

settings heightened the likelihood of these problems: shift work was available to take or leave, and there were multiple places to spend money outwith the home. Those who lived rurally did not have the same access to recreational spaces, relying more heavily on their home for food and comfort. Griffin postulates that even though the wages of rural men were predominantly lower than those working in towns and cities, and at increased risk from external factors like crop failure, increased hardship often bolstered a successful breadwinner model. Families had to work harder and, crucially, together in order to survive: 'all partners on one family enterprise, and all things ran smoothly in their course' (p. 127). Griffin thus situates men's personal choices in a larger map of social change: change that was particularly felt in industrialized hubs. While many fathers were good providers, higher male wages tilted the balance of power in the direction of men even more so than it had been in the past. The ownership of money within the family unit needs to be examined to understand discrepancies between wages and living standards.

The rest of Part Two explores the collateral damage wrought when the breadwinner model failed. Chapter 5 investigates family breakdown via divorce, death and desertion, while Chapter 6 turns to the lives of the mothers who chose or were forced to take on paid work. Consistently, it is women and their children who struggle without a male earner, having to work harder and live on less within societal structures that largely prevented them from maintaining economic stability. The section on 'Life' contains three final chapters that examine the place of food, emotions and political activism in the lives of the writers, always with a focus on how familial hierarchies influence their presence. Griffin's short conclusion then returns to her overarching argument: it is by paying attention to the nuanced details of family life that we can best understand 'large historical questions' (p. 301). This is where the strength of *Bread Winner* lies. Were the statistics that draw patterns between money and relationships left as numbers, the overall argument would risk feeling repetitive at times. But Griffin weaves her primary sources throughout the chapters, keeping lived experience at the core of her observations. Personal incidents – begging for chip scraps, or watching your father eat an unattainable egg – illuminate the gaps between broad economic patterns and real life. Indeed, though there could be more attention paid to the changing literary contexts these authors were writing within, that does not stop the voices of the autobiography writers shining through. In *Bread Winner*, Griffin convincingly demonstrates that noticing the small, domestic and often overlooked details of historical life is a vibrant and compelling way to gain insight into the big questions of the past.

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Pratik Chakrabarti, *Inscriptions of Nature: Geology and the Naturalization of Antiquity*

Baltimore: Johns Hopkins University Press, 2020. Pp. 280. ISBN: 987-1-4214-3874-0. \$54.95 (hardback)

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Inscriptions of Nature is a beautifully written, provocative and timely book by historian of science Pratik Chakrabarti. On the surface, it appears to tell a captivating story about the

complex intersections between mythology and geology in the nineteenth century. However, as one digs deeper through its many layers, *Inscriptions* presents profound methodological challenges to historians. Chakrabarti problematizes the often overstated faith placed by modern historians in archaeological, geological, or – broadly speaking – ‘scientific’ evidence at the expense of ‘mythological’ sources as a means of reconstructing the past. As Chakrabarti warns readers early in the book, criticizing naturalism in historical accounts, ‘for historians the question is ... should the history of science simulate science or interrogate it?’ (p. 8). The book constitutes an impeccable example of how historians can unsettle the boundaries between ‘mythological’ and ‘scientific’ forms of evidence to tell stories about the distant past.

Ever since the constructivist turn in STS, practitioners have worked to historicize accounts of the ‘natural’, emphasizing the artificiality of the nature–culture divide. *Inscriptions* goes a step further and identifies a set of events when and where the ‘historical’ was naturalized. Through his critical examination of the credibility of ‘secular’ histories, Chakrabarti poses a crucial methodological question for historians of science, namely how committed should we be to ‘secular’ histories given their entanglement with ‘mythological’ narratives? An important concept he elaborates to problematize deep time in India is that of ‘past unlimited’, which draws on Dipesh Chakrabarty’s ‘politics unlimited’ – the endless political domain of the most marginalized in India, who adopt all means possible in their struggle against monumentally oppressive systems. Chakrabarti explains that this limitless scope was also available to elite Hindus, who constructed their own claims about truth, antiquity and politics from a hotchpotch of ‘scientific’ and ‘mythical’ accounts. Thus, he contends, an emergent Hindu antiquarianism ‘uninhibitedly blended science, history, and deep time with myths, and it imagined India as a deeply Hindu land’ (p. 9).

