Abstracts

Doing 21st Century History: The Anthropology of Global and Environmental History

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In the first decades of the 21st century, two buzzwords took the zeitgeist by storm: one, globalization, and two, the Anthropocene. The conceptual histories of these two terms are not exactly synchronous; globalization had already gained steam before the turn of the millennium, but that they have both been dominant analytic concepts for journalists, philosophers, and researchers alike for the past two decades is undeniable. What has been less remarked on is the seemingly simultaneous impact both concepts have had on historical scholarship. Globalization has been tied to the emergence of global history as a historiographical framework or paradigm, while the Anthropocene invigorated an already well-established environmental history. Yet while both historical subfields have grown rapidly over the past two decades, there remains a curious disjuncture between the two. This is especially odd given that world environmental history predates global history by several decades as a recognizable framework. With some notable exceptions, global history and environmental history as research paradigms appear stubbornly resistant to commensurability.

From the perspective of the anthropology of history, my paper inquires into this state of affairs in historical scholarship and argues that these recent developments are phenomenal and material manifestations of the continuing crisis of Western metaphysics. I read the disciplinary histories of global history and environmental history as demonstrative of fundamentally ontological issues. What is unique and provoking about these developments, however, is that knowledge domains typically held at arm's length from each other have become available for study under the same disciplinary domain. In other words, the environment, a domain traditionally reserved for the natural sciences, has somehow come under the remit of the historian just as much as the global has. This opens new possibilities for scholars of history and historiography to rethink that which once was an obvious line of demarcation: that between nature, studied by scientists, and the past, studied by historians. Recognizing and analyzing these developments in the historical fields, I argue, provides us not only with a concrete and material example of how disciplinary remits come to matter metaphysically and ontologically, but also provides insight into the contingency of disciplinary remits, suggesting they can ultimately be rethought and similarly come to matter.

Reading History Backward: Kuhn's Marginal Cassirer and the Epistemology of Historical Reconstruction

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Historical inquiry faces a distinctive epistemic difficulty: historians know the outcomes of processes whose participants did not. This asymmetry makes retrospective reconstruction indispensable, but also potentially distorting. In the history of science, later conceptual structures can be projected backward onto earlier inquiry, making past scientific developments appear more continuous, rationally ordered, and determinate than they were for historical actors themselves.

This paper reconstructs an early formulation of this problem in Thomas Kuhn's engagement with Ernst Cassirer. Drawing on newly examined annotations in Kuhn's personal copies of An Essay on Man and The Philosophy of the Enlightenment, together with Kuhn's 1951 Lowell Lectures, I argue that Cassirer's distinction between systematic and genetic analysis provided Kuhn with an important resource for thinking

about the historical reconstruction of scientific knowledge. Whereas systematic analysis presents conceptual structures in their completed and coherent form, genetic analysis investigates the processes through which those structures emerge and change. Kuhn radicalized this distinction. In the Lowell Lectures, he argued that the systematic organization characteristic of textbook science provides no adequate representation of the historical processes through which scientific knowledge was produced. What he called "reading history backward" can therefore be not merely incomplete but positively misleading.

Kuhn's later annotations on Cassirer's Philosophy of the Enlightenment sharpen this historiographical point. He repeatedly questions whether Cassirer is reconstructing eighteenth-century intellectual developments according to categories available to historical actors or imposing upon them a retrospective, Kant-centered systematic order. The marginalia thus show Kuhn applying to Cassirer himself the historical standards that had already emerged in his early philosophy of science.

I argue that this episode illuminates a broader epistemological problem for the historical sciences. Warranted historical reconstruction requires more than recovering true propositions about past events. It also requires distinguishing between conceptual relations available within a historical context and relations visible only retrospectively. Kuhn's critique of backward reading therefore suggests an epistemic constraint on historiography: knowledge of the past must preserve the historically situated possibilities within which past actors encountered evidence, formulated problems, and understood possible solutions.

Learning from the Past in the Philosophy of Science: Particularism and the Role of History in Regulating Belief in Current Scientific Theories

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The scientific realism debate is a dispute over whether the empirical success of scientific theories warrants belief in their (approximate) truth. Realists maintain that the impressive success of a theory—such as its capacity to generate successful novel empirical predictions—provides compelling evidence for it. They are thus committed to epistemic principles of the following form: if a theoretical hypothesis achieves such-and-such kind of empirical success, then it is thereby worthy of belief as (approximately) true.

Antirealists, however, have raised a familiar challenge from the history of science: several past theories exhibited comparably impressive forms of success but were subsequently abandoned as (radically) false. This appears to undermine the reliability of such success as an indicator of truth, and hence to undercut the warrant for our present realist commitments. Realists typically respond by identifying further conditions under which scientific success is truth-conducive. This dialectic has resulted in what Kyle Stanford describes as a "shared epistemic project" in which realists and antirealists seek to "identify, evaluate, and refine candidate indicators of epistemic security for our scientific beliefs," treating the "historical record of scientific inquiry itself as the most important source of evidence [...] pursuing that joint project" (2021: 236).

Yet this methodological reliance on history is challenged by advocates of localism. Localists argue that the diversity of scientific practices across disciplines and historical periods makes cross-epoch comparisons misguided. Their advice, in Carl Hoefer's words, is "Don't go back in time" (2020: 21). Epistemic justification, they contend, is sensitive to the particular evidential circumstances of each case, so that historical episodes cannot legitimately provide general lessons for regulating present scientific beliefs.

I argue that the exclusion of cross-epoch comparisons from epistemic appraisal does not follow merely from the diversity of science. Rather, the localist rejection of historical extrapolation requires a further meta-epistemological commitment concerning the nature of justification, namely, particularism. Particularism maintains that justification does not depend upon principles, rejecting the idea that rational normative appraisal consists in applying rules to cases (Dancy, 2004). It thus stands opposed to generalism, according to which justification depends upon conformity to general principles.

Having established that the localist exclusion of history from the regulation of scientific belief hinges on particularism, I then challenge particularism by examining its principal motivation, the "argument from the holism of reasons." This argument attempts to infer the impossibility of epistemic principles from the

alleged impossibility of finitely codifying the conditions under which considerations of a given type generate epistemic reasons of a certain valence. I argue that this argument rests on the problematic idea of "conditional conditioning": that the conditions under which a consideration grounds a reason can themselves be subject to further conditions (cf. Bader, 2016).
I conclude that the historical record of scientific inquiry retains an ineliminable role in regulating our present realist commitments by providing the comparative cases against which candidate epistemic principles are assessed and refined. Learning from history is thus a constitutive element of epistemology.

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Does Theory of Historical Process in Poznań Version of Analytical Marxism Fall Under Popperian Critique of Theoretical History (and Historicism)?

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The famous Popperian critique of the possibility of theoretical history (theory of historical process) was based on two kinds of arguments: According to the first kind of argumentation, Popper assumes that human history depends on human knowledge. Therefore, in order to predict the future course of human history we should know in advance the content of future scientific theories what means to make some scientific discoveries. According to second line of argumentation, the known examples of theoretical history belong to historicism – products of human minds that cannot fall under procedure of falsification. According to Popper, Marxian historical materialism represents a lay kind of historicism.
However, in my paper I will propose the reconstruction of the theory of historical process elaborated it Poznań School of Methodology. The heuristic tool will be Popper's model of knowledge, according to which, the development of scientific theory went through the phase of the posing of the scientific problem, proposing a tentative theory, a critical discussion and its modification. Proposed by Leszek Nowak (one of the co-founder of the school) the adaptive interpretation of historical materialism was transformed – under the influence of the elaboration of the idealizational theory of science and the categorical interpretation of dialectics – into the generalized version of historical materialism. This version includes theory of the class and primitive societies. Difficulties in the building of the theory of real socialism led to the transformation of generalized version historical materialism into the non-Marxian historical materialism where some tenets of Marxism were refuted (e.g. the domination of economy over politics). In the course of the building of the adaptive interpretation of historical materialism and the non-Marxian historical materialism some primary notions were defined and modified satisfying the criteria of falsification. Although Popper severely criticized the possibility of theoretical history, the theory of history as developed at the Poznań School of Methodology satisfies his criteria of falsification. This throws doubt upon the validity of Popperian critique of theoretical history.

Reading the past: Bayesian Inference in Textual Criticism

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Over the last twenty years, philosophers of science have renewed their attention to the methodological and epistemological issues arising in historical sciences, including historiography, paleontology, geology, archaeology, evolutionary biology, and linguistics (Tucker, 2004, 2009; Kosso, 2009; Laas 2016; Turner 2011; Turner 2013; Chapman and Wylie, 2016; Wallach 2018; Currie and Turner 2016, Yao 2023). Yet textual criticism—the philological discipline concerned with reconstructing the most reliable versions of texts—has received little philosophical analysis (cf. Hendel 2017). Since Lachmann (1855), textual criticism has employed a rigorous "genealogical" method to reconstruct lost originals, making it a paradigmatic scientific approach within the humanities (Timpanaro 1981; Trovato 2014; Turner 2014; Kurtz 2021). This paper aims to fill that gap, providing a philosophy of science outlook of textual criticism and a logico-probabilistic analysis of its methodological principles. In particular, we focus on how criteria for preferring different hypothetical reconstructions of the original version of a text can be justified from a theoretical point of view, and how they compare to patterns of scientific inference in other areas.

