

According to Hannam, Aristotle is the scientific 'discoverer' of the globe because he was the first person to 'know' the truth and back it up with empirical and logical evidence. Referring to the philosophical correspondence theory of truth, Hannam explains that 'The Earth is spherical. That statement is true ... because it corresponds to reality' (p. 311). For Hannam, distinguishing between knowledge (as reflecting truth) and belief (as requiring no proof) is crucial (p. 93). Aristotle justified his claim theoretically and empirically, and later experiments and photographs have proven the globe to be 'true'. Therefore, Hannam's logic goes, Aristotle is the scientific discoverer of our globe, a claim likewise enabled by his broad use of 'scientific' (p. 94).

As Hannam gets closer to the present day and his primary sources are more ascribable to individuals, he points out the difficulty of getting at the perspectives of people who were not members of an educated elite. But by the Middle Ages, Hannam claims, most Europeans had accepted Aristotle's view because, in the eighth century, the Venerable Bede, the 'greatest scholar of the era,' unequivocally supported it (pp. 211-12). In other words, centuries before the globe could be proven with sixteenth-century circumnavigations, it needed to be supported by someone authoritative to be fully believed. Hannam identifies this with the coherence theory of truth, whereby people accept an idea when it fits other known information and is endorsed by a trusted authority (p. 311). After his discussion of the Middle Ages, Hannam moves swiftly, taking only three chapters to go from Columbus and Copernicus to nineteenth-century cosmological debates between Christians and Buddhists in Asia (p. 295). The last few chapters describe varied flat Earth subgroups – from nineteenth-century zetetics to denizens of the flat Earth Internet - to show how a traditional perspective can remain convincing despite overwhelming evidence for a universalizing theory.

Hannam's story is shaped by an essentially teleological question - how did it become reasonable to view planet Earth as a sphere? Because his book tracks an idea across millennia, it is a general one, though Hannam takes pains to root each chapter in recent academic literature on the specific culture or context he is focusing on. In many ways Hannam's is not just a book about the discovery of an idea so much as a narrative about how ideas about the shape of Earth have reflected and confirmed different cultural values, histories and norms. For Hannam, Aristotle's spherical Earth was groundbreaking because it put individual experiences of flatness in a new framework and enabled new ways of perceiving humankinds' place in (and on) the world. That it has since been confirmed by photographs from space is merely the cherry on top.

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Geoffrey Lloyd and Aparecida Vilaça, Of Jaguars and Butterflies: Metalogues on Issues in Anthropology and **Philosophy**

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Zhuangzi, the famous tale goes, once dreamed that he was a butterfly. Happily flying from flower to flower, the butterfly did not remember a thing about Zhuangzi, so much that, upon awakening in his human body, he could no longer tell whether he was Zhuangzi dreaming of being a butterfly, or a butterfly dreaming of being Zhuangzi. But for the Wari' people of Amazonia, jaguars see themselves as human, and humans may themselves be jaguars at the same time, possessing two bodies that may cohabit or transform into each other – a view known as *perspectivism*. For Zhuangzi, the transformation between human and animal can only presuppose an initial separation; for the Wari', it is the separation itself that must be wrestled out of a constantly transforming world.

These two contrasting vignettes (pp. 14-15) introduce the book's central conundrum. This compact volume, based on emails exchanged during the COVID-19 pandemic, explores the question of transformations in a loose, conversational way - more on this later. This, in turn, forms the perfect pretext for a meeting between the authors' respective disciplinary backgrounds, with G.E.R. Lloyd taking on the role of the philosopher and historian of science, while Aparecida Vilaça acts as a representative for anthropology. Through fifteen chapters of varying length, their perspectives interweave in a sort of freeassociative logic. From the problem of identity and separation outlined above, the book drifts into the epistemology of perception, dreams and hallucinations, before tackling the ontology of bodies and the relation between objects and perspectives. After a particularly dense central section, the discussion turns to proof, doubt and truth telling, before finally finding its natural resting place in a reflection on anthropology, philosophy and whether categories such as 'ontology' and 'epistemology' can be useful in bringing them together. At every turn, the conversation remains grounded in Vilaça's ethnographic experience with the Wari', which serves as an endless source of conceptual puzzles. To wit: how is it that To'o's mother, having been witnessed biting a monkey's neck and drinking its blood, then proceeds to spit out the mushy leftovers of chicha (maize beer)? After being attacked by a jaguar shortly before, she has become kin with it, at once human and jaguar. And, as noted above, jaguars see themselves as human, and, therefore, blood as chicha. As a result, she has become able not only to hold a sort of double perspective, but also to 'make [the blood] look like chicha to the others after making it ... pass through her body, in which case we might say that her body acted as some kind of translating machine' (p. 33)

