
Citation for published version (APA):

DOI:
10.30965/26664275-20210002

Document status and date:
Published: 01/01/2020

Document Version:
Publisher's PDF, also known as Version of Record (includes final page, issue and volume numbers)

Please check the document version of this publication:
• A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
• The final author version and the galley proof are versions of the publication after peer review.
• The final published version features the final layout of the paper including the volume, issue and page numbers.

Link to publication

General rights
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.
• Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
• You may not further distribute the material or use it for any profit-making activity or commercial gain
• You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:
www.tue.nl/taverne

Take down policy
If you believe that this document breaches copyright please contact us at:
openaccess@tue.nl
providing details and we will investigate your claim.

Download date: 05. Jun. 2022

The work under review is an edited and translated version of a series of typescripts written by Paul Feyerabend during the 1970s, which were left incomplete and unpublished by the author. Originally published in German by Suhrkamp Verlag in 2009, these typescripts contain research on the history of human conceptions of nature, aimed at providing a historical reconstruction of the transitions that led to science’s view on nature in the 1970s. This ambitious project was supposed to comprise three volumes, which presented and explained conceptions of nature that range from the Stone Age to twentieth century developments in quantum physics. Only the first of these grew into an advanced draft and it is this text that became the backbone of the book that we have today. Alongside the aforementioned draft, the editors, Helmut Heit and Eric Oberheim, provide a useful introduction that explains the text’s place in Feyerabend’s philosophical development and incorporate, as a sort of epilogue, a letter to J. C. Smart and some documents written by the author on sabbatical leave which reveal the motivations and plans behind the whole project.

The aim that drives Feyerabend’s research in *Philosophy of Nature* is to disprove and demystify our contemporary belief in the existence of a universal faculty of reason and a universal experience of the world. As a theme resonating across the book, it is constantly suggested that contemporary scientists and philosophers are under the false impression that mankind’s cognitive abilities have always been more or less the same, and thus, regardless of the time and place in which an individual is situated, a given cognitive process—for example, perception—will yield the same result, and produce the same experience of the world. What changes from culture to culture, the allegedly mistaken view goes, is how we describe the things we perceive. Our descriptions might be influenced by the quantity and quality of knowledge that we have, the social institutions that govern our customs and daily lives, the traditions and religions in which we are immersed, and so on. Nonetheless, these interpretations rest upon an unchanging base, an objective core of facts about the world that, under the same circumstances, *should* be perceived or grasped by anyone in the same way. I shall call this view the *universal experience* position (or UE, for short).

By writing a history of conceptions of nature, Feyerabend sets out to prove this assumption false by providing counterexamples, i.e. different conceptions
of nature, that cannot be properly accounted for by mankind’s allegedly universal experience of the world. This means that the experience of the world produced by a universal cognitive apparatus as described by UE—which is, by the way, the kind of experience that fits with our contemporary scientific worldview—does not provide a suitable explanation nor an appropriate grounding for some conceptions of nature that may be found in past cultures and civilizations. With this in mind, Feyerabend starts introducing the reader, through bits and pieces, to his core philosophical intuition: these conceptions of nature, which cannot be accounted for by our current—and supposedly universal—way of experiencing the world, must be the result of radically different ways of experiencing the world. The meaning of this will be addressed later.

Having this aim and intuition as a background, the author starts presenting the possibility of the existence of fundamentally different ways of experiencing the world through the study of myths and their presuppositions. In the first chapter, it is stated that mythologies are complete ways of comprehending the world (3), with their own objectives, methods and criteria to understand and interact with it. As such, mythologies should not be understood as ‘basic’ cultural manifestations that belong to primitive ‘stages’ of human cultural history, but rather as elaborate and comprehensive worldviews, that are not inferior to their later counterparts. The origin of the consideration of myths as a primitive stage of human culture, says Feyerabend, may be traced back to “evolutionary notions of the nineteenth century, according to which a linear evolutionary development in the animal kingdom is reflected in an equally linear evolution of human skills and cultures” (6). But this analogy offers an erroneous image, for populations immersed in mythological cultures possessed sophisticated theoretical knowledge and advanced skills to utilize it practically, that do not fit in the primitivist perspective of the evolutionary explanation. The author illustrates this point by providing examples of complex astronomical calculations made by people in the Stone Age which, in turn, lead to the construction of intricate sites, such as Stonehenge.