Our main case study is the principle of lectio difficilior potior ("the harder reading is superior," henceforth LD). LD guides choices among variant readings of the same passage transmitted by different witnesses. When one reading is less usual, more sophisticated, or otherwise more "difficult" than its alternatives, the principle recommends preferring it. Its rationale is that copyists tend, deliberately or inadvertently, to simplify obscure or unintelligible passages—a process known as "banalization." Nevertheless, textual critics generally recognize that LD is neither infallible nor safely applicable as a mechanical rule. Although the principle is therefore often formulated probabilistically, its justification and conditions of applicability remain unclear.

Here, we provide a Bayesian reconstruction of LD as a rational, fallible pattern of inference (Crupi 2020; Sprenger and Hartmann 2019). First, we identify principles that can serve as premises in arguments employing LD. Some, including banalization, appear explicitly in the technical literature; others remain implicit or are introduced here. Second, we formulate these principles probabilistically and interpret LD as the claim that, given textual evidence E, the hypothesis D that the original contained the lectio difficilior is more probable than the competing hypothesis F that it contained the lectio facilior: $p(D|E) > p(F|E)$. Third, we formally derive this inequality from the probabilistic versions of the identified principles.

The derivation establishes an epistemological justification for LD while clarifying its general conditions of applicability, including assumptions often left unstated in philological practice. It also illuminates the debate between "classical" and Neo-Lachmannian approaches: the hypothetical and conjectural character of textual reconstruction does not diminish its scientific validity but may instead strengthen it. Examples from the literature suggest that the adequacy conditions are generally satisfied, although further case studies are needed. More broadly, this study offers the first philosophical analysis of a central principle of textual criticism and provides a foundation for investigating other methods in textual criticism and related historical disciplines.

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Anomalies and their role in the Geosciences

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As I argue (2027), recognition that a natural phenomenon is at least potentially anomalous is a driving force behind scientific discovery. Yet this fact has been largely ignored by philosophers of science. Logical empiricists implicitly treated anomalies as especially surprising, failed predictions, and hence as belonging to the context of discovery (vs. justification). Thomas Kuhn, on the other hand, contended that anomalies can't be recognized (as such) in the absence of a scientific crisis or revolution. Neither of these accounts of scientific practice, however, can explain the role actually played by anomalies in scientific discovery: Not all anomalies represent failed predictions and recognition that a phenomenon is potentially anomalous doesn't require a Kuhnian crisis or revolution. This is especially true in the historical and field geosciences, which include planetary science and astrobiology. Scientists cannot satisfactorily investigate how particular natural events arise and develop in the confines of the sterile, artificially controlled laboratory. Even supposing that you could synthesize the origin of life in a lab setting, for instance, it wouldn't follow that this is the way it happened on Earth; most natural phenomena, e.g., a quartz crystal, can be synthesized in a variety of different, highly context dependent, ways. Drawing on case studies from the historical geosciences, I argue that the best way to facilitate discovery is to actively search for potential anomalies. Moreover, as I show, this is what geoscientists actually do in practice. Unlike laboratory physicists, historical geologists view serendipitous encounters with anomalous phenomena as treasured hints about what actually happened. Moreover, the so-called "predictions" of historical scientists typically represent educated guesses—as opposed to deduction-like inferences—about where a "smoking gun" for a favored hypothesis might be found and what form it might take. Tellingly, when geoscientists are fortunate enough to encounter "predicted" phenomena, they often refer to them as "anomalies", despite the fact that they were looking for them or, in retrospect, can see that they provide a "smoking gun" for their conjecture.

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Bridging the Divide: The Challenging Integration of Archaeology and Ancient DNA

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Over the last decade, ancient DNA (aDNA) has become one of the most transformative forces in historical reconstruction, reshaping how scholars investigate ancestry, mobility, social organization, and demographic change. However, despite the substantial contributions it has made, aDNA research remains largely epistemically and methodologically distant from the archaeological contexts that give its results historical meaning. Its rapid rise has generated notable disciplinary friction, because collaboration often proceeds unevenly, and because genetic research now carries greater narrative authority and social visibility than that of traditional archaeology.

The divide between archaeology and archaeogenetics arises from two principal sources. First, archaeological and genetic data differ fundamentally in their nature, structure, comparability, and reproducibility, shaping how each discipline approaches its interrogation of the past. Second, these divergent evidential foundations have produced increasingly distinct scientific repertoires – the assemblages of skills, practices, material resources, and epistemic norms through which each field produces knowledge. These repertoires are internally coherent yet largely non-overlapping: although both disciplines share the goal of reconstructing past populations and behaviours, this alignment reflects a common objective rather than true interdisciplinarity. In current practice, most researchers are deeply trained in one repertoire and only superficially familiar with the other, leading to asymmetries of authority, misunderstandings about method, and uneven capacity to evaluate each other's claims. This contributes to a fragmentary integration that can shape archaeogenetic narratives in significant ways. Importantly, within this disciplinary divide, the perceived scientific objectivity of aDNA intensifies asymmetries between repertoires, particularly in contexts involving the wider public.

This work argues that such divides risk obscuring the epistemic underdetermination embedded in historical reconstructions, allowing the uncertainties within archaeogenetic narratives to be masked by their own epistemic authority. It suggests that adequate integration must focus on inference
construction – the key moment when archaeological and genetic evidence come together to support a historical claim. Strengthening this integration is essential for preventing the spread of genetic-based historical claims that can be simplified, misinterpreted, or mobilized to reinforce essentialist ideas about identity, ancestry, or human difference.

Lost Pasts & Unprecedented Futures

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Sometimes the past is hard to know because it has left incomplete, degraded records; sometimes the past is hard to know because it is weird. In *The Science of Lost Worlds* I argue that to understand reasoning in the historical sciences we need to consider both erasure (incomplete records) and loss (unfamiliar, potentially unique, pasts). I provide an account of how knowledge of lost pasts is generated. But what about weird futures? In this paper, I compare how we come to knowledge of lost pasts and unprecedented futures, and argue that there is reason to be epistemically pessimistic about the latter. This is based on the crucial role that traces and records play in historical reconstruction, and the lack of 'records of the future'.

What If Economics Ignored Its Evidence? Homo Economicus and the Rejection of Historical Traces

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Historical sciences such as archaeology, evolutionary biology, and geology generate knowledge by reconstructing past events from present traces—material, textual, or environmental evidence that survives the entropic degradation of time. Can neoclassical economics claim to be a historical science if it marginalizes trace-based inference? A central methodological question in contemporary philosophy of the historical sciences is how hypothesis testing and inference from traces can be systematically integrated into

historical explanation. This paper examines whether mainstream economics meaningfully engages with trace-based evidence or whether it operates through an alternative epistemic strategy that limits the evidential role of historical traces.
This paper argues that the orthodox paradigm systematically marginalizes trace-based inference by relying on an abstract ontology centered on Homo Economicus. Rather than emerging from the interpretation of historically situated evidence, this figure functions as a theoretical posit that structures inquiry prior to engagement with empirical traces. As a result, economic modeling often proceeds independently of the fragmented, context-dependent evidence that constrains explanation in other historical sciences.
This argument is developed in three steps. First, drawing on recent work in the epistemology of historical science, the paper clarifies the role of traces as primary evidential constraints on claims about the past. Second, it examines how neoclassical modeling practices privilege formal coherence and mathematical tractability, sometimes at the expense of engagement with historically grounded data. In this respect, theoretical virtues associated with mathematical aesthetics can partially displace evidential sensitivity to historical complexity. Third, the paper analyzes the historiographical implications of this framework. By projecting Homo Economicus as a transhistorical baseline, economic theory risks organizing diverse historical phenomena into a narrow explanatory schema, thereby limiting the space of plausible alternative trajectories and masking the inherent underdetermination of institutional developments.
The contribution of the paper is to reinterpret mainstream economics as a distinctive case within the philosophy of historical knowledge: not simply as an abstract science, but as an epistemic space in which the relationship between theory and historical evidence is reconfigured. This perspective helps clarify both the strengths and the limitations of economic explanation and opens a path for more historically responsive approaches to economic phenomena grounded in the interpretation of material and institutional traces.

Keywords: Trace-based inference; Philosophy of historical sciences; Homo Economicus; Underdetermination; Epistemic strategy.