Cases such as this one are highly efficient at bringing together long-standing problems in the history and philosophy of science with equally venerable ones in anthropology. Indeed, readers who are well versed in either field are unlikely to find much conceptual novelty here, especially if they are familiar with either of the authors' works. Although the problem of science and irrationality in ancient Greece has been well covered by Lloyd's previous books (among others), the question of reality and perspective in anthropology goes all the way back to Evans-Pritchard and his work on Azande magic, filtering through Lévi-Strauss before being more recently revived by the 'ontological turn', as represented by Eduardo Viveiros de Castro, Philippe Descola and Vilaça herself. Rather, what makes Of Jaquar and Butterflies a truly stimulating read is its methodological freshness. Though philosophy and history of science have had plenty of occasions to negotiate the terms of their collaboration, such has not yet been the case with anthropology and philosophy, and this despite their well-established mutual relevance. In elevating perspectival difference from the merely cultural to the ontological, sometimes even suggesting that Western scientists and Wari' people do not live in the same world, contemporary anthropology has amply borrowed from a certain philosophical canon - a mix of post-Heideggerian phenomenology, Deleuzian metaphysics and classic American pragmatism - and used it to build its own conceptual edifices. In doing so, it has passed over professional philosophers' similar attempts at reconciling, for example, scientific and

non-scientific beliefs. And in return, philosophers have largely ignored these anthropological efforts. What Lloyd and Vilaça offer us here is a glimpse into what a truly joint practice of philosophy and anthropology would look like.

In characterizing this endeavour, they choose the term 'metalogue', inspired by Gregory Bateson: 'tentative, exploratory' (p. 9), fundamentally open-ended discussions, never reaching a full conclusion. More than anything else, though, the book is highly reminiscent of Ludwig Wittgenstein. Thematic resonances with the discussion of aspect perception in Part II of the *Philosophical Investigations* (1953) are certainly abundant. Most importantly, the convergence resides in the way empirical details slowly unfold in a fragmentary manner, progressively revealing complications in how human practices and language fit together, tensions and paradoxes quietly ebbing and flowing. And indeed, the book's most successful moments come when it effectively dissolves received philosophical problems – when, for instance, the authors come to the realization that, in a world in which perspectives come first and are ever-shifting, it would make no sense to frontally question a shaman's visions.

What this experiment shows us is that a successful collaboration between anthropology and philosophy cannot be understood through a simplistic opposition between empirical data and theoretical framework. Instead, it is a mutual opening that is warranted, in which anthropology reshapes philosophical problems and philosophy reshapes anthropological description, anthropology being approached philosophically and (the history of) philosophy being approached anthropologically. In this regard, the authors' final declaration that their agendas are different – Vilaça being interested in preserving difference, while Lloyd wishes to find commonalities – feels like a slight regression from the text's previous developments.

Nonetheless, following these labyrinthic metalogues could very well guide historians of science in their own methodological reflections, inspiring them to consider the role anthropology could play in their own research. Moreover, the brevity and conversational format of *Of Jaguars and Butterflies* would make it a formidable tool for the classroom, providing students with a stimulating access point into the intersection of philosophy and anthropology.

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Paulo Galluzzi, The Italian Renaissance of Machines

Cambridge, MA: Harvard University Press, 2020. Pp. 296. ISBN 978-0-674-98439-4. £37.95 (hardcover).

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This volume is based on the Berenson Lectures on the Italian Renaissance delivered in 2014 by Paolo Galluzzi at Villa I Tatti, the Harvard University Center for Italian Renaissance Studies. Individual chapters draw on, synthesize and expand on Galluzzi's previous publications in Italian dealing with Renaissance engineers, Leonardo da Vinci, and period depictions and conceptions of machines. The volume's three chapters probe