In a compelling account of the history of the canal of Zabita Khan – a British attempt to irrigate the Doab region of northern India – this book’s first chapter elucidates the transformation of a colonial engineering project into an archaeological and geological endeavour. Land surveys uncovered the remains of an ancient canal system that marked ‘the British discovery of Indian antiquity ... in which the past, present, and future were fused inseparably’ (p. 34). By examining how questions about ancient India that earlier pertained to mythology entered the remit of archaeology and geology and emerged as a new genre of colonial antiquarianism, Chakrabarti evinces a striking example of the naturalization of antiquity and thus brings to light ‘how the deep past came to the surface of nineteenth-century India’ (p. 54).

Chakrabarti then traces a genealogy of the theory of the geological evolution of the Himalayas and the Indo-Gangetic plain back, through the actions of Hugh Falconer, to the discovery of a series of fossils in the Siwalik region the 1830s. He explains that ‘the scientific facts and provenance of these fossils ... were established in reference to Orientalist and Indological traditions that had ostensibly little to do with paleontology’ (p. 83). He illustrates how the narrative of geological ‘ancient alluviums’ emerged from a complex melange of natural-historical evidence and orientalist notions about Indian antiquity.

In the book’s third chapter, Chakrabarti inverts traditional historiographies about the historicization of nature, asking instead ‘how mythologies themselves became infused with ideas of deep geological time and nature’ (p. 85). The first part explores William Jones’s late eighteenth-century orientalism, showing how Jones ‘suggested that rather than seeing the Puranas as a “mere assemblage of metaphors,” the need was to appreciate the “symbolic mode of writing adopted by eastern sages, to embellish and dignify historical truth”’ (p. 90). Later, the chapter discusses the fascinating intersections between Falconer’s and Proby Cautley’s discovery of gigantic tortoise (*Colossochelys atlas*) fossils

and Puranic myths about Vishnu's *kurma* (tortoise) avatar. Here, Chakrabarti convincingly shows that Falconer's 'scientific' theory of evolutionary stasis, which entailed his suggestion that ancient Brahmins coexisted with the 'mythological' creatures about which they wrote, was heavily shaped by his Puranic hermeneutics. Thus Chakrabarti demonstrates how sacred histories were naturalized in the nineteenth century.

Subsequently, the book focuses on the naturalization – often through geological accounts – of human antiquity and its subsequent influence on nineteenth- and early twentieth-century colonial and post-colonial discourses on race, aboriginality and 'prehistory'. Chakrabarti re-examines the history of the recurrent colonial framing of India, as well as South Africa and Australia, as spaces in which settlers – be it 'Aryans', 'Bantus', or white Europeans – displaced and marginalized indigenous populations. Chakrabarti shows that the nineteenth-century colonial preoccupation with presenting 'Dravidians' and Aboriginal Australians, among other tribal populations, as an extant remnant of primitive and 'prehistoric' races, as well as being subsumed into the naturalized context of Darwinian evolution, was inseparable from contemporary geological and palaeontological investigations.

The final chapter explores how notions of 'primitivism' acquired geological significance, wherein Chakrabarti shows that the 'convergence of geological and anthropological investigations in central India' was an essential aspect of the British colonial project (p. 162). The book provides new perspectives to historiographies of the Gonds – the central Indian tribe who, through the colonial appropriation of their name for the Gondwana supercontinent, were naturalized as part of geological narratives. He reconstructs the integration of the Gonds into colonial and scientific narratives about a 'primitive' antiquity, thus showing how the marginalized group was inscribed into the landscapes of a prehistoric Earth.

Overall, *Inscriptions* kindles important questions about the complex historical entanglements of geology, archaeology and different flavours of orientalism in the nineteenth century, always – as indeed they should be – contextualized by the ever-present spectre of colonialism and an emergent scientific hegemony. This book will be widely appreciated by readers across our discipline.

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Audra Wolfe, *Freedom's Laboratory: The Cold War Struggle for the Soul of Science*

Baltimore: Johns Hopkins University Press, 2018. Pp. x + 302. ISBN 978-1-4214-2673-0. \$29.95 (hardback). ISBN 978-1-4214-3908-2. \$19.95 (paperback)

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Articulating a vision of apolitical science and disseminating it globally takes a lot of effort, resources and political acumen. *Freedom's Laboratory: The Cold War Struggle for the Soul of Science*, by Audra J. Wolfe, draws from a wide array of sources, some of them rather