Two Kinds of Optimism

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While the debate in the philosophy of historiography has been largely characterized by a standoff between realists and anti-realists about whether the past is either discovered or constituted through historical narratives, the debate in what might be called the philosophy of the historical sciences has been focused on the question as to whether the justificatory practices deployed in sciences such as geology, palaeontology and evolutionary biology grant reasons for optimism or pessimism about the possibility of gaining knowledge of the distant past. The debate between optimists and pessimists provides some welcome relief from the ideological battle that has raged between realists and anti-realists since the narrativist turn because the debate between optimists and pessimists in the philosophy of the historical sciences tends to be more practice orientated and driven by a reflection on the explanatory tools deployed by first order scientists (palaeontologists, geologists) rather than by a prior philosophical commitment to either realism or anti-realism.
Pessimists believe that the inability to test experimentally places sciences which deal with past unobservables (such as dinosaurs and ancient glaciations) at an inherent disadvantage with respect to sciences which deal with microscopic unobservables (such as atoms and molecules) because the latter can be reproduced under laboratory conditions whereas the former cannot (Turner 2007). Optimists, on the other hand believe that although the historical sciences do not have the luxury of testing their hypotheses experimentally, they can draw from a diverse methodological toolkit that mitigates the erosion and scarcity of traces caused by the passage of time in the absence (either complete or partial) of experimental testing (Currie 2018; Cleland 2002; 2013). Those who argue for optimism often invoke the consideration that scientific advances developed in unrelated fields (such as DNA analysis and LiDAR technology) have

propelled the study of the distant past forward in a way that would have hardly been imaginable not so long ago (Currie 2018; Kitcher 2017).

Let's call optimism concerning the ability of the historical sciences to unlock the secrets of the distant natural past, optimism 1. Our goal in this paper is not to take sides in the debate as to whether or not there are grounds for optimism 1, but to warn against the view that optimism in sense 1 entails an altogether different kind of optimism concerning the ability of historical sciences such as palaeontology and evolutionary biology to extend our knowledge of the distant historical past. Let's call the kind of epistemic optimism about the ability to infer from material traces (such as fossilized bones and teeth) to cultural conclusions optimism 2.

The historical past, as we understand it, is not merely the past of ancient humans or ancestor species of hominids, but of the institutions and practices that govern past forms of life (in the Wittgensteinian sense). This kind of past is not amenable to be discovered through the deployment of analogies and middle range theories which have made it possible to infer the approximate age of death of the Denisovan girl from the fossilized bone remains of her small finger (by comparing the state of epiphyseal fusion of the phalanges with the stage of fusion in living teenagers); to determine the approximate size of a species of platypus (O. tharalkooschild) on the basis of the discovery of a single fossilized molar tooth (by invoking stable correlations between mammalian teeth and size of adult specimen) or to establish whether marks on fossilized animal bones were the product of stone tools or of predator bites, (by appealing to testable hypotheses of the causal processes through which marks on animal bones are produced by the use of tools). Humanistic oriented historians may be confronted with an abundance of material traces from the past and yet have little insight into the lives of the people inhabiting it in the absence of the kind of traces which shed light on their forms of life. The relevant consideration when approaching what is often regarded as a key obstacle for any science seeking to know the past, namely the availability of traces, is not simply how much or how little has survived the passage of time, but the kind of trace (texts and paintings, for examples, rather than rocks and bones) that has done so. An abundance of material traces, which would be a boon for the historical scientist, would not be nearly as helpful to the humanistic historian in the absence of the sort of trace which provides insider knowledge into the institutions, laws and practices of past people. The notion of a "scarcity" of survivals from the past just as an abundance of it, must be adjusted to the category of thing one seeks to understand.

We are sympathetic to the claim that the philosophy of historiography should pay closer attention to the explanatory practices of historians (rather than replay generic philosophical arguments for and against realism on a different turf) and that philosophers of historiography may have, in this respect, something to learn from philosophers of the historical sciences, but argue that closer reflection on the explanatory practices of humanistic historians reveals the disunity of the so called geisteswissenschaften and naturwissenschaften and shows that any grounds for optimism (in sense 1) concerning the ability of the historical sciences to extend our knowledge of the distant geological or evolutionary past do not translate in grounds for optimism (in sense 2) concerning their ability to unlock the secrets of the distant historical past.

Historical Explanation: Between Concrete and High-Level Events

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In this paper, I explore how theories of causal explanation from general philosophy of science can be applied to the historical sciences, focusing specifically on trace-based reasoning. I argue that the existing literature fails to provide a satisfactory account of how historical explanations relate to these general framework theories. I focus my analysis on the difficulty of applying these models while maintaining the token-type

distinction and assuming that historical sciences are primarily concerned with tokens. First, I show that this distinction does not hold within general models of causal explanation, such as Woodward's interventionism or Strevens's kairetic account. Second, I show that abandoning this distinction entirely yields an undesirable consequence: it erases the genuine distinction between historical explanation and other forms of explanation. Finally, I show that reconciling the general philosophy of causal explanation with the singularity of historical practice is possible by framing the core problem not in terms of tokens versus types, but in terms of concrete versus high-level events.

The philosophy of historical science is largely divided between exceptionalists (e.g., Cleland, 2011; Tucker, 2014), who argue that historical knowledge uniquely or primarily targets individual tokens, and unificationists or pluralists (e.g., Jeffares 2008; Turner 2014; Wylie 2017; Currie, 2018), who maintain that historical science relies on types and regularities much like any other discipline. I show that exceptionalism cannot easily accommodate dominant causal models(such as Woodward's interventionism or Strevens's kairetic account), as these models explicitly require type-causal relations or high-level difference-makers to explain individual tokens. Woodward's model presupposes invariant interventions, which require evaluating any claim about token-causation over a class of interventions, thereby treating the token as a type: "we must appeal to claims about type-causal relationships of the sort embodied in (M) to elucidate token-causal claims" (Woodward, 2003, 72). Strevens (2008) similarly holds that explanatory models feature difference-makers—events taken at their highest level of generality and identified as the causal factors of the phenomenon to be explained. However, existing attempts to apply general explanatory frameworks to history—such as Lewis's counterfactual account (e.g., Reiss, 2009; Gerber, 2014), Woodward's interventionist framework (e.g., Turner, 2014), or elements of Strevens's kairetic account (e.g., Currie, 2019)—pose significant difficulties. In particular, unificationist applications struggle to capture the genuine specificity of explanation in trace-based historical reasoning.

To resolve this deadlock, I argue that the main obstacle to applying general explanatory models to history lies not in the distinction between tokens and types, but in that between concrete events and high-level events. Non-historical sciences also explain tokens (Hempel 1965). What truly characterizes historical explanation is its attempt to explain concrete events, whereas general explanatory models typically focus on high-level events: "the kinds of events that are typically explained are not concrete events—events individuated by all the details of their happening, by all of their intrinsic properties—but what might be called high-level events" (Strevens, 2008, 8). Re-evaluating this distinction (rooted in Weber, 1949, Hempel, 1965, and Strevens, 2008), I demonstrate how general causal models can be reconciled with historical practice while properly accounting for the fine-grained granularity specific to historical explanations.

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Murder, suicide, or accident? Historiographic theories and social learning: the Spanish Civil War, 90 years later

Juan Luis Fernández (independent researcher)

The outbreak of the Spanish Civil War in 1936 attracted planetary attention, and had a profound influence on the evolution of the country and of Southern Europe for the decades to come. Their ideological origins have given rise to a wide variety of historiographic interpretations, which can be divided into three major narrative patterns: murder, suicide, and accident. The murder thesis organizes the historical contents around the theory that someone killed the democratic experiment that the Second Republic was; this 'someone' is either the conservative, military, clerical and fascist groups, for the leftwing interpreters, or the communist and anarchist revolutionaries that the left-leaning liberal governments were unable to tackle, according to rightwing or revisionist versions. Sometimes external forces are also guilty of murder: fascist powers in support of the rebels, Komintern in that of the revolutionaries.

As to the suicide thesis, it underlines the shortcomings of the republican little bourgeoisie leadership, instrumental in the proclamation of the regime in 1931, yet incapable of acting together in order to avoid extremisms, to which it is added the radicalization of a majority of the Socialist Party, whose leader flirted with the Marxian idea of the proletarian dictatorship, and the intensely demagogic practices by Catalan

nationalist parties within their new regional autonomous administration. So, it was a suicide of the system, because of the pragmatic incoherence of those groups most interested in the success of the experience: liberals from left to right, moderate Catholics, professional middle-class or upper working-class socialists, and non-secessionist regionalists in Catalonia, Galicia or Basque Country.
Finally, the accident thesis suggests that war was not unavoidable at all. Had the catholic center-left Alcalá-Zamora remained in the Presidency, or else the Socialist Party entered a Popular Front government in the first months of 1936, things might have been quite different. Even the alleged casus belli for the outbreak, the murder of the conservative MP Calvo Sotelo, was somehow fortuitous (the assassins have failed to localize a prior target, another far right politician). Some observers noted the relative equilibrium in the numbers of left/right votes in the snap parliamentary election of February-March 1936. Like in the stories of Lemony Snicket, "A series of unfortunate events" occurred.
What to learn, then, from such a momentous event in the history of Spain and of Europe, when historiography seems to be utterly undecided about the interpretation? We are to explore the difficulties of learning from history, aided in part by a recent book (2024) by the Spanish historian Rebeca Rodríguez Hoz, who researched systematically the 1940-2021 historiography on the Republic. And we will find that many other historical events, such as the outbreak of WWI, are affected by this very problem as well. It seems to be an overall issue (it is also apparent in economic history) that undermines the idea of "historical enlightenment", and claims for more integration between historical study and social sciences, and for an epistemological renewal.

