to critically evaluate the claims of pseudoscience and the paranormal, something that can be accomplished in a variety of ways.

Paper available [HERE](#)

An Obituary for Michael Martin is: [HERE](#)

Readers are welcome to send suggestions, including appropriately-aged own-papers, with bibliographic detail plus pdf file, for the Golden Oldie Award to the [Editor](#).

Coming HPS&ST Related Conferences

May 29-31 2026, Karl Popper in China, Hong Kong, UST

Details: [HERE](#)

June 9-12, 2026, Scientae annual conference, Nantes, France

Details: [HERE](#)

June 11-14, 2026, Committee for Skeptical Inquiry, 50th Conference, Buffalo, NY.

Details: [HERE](#)

June 11-13, 2026, Francis Bacon: Four Centuries of Thought, UTN

Details: rodolfo.garau@utn.de &

daniela.jalobeanu@utn.de

June 22-25, 2026, 8th ICASE World Conference on Science & Technology Education, University College, Cork, Ireland

Details: [HERE](#)

July 6-10, 2026, IHPST 18th Biennial Conference, Lisbon.

Details: [HERE](#)

July 13-15, 2026, 'Logic, Relativity and Beyond', Rényi Institute of Mathematics, Budapest

Details: [HERE](#)

July 13-16, 2026, joint European Society for the History of Science/History of Science Society meeting, Edinburgh.

Details: [HERE](#)

July 15-17, 2026, Biennial Conference, Society for Philosophy of Science in Practice (SPSP), University of Cambridge

Details: [HERE](#)

July 22-24, 2026, Asian Philosophy of Science Association, conference, Singapore

Details [HERE](#)

July 29-31, 2026, 29th Conference of the International Society for the Philosophy of Chemistry

Details: [HERE](#)

August 12-14, 2026, Philosophy of Biology at Madison (POBAM)

Details: [HERE](#)

September 14-15, Law-based Explanations Conference, London School of Economics

Details: [HERE](#)

November 5-6, History of Alchemy and Chemistry Conference, Munich

Details: [HERE](#)

November 19-22, PSA Annual Meeting, San Diego.

Details: [HERE](#)

January 25, 2027, Robert Boyle 400th Anniversary Conference, Royal Society of Chemistry, London

Details: Professor Michael Hunter at m.hunter@bbk.ac.uk.

HPS&ST Related Organisations and Websites

[IUHPST](#) – International Union of History, Philosophy, Science, and Technology

[DLMPST](#) – Division of Logic, Mathematics, Philosophy, Science, and Technology
[DHST](#) – Division of History, Science, and Technology
[IHPST](#) – International History, Philosophy, and Science Teaching Group
[NARST](#) - National Association for Research in Science Teaching
[ESERA](#) - European Science Education Research Association
[ASERA](#) - Australasian Science Education Research Association
[ICASE](#) - International Council of Associations for Science Education
[UNESCO](#) – Education
[MJHoS](#) - Midwest Junto for the History of Science
[HSS](#) – History of Science Society
[ESHS](#) – European Society for the History of Science
[AHA](#)– American History Association
[FHPP APS](#) - Forum on History and Philosophy of Physics of the American Physical Society
[HAD AAS](#) - Historical Astronomy Division of the American Astronomical Society.
[ACS HIST](#) – American Chemical Society Division of the History of Chemistry
[GWMT](#) - Gesellschaft für Geschichte der Wissenschaften, der Medizin und der Technik
[ISHEASTME](#) – International Society for the History of East Asian History of Science Technology and Medicine

[EASE](#) - East-Asian Association for Science Education
[BSHS](#) – British Society for History of Science
[EPSA](#) - European Philosophy of Science Association
[AAHPSSS](#) - The Australasian Association for the History, Philosophy, and Social Studies of Science
[HOPOS](#) – International Society for the History of Philosophy of Science
[PSA](#)– Philosophy of Science Association
[BAHPS](#) - Baltic Association for the History and Philosophy of Science
[BSPS](#) – The British Society for the Philosophy of Science
[SPSP](#)- The Society for Philosophy of Science in Practice
[ISHPSB](#) - The International Society for the History, Philosophy, and Social Studies of Biology
[PES](#)– The Philosophy of Education Society (USA)
[SHOT](#) - Society for the History of Technology

The above list is updated and kept on the HPS&ST website at: [HERE](#)

HPS&ST related organizations wishing their web page to be added to the list should contact assistant editor Paulo Maurício: paulo.asterix@gmail.com

HPS&ST NEWSLETTER PERSONNEL

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