After dismissing the notion of mythologies as primitive stages in human cultural history, chapter two continues building a case for mythologies as elaborate and comprehensive worldviews by addressing the issue of their interpretation. Feyerabend commences by introducing the “theory of nature myths”, according to which “myths start with a core of correct and easily reproducible perceptions of the world and of humans, though these perceptions are subsequently described in different ways, either realistically (pure nature myths) or in an esoteric, exaggerated, ritually stipulated language” (37). In other words,
myths should not be regarded as complete fictional stories, as they are rooted in facts of the world or society that conform the base of the knowledge and skills mentioned above.

The author suggests that this theory should be preferred over its alternatives, especially Lévi-Strauss’s structuralism, according to which myths are sequences of tales whose aim is to show and clarify an invariant logical order between different elements within a certain structure. Under this perspective, myths employ stories as a medium to draw the attention of an individual from a particular event towards general, formal properties and relations that stand between different elements with independence of the content of specific stories (46). For example, the myths of Icarus and Daedalus in Greek mythology on the one hand, and the one of Sampati and Jatayu in Hindu mythology on the other, describe different particular events, but they share the same structural relations between the elements that conform the them: in both there are two individuals, which possess wings for different reasons, and one of them flies so high that the wings get damaged or burned by the sun, thus serving as an example of the consequences of pride and arrogance. Feyerabend claims that, as Lévi-Strauss’s proposal grounds the objective base of myths in an invariant logical order, it needs to assume that human beings are endowed with one and the same deep mental structure, in the manner of Kantian philosophy (47). Therefore, in this view, the order that myths try to show would be in the observer’s mind, and not in the world itself.

To understand why this kind of assumption is not suitable for explaining myths, Feyerabend introduces a distinction between two different epistemologies: (i) a naïve version; and, (ii) a refined version. On the one hand, the naïve version assumes that the elements of reality, the “facts”, are unambiguously presented to human consciousness and that these facts can be unambiguously described with the help of concepts. Under a naïve epistemology, “concepts are unilaterally based on facts, whereas facts are in no way influenced by concepts, rites, institutional peculiarities, or social circumstances” (37). On the other hand, a refined epistemology assumes that this influence does take place and thus “even the simplest facts are at least in part shaped rather than merely described by concepts” (37). This means that ‘reality’ is not an independent variable which an individual may observe with detachment from ‘the outside’. It is rather our languages, artistic expressions, traditions, religions, emotions, interests, and their interconnections that determine our reality. From this does not necessarily follow the strong conclusion that reality is completely subjective, and that it is absolutely determined by social and cultural factors. Instead, a refined epistemology is compatible with the weaker conclusion that our
reality is co-determined, maybe in different degrees, by the world that we perceive, and the social and cultural factors that shape our cognitive processes. Feyerabend does not explicitly distinguish between these conclusions and at times he seems to endorse the former, and at others the latter. Before laying out the consequences of this ambiguity, a bit of more groundwork must be done.

Feyerabend clearly favours a refined epistemology, but for reasons not given in the book. After dismissing any form of naïve epistemology, he seems only to embrace a refined version because it is a suitable framework to develop his core intuition, and this point will remain essential to the understanding of the whole project of *Philosophy of Nature*. If several conceptions of nature that may be found in past cultures and civilizations are not properly accounted for by UE, then they must be product of different experiences. Although initially a vague and ambiguous statement, with the machinery of a refined epistemology in place, this intuition now becomes clearer: this difference in the experiences is not merely an issue of different *tokens*, but a difference in the *type* of experience that individuals may have. If the framework provided by a refined epistemology is correct, then what an individual perceives is, at least in part, determined by social, cultural, religious, artistic and philosophical considerations. In this way, two individuals immersed in different sets of factors will have different perceptions of the world. As such, if these two individuals were placed in front of the same stuff, they would *look* at the same object, but have different *percepts*, thus having different kinds of experiences of the world.