The Discrepancies of Open-Society History

Gal Gerson (University of Haifa, Israel)

Karl Popper's open-society idea underlies much of contemporary Western liberalism, as it links political liberty to a world civilization and its everyday habits rather than to specific public bodies. The open society's perception of history, along with its critique of historicism, then, defines a key feature of a prevalent ideological outlook. I argue that, ironically, Popper's approach involves a historicist pull that manifests the prospective slide toward social hierarchy and the sharp good-bad dichotomies he attributes to closed-society historicism. Hence, Popper's critique of historicism is simultaneously vindicated (as the open society's implicit historicism leads where he expects historicism to lead politically) and refuted (as the open society fails to maintain its distance from historicism, hinting at the critique's fragility). Authoritarian regimes, Popper argues, rely on a diachronic narrative anchored by a defined, morally significant future event. The political impact of this narrative is twofold. First, the culminating event functions as a deliverance that diminishes everything before it, reducing individual lives to marginal precursors and transferring legitimate power to whoever claims to predict that trajectory. Second, historicism creates a binary between agents who believe in this prophesied trajectory and advance it, and those who seem to obstruct it. The latter are framed as enemies to be persecuted. Popper thinks that versions of this belligerent, autocratically-biased historicism were prominent throughout Western thought. Aristotle's telos, Hegel's dialectic, and Marx's historical materialism are his prime examples, with the supremacy of the Prussian monarch or the dictatorship of the party as their institutional outcomes. Discarding historicism, the open society professes lack of certainty about the future. This attitude underpins both scientific inquiry and egalitarianism. It encourages exploration of the unknown rather than affirms the already known. It removes everyone equally from any credit for prophecy. All opinions merit a fair hearing, regardless of their exponent's status. The institutional outcome is liberal democracy, while the cultural one is the constant advance of thought and science. However, scholars note that Popper himself relies on the apparently unavoidable rise of the open society, bringing him dangerously close to historicism. For him, history follows an outline that frames past, present, and future independently of any specific context. Moreover, as if to substantiate his claim that historicism supports hierarchies, Popper slides into a vision where a learned scholarly elite—what he calls the 'publicity of free discussion'—gradually displaces the public of equal, anonymous citizens, acting much like the Catholic Church did when it offset princely

power. Additionally, Popper divides the world into the open and closed societies, framing them as irreconcilable enemies in a struggle that plays out through time, a chronological structure that mirrors the Manichean contest he attributes to the worldview held by closed societies. If the open society is intrinsically bound to rejecting historicism, yet ultimately adopts a worldview marked by something bordering on a conjunction of predicted narrative, elitism and dualism, Popper's critique cannot be unproblematically sustained, calling for additional reflection on liberal democracy's justifications and its attachment to progress.

Reading Traces, Framing Pasts: Interpretive and Conceptual Underdetermination in Narratives of Civilization

Benjamin Goldberg (University of South Florida, USA)

A central epistemic challenge in archaeology is not merely the scarcity of physical remnants, but the persistence of interpretive and conceptual underdetermination. While Adrian Currie's Rock, Bone, and Ruin: An Optimist's Guide to the Historical Sciences (2018) defends methodological pluralism and triangulation as effective means of constraining evidential gaps, such strategies may not fully address a deeper theoretical barrier. As P. Kyle Stanford argues in Exceeding Our Grasp: Science, History, and the Problem of Unconceived Alternatives (2006), significant explanatory possibilities can lie outside contemporary conceptual frameworks, leaving historical sciences vulnerable to systematic underdetermination.

Three case studies illustrate these interpretive constraints. The Narmer Palette of Early Dynastic Egypt exhibits distinct interpretive underdetermination (cf. Alison Wylie, Thinking from Things: Essays in the Philosophy of Archaeology, 2002), as the same material features can be read as a historical record of military unification or as a symbolic representation of cosmological order. The Indus Valley civilization exemplifies conceptual underdetermination: its urban complexity lacks the overt palaces or royal tombs typical of conventional state typologies, leaving its political organization deeply contested. While David Graeber and David Wengrow's The Dawn of Everything (2021) rightly critiques unilinear evolutionary schemas, their expansive "political possibility space" remains insufficiently constrained, risking the replacement of traditional typologies with new speculative frameworks. Finally, Norte Chico presents an infrastructural challenge by demonstrating monumental coordination without writing or pottery, undermining standard cross-cultural definitions of civilization.

These cases offer a measured but important lesson for both archaeology and the philosophy of history: historical reconstructions remain bounded not only by taphonomic loss, but by the limits of our analytical categories. Increasing empirical precision does not automatically resolve disputes over social meaning. Confronting these deeper forms of underdetermination suggests that ancient social configurations may have operated on logics fundamentally distinct from modern frameworks, requiring a necessary epistemic humility when interpreting the origins of complex societies.

No Unity Without Humanity. What Historiography Teaches Us About the Quest for the Unity of Science

Michal Hubálek (University of Hradec Kralove, Czechia)

In contemporary theorizing about science, various forms of pluralism and a practice-oriented focus have become the norm. Few would want to defend any strong unity-of-science thesis, and many are happy with a very inclusive and liberal notion of "science." I myself certainly fall into the latter camp.
Having said that, I will approach the topic from an unusual angle this time. I will ask how this inclusive notion of "science" actually shapes debates about the scientific status of the traditionally labelled "soft" and "social" sciences; taking historiography as a particularly revealing boundary case. I will argue that attempts to show that historiography is – or is not – a "real" science exemplify a theoretically unresolved (and recently neglected) tension between the general continuity of all human inquiry and more specific forms of methodological pluralism that quietly turn disciplinary differences into deeper epistemic discontinuities.
The continuity I have in mind, however, is not reductive: its basis lies neither in a single scientific method nor in the ontological reduction of the "social" to the "natural," but in the irreducibly human conditions under which inquiry of every kind takes place. My main task is to point out that the continuity among the sciences might be much greater than our current pluralist intuitions permit us to acknowledge.
Historiography, then, may turn out to be less an embarrassment for the unity of science than an embarrassment for some of our reasons for rejecting it.

From Thin to Thick Description in Historiography: What can we learn from pragmatist studies of practice?

Jouni-Matti Kuukkanen (University of Oulu, Finland and Cambridge University, UK)

This paper outlines a framework for a pragmatist philosophy of historiography. While pragmatism has often emphasized practice, historians' practices themselves have rarely been examined in sufficient detail. Drawing on the distinction between thin and thick description, I argue that pragmatist studies of historiography should move beyond abstract appeals to practice and investigate the concrete activities through which historical knowing is generated. Historiography is characterized as a norm-governed practice situated in communities, structured by rules, and sustained through mutual accountability. Particular attention is given to method, understood as a warranted way of arriving at conclusions. The paper integrates practice, community, rules, normativity, and warrant into a framework for philosophical and empirical studies of historiographical practice.

Grasping the Past: Puzzles, Gossip, and Historical Understanding

Ana Elisa Ulloa Labariega (Università della Svizzera italiana, Switzerland)

Historical sciences face a distinctive epistemic asymmetry: Past events and processes produce the traces available to us in the present, while historical inquiry proceeds in the opposite direction, from present traces toward reconstructions of the past. Much work on the epistemology of the historical sciences (Cleland 2002; Turner 2007; Tucker 2011; Currie 2018) has addressed how such reconstructions can be warranted. Yet a successful reconstruction does not by itself explain what it takes for an epistemic agent to understand the past reconstructed.
Accounts of historical understanding in terms of grasping provide a promising starting point. Grimm (2017), for instance, argues that historical understanding involves grasping how the elements of its object are structured and how they depend upon and relate to one another. But this raises a further question: what must an epistemic agent grasp for a successful reconstruction of the past to become intelligible as history? I argue that historical understanding requires more than recognizing individual dependencies or their

organization. Grasping begins when the agent apprehends that organization as yielding something beyond the relations that compose it; understanding emerges when she can discern what the resulting configuration makes intelligible as a whole. A puzzle illustrates the distinction: recognizing how its pieces fit together is not yet the same achievement as discerning the image they jointly yield.

This requirement is non-trivial because historical inquiry involves at least three potentially divergent orders: the temporal and causal organization of past events, the evidential order through which they are reconstructed from present traces, and the order through which their relations become intelligible to an epistemic agent. The last need not reproduce either of the first two. Gossip offers a mundane illustration: making sense of what happened often requires moving between simultaneous events, supplying context retrospectively, or departing from chronological order so that otherwise isolated facts become jointly intelligible. The same organizational pattern operates in more epistemically demanding contexts, where heterogeneous evidence, processes, and relations must be articulated without simply reproducing the order in which events occurred.

Narrative organization can articulate such an order of intelligibility without being identified with intelligibility itself. Currie and Sterelny (2017) argue that narratives contribute to successful historical reconstruction by tracing causal trajectories and scaffolding inquiry where evidence is incomplete. I propose a complementary role at the level of historical understanding: narrative organization can articulate relations according to what is required for their local and global significance to become intelligible, rather than merely reproducing their chronological or causal sequence. In doing so, narrative may express—and sometimes facilitate—the grasp through which an agent discerns what a reconstructed historical configuration amounts to.

Historical understanding, on this account, is therefore neither the mere possession of historical information nor successful reconstruction alone. It is an agential epistemic achievement in which grasping enables the transition from recognizing an organized set of relations to discerning what that organization makes intelligible. This distinguishes the epistemology of historical understanding from that of historical reconstruction while preserving their dependence on the same evidential constraints.

Subalternity beyond Subaltern Studies: History, the Nation-State, and the Persistence of Ahistoricity

Vinay Lal (University of California Los Angeles, USA)

The Indian school of historiography known as “Subaltern Studies” gained much traction at its inception in the mid-1980s, and over the following two decades it became enshrined both as one of the few theoretical interventions from the global South in historical studies and as an Indian variant or incarnation of postcolonial studies. In my book, The History of History: Politics and Scholarship in Modern India (Oxford UP, 2002; 2nd ed., 2005), while acknowledging the strengths of subaltern studies, I also critiqued it as ‘exploitative’, as yet another mode of inquiry which relied upon the theoretical apparatus derived from the West and took India as the raw data, just as I noted that it failed to engage even remotely with the vast lore of mythic material available to the Indian scholar.

Mohandas Gandhi, who viewed Hinduism as a language of mythos rather than of history, was supremely indifferent to history. It was, to him, the least interesting mode of accessing the past, tethered as it was to the claims and violence of the modern nation-state. In this paper, I will begin with a consideration of Gandhi’s views of history and then move towards an exploration of the work of Ashis Nandy, who has offered the most trenchant analysis on offer of what he calls the ‘totalizing’ nature of modern historical consciousness. Nandy warns, rather ominously, that ‘once you own history, it also begins to own you’, and the paper will, on the one hand, unravel the implications of this insight, while suggesting that, quite fortunately, subalternity escapes the subaltern historian. Though the Indian nation-state has displayed a ravenous appetite for embracing the historical mode, the Indian subaltern has a nasty way of persisting with

ahistoricity. In developing this argument, I also will also be drawing on the insights of other theorists from the global South such as JPS Uberoi and A. K. Saran, and invoking what Boaventura de Sousa Santos calls ‘epistemologies of the South’.

When Non-Refutation Becomes Evidence: The Fallacy of Unrefuted Subtext in the Historical Sciences

Chris Maloney (University of Arizona, USA)

Historical inquiry often depends on fragmentary signals that survive the passage of time: minutes, memoirs, institutional records, recollections, archival gaps, and later narrative reconstructions. Such evidence rarely speaks with the completeness historians would wish. This paper examines a recurrent but under-theorised error in the interpretation of such traces: the fallacy of unrefuted subtext. The fallacy occurs when proposed concealed meanings, including in this case humiliation, shame, concealment, amongst others, are treated as evidentially serious because they are compatible with the surviving record and have not been directly disproved. This is related to, but distinct from, Fischer’s fallacy of negative proof and the wider appeal to ignorance: its distinctive error is not interpretation beyond the surface record as such, but the conversion of non-refutation into positive support, and its objects are hidden states of mind and motive rather than plain factual propositions.

The paper develops this concept through a case study from the historiography of twentieth-century British psychiatry: the posthumous reconstruction of William Sargant’s early career, breakdown, and later psychiatric practice. In one strand of this historiography, a restrained professional discussion of Sargant’s early medical research has been retrospectively read as a scene of catastrophic humiliation; an autobiographical account of locum work at Hanwell is then reread as possible concealment of inpatient status; and the absence or incompleteness of records is made to carry incriminating probability. After several retellings, in which the account hardens by degrees towards certainty, a contemporary archival audit complicates the narrative by documenting Sargant’s locum employment while finding no plausible patient entry in the searched admission and departure registers, or in other relevant records. The case therefore allows the transition from possibility to probability to be examined under unusually favourable evidential conditions.

The fallacy is understood as a compound historiographical error involving the slide from possibility to probability, appeal to ignorance, burden-shifting, underdetermination, the bad-lot objection to inference to the best explanation, and narrative fallacy. Versions of it threaten any historical science that reasons from trace to unobserved cause across the entropic barrier; this documentary-historical case is distinctive because the candidate causes are concealed motives and affects rather than physical processes, which add a moral charge less central to the natural historical sciences. One proposed safeguard is differential confirmation: historians should ask not merely whether a subtext can be read into the record, but whether the surviving evidence is more expected under that subtext than under plausible rivals. The broader aim is to clarify how warranted historical inference can be distinguished from self-authorising suspicion when the past survives only in traces.

Three Ways for a Science to Be Historical: Object, Explanation, Evidence

James W. McAllister (University of Leiden, The Netherlands)

I distinguish three overlapping ways in which scientific inquiry can be historical: by object, by explanation, and by evidence. Inquiry is historical by object when it investigates past events or processes, and by explanation when it accounts for phenomena through temporal sequence, contingency or path dependence. I concentrate on the third dimension, in which scientific warrant depends on reconstructing the history of

evidential materials. Specimens, records, images, and measurements have histories of production, preservation, classification, and transmission that shape their evidential significance. Drawing on collection-based natural history, archival climate science, and archaeology, I examine how recovering relevant aspects of these histories enables particular inferences and clarifies their limitations. Such reconstruction can be necessary even when investigators seek to explain present phenomena or establish general relationships. I argue that recognising this evidential dimension broadens our understanding of what makes inquiry historical and shows how historical scholarship can contribute directly to the justification of scientific claims.

Beyond the Future: On the Historicity of the Possible

Andrey Oleynikov (Bielefeld University, Germany)

The paper proposes to reconsider the category of the possible in contemporary theory of history and to explore its implications for the philosophy of historical knowledge. I argue that the modern understanding of history has largely identified possibility with the future. Within the modern regime of historicity, history was conceived as a process of transformation oriented toward a qualitatively different future, while the past appeared as the domain of accomplished and irreversible facts. This temporal asymmetry has also shaped the epistemology of history: historical inquiry has conventionally been understood as the reconstruction and explanation of what actually happened.
Recent debates on historical futures, presentism, historical events, and contingency have challenged this model, but often without fully abandoning its underlying temporal logic. Even approaches that emphasize discontinuity and unprecedented change continue to understand historical events primarily as transformations from one state of affairs into another. I suggest that a more radical reconsideration of historical possibility requires questioning the identification of the possible with the future itself.
The paper develops this argument by bringing together several approaches to historical possibility. Lucian Hölscher's concept of "virtual history" and Quentin Deluermoz and Pierre Singaravélou's history of possibilities demonstrate that the past contains a field of unrealized possibilities that can be reconstructed on the basis of historical evidence. Achim Landwehr and Ariella Aïsha Azoulay go further by challenging the very closure of the past implied by modern historicism. For Landwehr, the past is not a fixed repository of completed events but remains contingent insofar as different relations between pasts and presents can still be established. For Azoulay, the task of "potential history" is to recover suppressed possibilities and historical claims excluded by the disciplinary matrix of history.
Drawing on these approaches, I propose the concept of the historicity of the possible. Historicity here does not mean simply that possibilities exist at particular historical moments. Rather, it designates the capacity of historical reality to remain open to alternative actualizations and reconfigurations. This perspective allows us to reconsider the ontological status of the past: what happened does not exhaust what the past was capable of becoming. The past can therefore be understood not merely as a set of actual events but as a field in which unrealized possibilities continue to matter for the present.
This reconceptualization also has epistemological consequences. If the past is not exhausted by actuality, historical inquiry cannot be reduced to establishing factual truth about what happened. It may instead be understood as an investigation into the modal structure of historical reality: into what happened, what could have h4appened, what failed to happen, and what remains possible in relation to the past. In this sense, historiography becomes not simply a means of reconstructing history but a practice of reopening historical possibilities.

Reconstructing Styles of Scientific Reasoning: Historical Inference and the Historiography of Science

Eliakim Ferreira Oliveira (Universidade de São Paulo, Brazil)

How can historians legitimately infer the epistemic structures that guided past scientific practices from the traces those practices have left behind? This paper argues that the notion of styles of scientific reasoning, as developed by A. C. Crombie, Ian Hacking, and Otávio Bueno, provides a fruitful answer to this question and should be regarded as an epistemic unit for the philosophy of historiography and the historical sciences. Rather than interpreting scientific change exclusively through paradigms (Kuhn) or research programmes (Lakatos), I argue that styles of scientific reasoning constitute historically reconstructible structures that organize the formulation of problems, the construction of models, the evaluation of evidence, the use of heuristic resources, and the constitution of scientific objects.

Unlike paradigms or research programmes, styles of scientific reasoning are not restricted to particular theories or disciplines. They operate across theoretical traditions and may persist despite theoretical disagreement, making them particularly suitable for explaining historical continuities that escape traditional accounts of scientific change. I argue that reconstructing a style is not merely a conceptual exercise but an inferential one. Historians identify styles by examining the surviving traces of scientific practice—texts, models, diagrams, methodological prescriptions, explanatory standards, and argumentative patterns—and by reconstructing the stable epistemic commitments manifested across these different forms of historical evidence.

The paper illustrates this proposal through a case study drawn from the historiography of contemporary linguistics. Generative grammar and cognitive linguistics have often been interpreted as competing paradigms or rival research programmes. I argue instead that they are better understood as distinct theoretical traditions sharing the same style of scientific reasoning, namely hypothetical modelling. Although they disagree profoundly about the nature of language, cognition, and grammar, both organize inquiry around the construction and evaluation of theoretical models designed to investigate otherwise inaccessible properties of language. Their historical rivalry therefore concerns the assumptions embodied in those models rather than the underlying style of reasoning itself.

This case illustrates a broader philosophical claim. Styles of scientific reasoning may be understood as historical epistemic entities whose existence is warranted by historical inference from recurrent patterns in scientific practice rather than directly observed. They provide an intermediary level of historical explanation, connecting documentary evidence to broader reconstructions of scientific rationality while revealing continuities that remain invisible when analysis is confined to theories, paradigms, or research programmes.

By treating styles of scientific reasoning as legitimate objects of historical inference, this paper contributes to current discussions on the ontology of historical entities and the epistemology of historical knowledge. More generally, it argues that styles of scientific reasoning provide a promising framework for understanding continuity, change, and rationality across the historical sciences.

Historical Sources and the Entropic Barrier of Time

Friedrich von Petersdorff (independent researcher)

Stephen Toulmin and June Goodfield argue in their book ‘The Discovery of Time’ (1965) that the widening of time scales throughout the last centuries enabled natural scientists to reinterpret historical findings in terms of a deep time frame. As a consequence hereof any previously held concepts how to view the relatedness of human history and natural objects was bound to change. – Furthermore, given the effectiveness of natural sciences the question arose how to distinguish the respective methodologies of research (on the one hand from the point of view of natural scientists and on the other hand from the point of view of scholars of human history). – R. G. Collingwood, for example, pointed out that historians are not able to study the human past as it had actually occurred, as human history is researched merely as observed and as reenacted in the historian’s present. A further step in search of an understanding how the

assumed hermeneutic gap between human past and present could be bridged was taken by Paul Ricœur, based upon the results of Collingwood's analysis. – Natural scientists, however, did not encounter such hermeneutical questions, as they succeeded in understanding the processes of their objects of research by assuming that physical, chemical, astronomical or other kind of laws formulated in the present could be applied to events in the past, as well. In other words, the hermeneutic gap between scientists and their object of research would be bridgeable by formulating laws being equally valid in the present as in the past. A different kind of approach related to the question of bridging the temporal gap between human history and human past is being taken and developed by Aviezer Tucker (The Originary Sciences, 2025, 193-212) as well as by Wolfgang Ernst (Signale aus der Vergangenheit, Eine kleine Geschichtskritik, 2013). Whereas Tucker argues in favour of 'a novel philosophical division of the sciences into originary historical sciences and theoretical sciences' (194), Ernst presents a new understanding of a certain type of temporality, i.e. of 'historiographical information' which is distinct from the concepts of time so far being referred to by historians. – In order to analyse and outline the scope as well as the limits of Tucker's approach I shall compare the arguments of Ernst and Tucker (both view historical sources as signals and refer to the need of passing the entropic barrier of time). I shall proceed by using a framework including temporal aspects, namely in order to further distinguish the relatedness of the various aspects of time (including possible inherent barriers requiring a bridging of hermeneutical gaps). In my conclusion I shall outline the results of my analysis, thereby returning to Ricœur for a comparison of his conceptualisation of 'trace' (cf. Andreas Buller 'Epistemologie der Spur', 2026) with the results of my analysis of the respective works by Tucker and by Ernst.

Induction, Meta-induction, Naturalism and Faith

J. Brian Pitts (Cambridge University, UK)

Modern historiography and historical sciences hold that whatever cannot happen, did not happen. "Cannot" means contrary to natural laws. While it is rare to take seriously Hume's problem of induction in historiography and the historical sciences, empiricists, including Hume (on induction) and logical empiricists (including Gerhard Schurz) might be reluctant to assert such as an axiom: empiricism denies a priori knowledge and encourages open-mindedness. Much of 1950s-70s analytic philosophy aimed to solve the problem of induction, following Feigl and Reichenbach and continued by Salmon and now Schurz. According to Schurz, renouncing dogmatic a priori knowledge claims, one receives something adequate and justified meta-inductively: a posteriori reason to regard induction as the best bet (though neither certain nor probable), given its superior track record to rival predictive methods. Thus geologists, historians and liberal theologians were correct to reach modernist conclusions, even if their Enlightenment argumentation was circular before Schurz's work. Induction justified implies that dead people stay dead, no one walks on water, etc. Let science flourish and superstition wither!

The author perceives question-begging in Schurz's a posteriori claim that science has predictively outperformed all rivals. While no one would design airplanes using prophecy, the relevant rivalry is between exceptionless induction and induction with a few localized exceptions pertaining to miracles and/or prophecy. Old texts contain some prima facie plausible-looking reports of miracles and fulfilled prophecies, but the empiricist before justifying induction cannot appeal to knowledge that such events cannot happen: maybe bread will not remain nourishing, and/or a dead person might not stay dead. Hence Schurz's meta-inductive justification of induction works where no one has doubted induction, while being threatened where some have. That questioning natural causation opens the door to naturally impossible events is familiar: al-Ghazali's occasionalism critiqued the Aristotelian natural necessity supposedly implying that necessarily fire burns cloth and prophets in furnaces, leaving room for Koranic miracles.

While Reichenbach and Schurz noted that in principle meta-inductive reasoning could justify prophecy, this threat seemed idle; however, Stoics Chrysippus and Posidonius (reported by Cicero) used track records to defend divination (prophecy by Apollo). The Hebrew Bible routinely appeals to reported past successes

for the word of the Lord to justify expecting continued predictive success---e.g., the Egyptian Exodus makes conquering Canaan plausible. Even if one does not accept these reports, it is awkward that Schurz's finally-successful justification of science and Enlightenment threatens to defect: induction skepticism complicates discarding testimony for miracles, ancient texts use meta-induction to defend prophecy, and bizarre actions (e.g,, Abraham's undertaking to sacrifice Isaac, born to postmenopausal Sarah, while anticipating grandchildren) become broadly intelligible meta-inductively.
The author and Schurz have both explored responses. The author entertained extended track records: rocks, not just scrolls. Schurz proposed amendments involving criteria not anticipated in the meta-inductive project and seemingly designed to miss localized exceptions. Goodmanian reflective equilibrium and subjective Bayesianism (including Colin Howson on induction) suggest relativism or subjectivity. Such results might fit with a recent willingness among some historians (e.g., Eire's They Flew) to notice testimonies to impossible events.

Reference: J. B. P., "Does Meta-induction Justify Induction: Or Maybe Something Else?" Journal for General Philosophy of Science 54 (2023) pp. 393-419, special issue on The Problem of Induction: Meta-Inductive Approaches, https://doi.org/10.1007/s10838-022-09620-7

Science, History and Summoning-Forth Explanations

Gregory Radick (University of Leeds, UK)

Recent work on whether AIs trained on Edwardian physics will rediscover the general theory of relativity has put a new, high-tech spin on an old and widespread view of scientific knowledge. On this view, when the time is ripe, a discovery or invention becomes inevitable, irresistible, inescapable for the relevant community. Such a discovery or invention is, in effect, summoned forth, independently of the thinkings and doings of the individuals who happen to be responsible for them (since, had it not been those individuals, it would have been others). Building on the discussion in chapter 10 of my book *Disputed Inheritance: The Battle over Mendel and the Future of Biology* (2023), I want in this lecture to examine what sort of explanation a summoning-forth explanation of the scientific past is and, relatedly, what we should make of such explanations. Although I'll conclude that we should be wary of them, I'll suggest along the way how and why philosophers of history can do useful work in clarifying some of their especially puzzling features.

What Counts as a Solution? Origins, Optimism, and a Failed Prediction

Franziska Reinhard (The University of Edinburgh, UK)

For a time in the late 1960s and early 1970s, it seemed possible that the origins of life might soon cease to be a mystery. Well, insofar as this statement from the proceedings of the 1973 meeting of the International Society for the Study of the Origins of Life is to be believed: "… the advances made during the last two decades are beginning to provide a real understanding of the problem of the origins of life … and suggest that its solution may be reached before the end of this century."
A bold prediction and, in hindsight, a too optimistic one. More than fifty years later, the origins of life remains infamously unsolved. A tempting reaction to this episode might be rather pessimistic. Researchers in the 1970s seem to have overestimated their reach into the deep past. I argue that this is too quick: the statement is epistemically more interesting than merely a failed prediction. Philosophical debates about optimism and pessimism in the historical sciences are typically framed in terms of their epistemic situation: whether their subject matter is (locally) underdetermined, and whether available methods are sufficient to mitigate this. While these approaches stress the importance of context, I argue that whether optimism is justified also depends on how scientific questions and their anticipated solutions are framed at a given time.

Scientists do not only have research questions; they also work with expectations about what a satisfactory answer would look like. These expectations constrain what counts as a plausible solution and, in turn, how the problem itself is understood. To capture this dynamic, I draw on the framework of problem-solution co-evolution (Maher & Poon, 1996; Wiltschnig et al., 2013). Rather than identifying a fixed problem and then finding a solution, this framework treats problems and solutions as interacting search spaces: proposed solutions are evaluated against current constraints, but these constraints may be revised in light of potential solutions. One often does not fully know what the problem is until one begins trying to solve it.
I apply this perspective to the development of origins of life research to highlight how assessments of optimism and pessimism with respect to historical sciences depend not only on evidential constraints and available methods, but are also relative to scientists' understanding of their problems and their anticipated solutions

Fortune's Half: Why History Fails to Provide Practical Lessons about Political Action

Arturo Sierra (Adolfo Ibáñez University, Chile)

It is a longstanding hope that the work of historians should teach our leaders how to avoid past mistakes and thereby free us from 'Sisyphean politics.' A good historical education for all citizens would then keep us from blundering on so stubbornly, as Aviezer Tucker has recently argued. Is this hope well founded? I contend that it can be realised only to a very limited extent. Historiography provides poor lessons in statesmanship because of the role fortune plays in uncoupling success from prudence, spoiling actionable advice about political action.
Traditional notions of fortune, chance, etc., have been analysed as 'contingency' by philosophers of history and historiography, and it has been said that politics is 'the engine of [historical] contingency,' a domain of randomness. But my starting position is that if political decision-making is described as contingent in this sense, then it cannot be considered intelligent and teachable. Political action would be purposeless without belief in causal forces governing the course of events with relative inevitability, even at a granular scale. An implicit philosophy of history, which understands state-action as overdetermined by political necessity, military action by strategic necessity, etc., is assumed in the foresight that shapes the strategies of princes, generals, and voters.
According to this line of thought, prudent leaders are those who better understand the cause-and-effect relation between antecedent and ensuing events in history, and the foresight so granted allows them to direct the course of future history. The practical lessons historiography should ideally provide, then, are in the example and explanation of the inherent mechanisms of politics, so that new statespersons can achieve mastery of the inner workings of historical processes. The possibility of perfectible political action would rest, therefore, on the 'mechanical robustness of historical trajectories' within political 'command-and-control structures,' borrowing Kim Sterelny's terms.
However, fortune breaks crucial links in the—otherwise causally produced—series of events that should lead from action to results. This makes it difficult to decide which strategies are likely to succeed if tried again. Recognising the problem, Machiavelli, who nevertheless conceived historiography as a teacher, surrendered half of every action to fortune and noted that, in order to guarantee results, the historian's advice should say how to 'both have fortresses and not have them,' and 'be both cruel and merciful.'
Two examples will illustrate how fortune is a hurdle in obtaining lessons from history. First, Pericles' strategy at the start of the Peloponnesian War, which was based on sound calculations of the cause-and-effect mechanisms that would bring about victory. However, careful planning was defeated by outside-of-context factors that disallow learning from that failure. Coonversely, the First Crusade is characterized by foolish plans and unwise strategy, which does not recommend the example, yet it succeeded against advisable Arab prudence by an event of fortune, a 'type of miracle.' If any lessons should be learned from these examples, they are not of a practical nature, but about the futility of foresight.

Epistemic Plurality and the Limits of Comparative History of Science: Lessons from Needham's Science and Civilisation in China

Yanping Tian (University of Oulu, Finland)

Comparative history of science operates under a structural tension that is rarely made explicit. Universalisation is not merely an ideological commitment in such enterprises; it is a structural requirement of comparison itself. Any comparative inquiry must invoke a tertium comparationis — a shared dimension under which the traditions being compared are rendered mutually legible — and this move already constitutes a universalist claim, regardless of the historian's intentions. To bring a non-Western scientific tradition into historical view, the historian must invoke a sufficiently universal conception of science to ground the comparison; yet to avoid reducing that tradition to a deficient approximation of modern Western science, the historian must simultaneously insist on its conceptual irreducibility. These two commitments do not merely pull in opposite directions — they are mutually constitutive conditions of the comparative enterprise itself, generated by the logical structure of comparison rather than by any correctable ideological bias. This paper argues that this tension cannot be resolved without generating new epistemic asymmetries, and that recognising its irreducibility is itself a significant methodological result.
I develop this argument through a sustained analysis of Joseph Needham's Science and Civilisation in China (SCC), the twentieth century's most ambitious attempt to integrate Chinese scientific traditions into a global history of science. Needham's project is explicitly committed to both poles of this tension: a universalist conception of science that makes cross-civilisational comparison possible, and a robust account of Chinese correlative thinking as a genuinely distinct epistemic tradition. I argue that this dual commitment does not represent a theoretical inconsistency on Needham's part, but rather the most honest exposure of a constitutive aporia in comparative historiography — one that surfaces wherever a historian attempts to render locally embedded knowledge legible within a broader framework.
Crucially, I examine why proposed resolutions to this tension — whether through weak universalism, epistemic pluralism, or reflexive methodology — tend to displace rather than dissolve the underlying problem, reinscribing the asymmetry at a different level. This pattern suggests that the drive toward universalisation may function as something like a structural condition of comparative intellectual history: not a correctable bias but a gravitational pull inherent to the enterprise of making knowledge traditions commensurable.
The paper concludes by suggesting that a historiography which honestly acknowledges this gravitational pull cannot present itself as arriving at stable representations of non-Western scientific traditions. Instead, it operates as an ongoing negotiation between incommensurable epistemic commitments — one in which the historian's own conceptual framework is not a neutral instrument but itself an object of critical scrutiny, shaped by the same universalising pressures it seeks to diagnose.

Indecompositionality: The Strange Case of Historiographical Holism

Adam Timmins (University of Ostrava, Czechia)

In Towards a Realist Philosophy of History at one point I remarked that the sense of "holism" that one finds in historiographical theory has somewhat unorthodox features – essentially, "holism" in historiography relates to the idea that historical works are in a strong sense "indecomposable wholes". In this lecture I explore the roots of this line of thought in more detail – originating in the work of Louis Mink and being taken to it's logical conclusion by Frank Ankersmit – as well as pointing out some of the consequences of this view were it actually operative in historiographical practice.

From a Series of Unfortunate Events to Convergent Variations: Modeling the History of the Philosophy of Historiography

Aviezer Tucker (University of Ostrava, Czechia and Harvard University, USA)

I present an overview of the recent history of the philosophy of historiography since the Second World War, using an applied and admittedly simplified evolutionary model.

Dawkins and Gould famously debated whether the history of life reflects the survival of the fittest or the luckiest. I apply this question to the intellectual history of our subfield of philosophy to ask whether the history of the philosophy of historiography is a story of bad luck, a series of unfortunate events, of loss of fitness in shifting environment: Whether there is something wrong with the philosophy of historiography (along with aesthetics for example) that causes its extinctions in the current political, social, or intellectual environment.

I argue that for roughly the last third of the twentieth century, the philosophy of historiography has suffered from a series of unfortunate events that involved individual careers and trajectories rather than anything that has much to do with the intrinsic content of the philosophy that weakened its institutional infrastructure, especially in institutions that "reproduce" whose graduates use their elite status to gain permanent employment. Much valuable work has continued without institutional backing, and in other institutions, but its social reproduction was precarious, without sustainable continuity.

In the new century, a number of "environmental" factors such as the information revolution and the development of the philosophy of information, and the synthesis of the historical sciences, including genetics, philology, textual-based history, and archaeology, with cosmology and natural history, have led philosophers from different lineages, to converge on similar best solutions that consider the united methodologies of the historical sciences as distinct of those of the theoretical sciences. Common ideas include the consideration of historical events as distinctly tokens rather than types, and the inference of the common cause or common origin of information as distinctive of the historical sciences. Finally, a series of fortunate institutional events may favor the survival and reproduction of the field into the future.

A Diachronic Account of Speculation in the Historical Sciences

Derek Turner (Connecticut College, USA)

In recent work on speculation in the paleosciences, Adrian Currie has emphasized that speculation can be fruitful, in the sense that it often has indirect epistemic payoff. In his most recent work, Currie (2023) even defines 'speculation' functionally. A speculative hypothesis, according to his account, is one meant to be assessed by its fruits. At the same time, Max Dresow (2024) has offered a rather different analysis of speculation that focuses on the epistemic status of hypotheses. Dresow argues that different varieties of speculation involve relaxing different epistemic constraints that scientists ordinarily apply to explanatory hypotheses. These contrasting accounts are both synchronic in the sense that they emphasize the function or the epistemic status of a hypothesis at a time. Here I suggest a diachronic account of speculation that combines insights from Currie and Dresow while focusing on the career trajectory of a hypothesis. Fruitfulness and epistemic status can interact in a variety of interesting ways over time. I suggest that some speculative hypotheses have a distinctive diachronic profile: they remain in play while exhibiting declining fruitfulness combined with stable, low epistemic status over time. I examine some of these cases of *zombie*

speculation, where a speculative hypothesis hangs around after it has outlived its fruitfulness. Having identified the phenomenon, I argue that the possibility of zombie speculation should serve as a cautionary constraint on discussions of speculation in history and the historical sciences.

Our Age of Discord: A History of Possible Futures

Peter Turchin (Complexity Science Hub Vienna, Austria)

Social and political turbulence in the United States and Western Europe has been rising over the past decade. Cliodynamics, the new transdisciplinary field, which combines analysis of historical data with the tools of complexity science, has identified the deep structural forces that work to undermine societal stability and resilience to internal and external shocks. Here I look beneath the surface of day-to-day contentious politics and social unrest, and focus on the negative social and economic trends that explain our current "Age of Discord." One of the most important, but little appreciated, such hidden forces is a perverse "wealth pump" that transfers wealth from the "99 percent" to "1 percent." If allowed to run unchecked, the wealth pump results in both relative impoverishment of most people and increasingly desperate competition among elites. Since the number of power positions in a society remains more or less fixed, the overproduction of elites inevitably leads to frustrated elite aspirants, who harness popular resentment to turn against the established order. In America, the wealth pump has been operating full blast for two generations. In historical terms, our current cycle of elite overproduction and popular immiseration is far along the path to violent political rupture. In fact, today the USA finds itself in a situation that fits the definition of revolution, although, so far, fortunately a relatively non-violent one. The current focus of my research team is, how do we navigate our Age of Discord without descending into a hot civil war?

Background reading: Turchin, Peter. 2023. End Times: Elites, Counter-Elites, and the Path of Political Disintegration (Penguin Random House, New York and London).

Scientific Responsibility for Narrative Contingency

Victoria M.-Y. Wang (University of Edinburgh, UK)

Scientific inquiry is full of contingent choice points. Which problems are selected, how concepts are defined, which methods are employed, and which hypotheses are accepted etc. are contingent choices that can be justified by myriad epistemic and non-epistemic values (cf. Biddle and Kukla 2017; Brown 2020). To this by-now familiar list, I would like to add what I call narrative contingency: choices about how to tell the story of e.g. how a phenomenon works, or how or why an event occurred. These narrative choices are particularly salient in the historical sciences and historiography, where evidence is often scarce.

The idea that scientists choose how to narrate their findings is of course not new (e.g. Morgan et al. 2022). Recent work, with which I agree, shows that this narrative contingency can be resolved by, often implicit, appeal to non-epistemic values (e.g. Turner and AboHamad 2023).

Here I ask what responsibilities—both epistemic and non-epistemic—scientists have when making choices about how to construct a narrative, and whether they have any responsibilities towards the narratives they decide not to explore. In other words, what is inquiry "owed" once such a contingent narrative choice has been made? What does good scientific practice require of an historian/historical scientist in the face of such decisions?

Full answers to these questions will be complex. As a start, I suggest that, at the level of individual practitioners, certain attitudes towards their inquiry are appropriate, namely uncertainty and self-questioning about whether the choice of narrative was the "correct" one, and curiosity about alternative

narratives. My claim is that where these attitudes are warranted, revisiting the choice and exploring other narratives constitutes good scientific practice.

I will illustrate this idea by drawing on Saidiya Hartman's investigations into the transatlantic slave trade. In Lose Your Mother ([2007] 2021), Hartman recounts—based on a "few lines from a musty trial transcript"—how two enslaved girls, Venus and one unnamed, died on the Recovery. In later work, Hartman asks, "[i]f it is no longer sufficient to expose the scandal, then how might it be possible to generate a different set of descriptions from this archive" (2008, 7)? For both epistemic and non-epistemic reasons she "revisit[s] and revise[s]" (2008, 5) her earlier account of Venus's death, and attempts to "displace the received or authorized account, and to imagine what might have happened or might have been said or might have been done" (2008, 11) aboard that ship. This method Hartman dubs critical fabulation (which bears some similarity to "empirically grounded speculation" (Currie 2018)).

Further exploration of alternative narratives constitutes good scientific practice in several ways. First, it may point towards new lines of inquiry (e.g. looking for new sources). Second, it could enhance our understanding of the phenomenon, particularly through greater understanding of how the evidence base came to be scarce. Finally, some narratives serve non-epistemic (e.g. reparative) purposes, which are often linked to epistemic purposes. This sketch invites questions about how these considerations might apply to the natural historical sciences.

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From Living States to Historical Traces: Vitality, Operational Criteria, and Evidence of Past Life

Mustafa Yavuz (Istanbul Medeniyet University, Türkiye)

Historical sciences face a distinctive epistemic problem: the processes they seek to understand are no longer directly observable and must instead be reconstructed from surviving traces. This problem becomes especially acute in the historical sciences of life. If living is a dynamic activity, what remains available as evidence once that activity has ceased? Debates over the definition of life complicate this problem further.

Carol Cleland has argued that premature or overly restrictive definitions of life may constrain scientific discovery by excluding unfamiliar forms of living organization. This paper accepts the force of that criticism but argues that the problem can be reformulated by distinguishing life from vitality. I use "vitality" in a non-vitalistic sense to denote the dynamically maintained condition of a living system. Life, by contrast, is treated as a broader conceptual category that may resist a single context- independent theoretical definition. On this view, vitality can in principle be operationalized through empirically tractable indicators such as self-maintenance, regulation, responsiveness, material and energetic flow, organizational coherence, and persistence within functional ranges. This proposal develops a homeokinetic conception of living organization according to which vitality consists not in static equilibrium but in the active maintenance of a system within dynamically regulated limits.
A difficulty arises, however, when such criteria are transferred from experimental biology to historical inquiry. The properties by which vitality is investigated in extant organisms are not themselves preserved in the historical record. Metabolism, regulation, responsiveness, or homeokinetic maintenance cannot be directly observed in an extinct organism or an ancient biological system; historical sciences encounter only their surviving effects. I therefore argue that inquiry into past life faces an operational–historical gap. Operational indicators of present vitality must be translated into evidential criteria for past vitality by establishing warranted relations between living processes, the traces they produce, the conditions under which those traces are preserved, and the alternative non-biological processes that may produce similar traces. The central question is consequently not only "What is life?" but also "What surviving traces warrant the inference that vitality was once present?"
This distinction preserves the methodological openness demanded by anti-definitional approaches while explaining why the historical sciences of life nevertheless require empirically constrained criteria of biological activity. We may not need a universal definition of life in order to investigate vitality, but we must specify what counts as evidence that vitality once occurred.

Writing Historians, Historicizing Historians: Canon Formation, Emplotment, and the Historiography of Maruyama Masao

Yangfan Zhang (University of Heidelberg, Germany)

How do historians learn from the past when the past reaches them not as neutral evidence, but through traces already selected, edited, narrated, and canonized by previous generations of historians? This paper approaches this question through the posthumous receptionof Maruyama Masao, one of the most influential figures in postwar Japanese intellectual history. Rather than treating debates over Maruyama simply as disputes within Japanese studies, I examine them as a problem in historiography itself: how historians produce historical knowledge from textual remains whose survival, organization, and intelligibility have already been shaped by historical writing.
The case is particularly revealing because all actors involved occupy a double position within historiography. Maruyama himself was a historian of Japanese political thought; those who canonized him were likewise historians of Japanese intellectual history; and those who later criticized this canonization were also historians. The object of historical writing here is simultaneously a producer of historical narratives, while the producers of those narratives are themselves historically situated interpreters. The historiographical problem, therefore, is not simply how historians write history, but how historians write historians.
The paper focuses on the confrontation between what may be called the "orthodox Maruyama discourse" and the "critical Maruyama discourse" from the late 1990s onward. The former, centered on Maruyama's disciples and associates, constructed a coherent image of Maruyama through editorial projects such as the publication of his Collected Works and Lecture Notes, particularly through the explanatory commentaries attached to these volumes. Drawing on Hayden White's theory of emplotment, I argue that these editorial interventions did not merely contextualize Maruyama's writings; they transformed dispersed textual traces into a coherent historical narrative. Through this narrative, Maruyama emerged as a unified intellectual

subject whose prewar formation, postwar democratic thought, and later theoretical developments unfolded organically toward the telos of Postwar Democracy.

Critical interpreters challenged this narrative by exposing the limits of Maruyama's Enlightenment rationalism, elitist assumptions, and implicit commitments to the nation-state. Yet these critiques also reveal a deeper historiographical problem: historical evidence does not simply exist waiting to be interpreted; rather, historians continuously participate in producing the conditions under which evidence becomes meaningful. The struggle over Maruyama thus becomes a struggle over historical intelligibility itself.

This paper further argues that the problem extends beyond posthumous canonization. Maruyama's own historical writings relied heavily on conceptual vocabularies and scholarly infrastructures inherited from the Japanese Empire. Consequently, a historical project originally intended to criticize imperial ideology and reject cultural exceptionalism became entangled with residual forms of imperial knowledge production, gradually reproducing new forms of national particularism that could later be appropriated by the very political forces it sought to oppose. The case of Maruyama therefore suggests that historiography should be understood not merely as the representation of historical reality,but as a historically burdened epistemic practice: a tragic spiral in which historians, historical objects, and historical narratives continuously constitute one another, carrying forward the accumulated weight of earlier forms of knowledge even as they seek to overcome them.

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