Returning to theories such as structuralism, their assumption that human beings are endowed with a common deep mental structure in order to provide a grounding for objectivity, is not compatible with a refined epistemology that postulates flexible and varying cognitive processes. The theory of nature myths, on the contrary, ensures, at least some degree, of objectivity without presupposing a universal cognitive apparatus for the human species. In Feyerabend's words, “increasing abstractness, increasing generality do not imply that we leave the realm of cosmology and enter in that of logic, nor does the establishment of the presence of abstract structures within a myth show that there is no narrative of concrete events” (48).

The methodological payoff of abandoning the primitivist evolutionary explanation of myths and interpreting them under the lens of a theory of nature myths combined with a refined epistemology, is that mythologies turn out to be autonomous and comprehensive worldviews, whose conceptions of nature are to be formulated with their own notions and evaluated by their own criteria. As these radically different worldviews are grounded on experiences of the world of individuals with different cognitive processes, they should be
regarded as independent alternatives that stand one beside the other on equal footing. If this is the case, then any attempt of reduction of one conception of nature to another would be a futile endeavour, and the act of judging one with the criteria, expectations and conceptual framework of the other would be an unfair and fallacious attempt. In other words, different conceptions of nature should be regarded as incommensurable, insofar as they lack a common standard and they cannot be logically related to each other (xix).

From chapter three onwards, Feyerabend presents an application of his theory by analysing the case of the Homeric worldview and the subsequent transition towards a rationalistic conception of nature and the birth of European philosophy. As “one world dissolves and is replaced by another” (50), we do not have direct access to the cognitive processes and the experience of the world that grounded conceptions of nature different from our own, so our only chance to comprehend another worldview, however imperfectly, is through indirect evidence. Based on research provided by archaeologists, historians of art, philologists and other related disciplines, Feyerabend presents a reconstruction of the Homeric worldview according to which the world was perceived as an aggregate of things. In an aggregate universe, the elements or things that compose it exist in a simple succession, lacking any hierarchical organization, and only standing in “paratactic” relations, that is, relations between elements of equal status or importance. If so, an individual is just one more element among many others, including all forms of deities, which are “sewn together” to form a grand collage that depicts the entire universe.

This characterization of the Greek worldview in Homeric times, as it is suggested by the author, is suitable to account for an impressive list of examples of artistic expressions. From paintings techniques in vase art, to the way in which human bodies and divine entities are represented, passing through a literary analysis of the Iliad and the Odyssey, the author tells the reader not to rule out “the possibility that a certain style represents the world in precisely the way in which it was seen and experienced by the artist and his or her contemporaries, and that basic assumptions (conscious or unconscious) are expressed in each formal characteristic, assumptions that reflect the cosmology of the time” (63). Therefore, we should not rule out the possibility, continues Feyerabend, that the world of the archaic humans was indeed an aggregate of parts and, for example, archaic humans saw their fellow humans as aggregates of limbs or loosely connected mannequins.

At this point the consequences of the ambiguity of adopting a refined epistemology comes in. On the one hand, if the strong conclusion that reality is completely subjective, and that it is absolutely determined by social and
cultural factors, were to follow, then from the analysis of a particular art style, we would be inferring an ontological analysis of the world in which the artists were immersed. Art styles could be considered as privileged windows into the ontological structure of the world of other cultures, as art styles would be depicting how those individuals shape, in an absolute way, the facts and structure of their cosmology. In the case at hand, this would mean that the Greek archaic art style depicts an aggregate or Homeric world. This, in turn, could lead to the conclusion that different cultures live in radically different worlds, in a strict ontological sense.

On the other hand, if the weak conclusion that our reality is co-determined by the world that we perceive, and the social and cultural factors that shape our cognitive processes, were the case, then there is room to argue that from the analysis of a particular art style, we would be inferring a particular conceptualization of the world in which the artists were immersed. Under this interpretation, different cultures live in the same world, in a strict ontological sense, but diverge in the conceptualizations that the make of it. Art styles could be considered, then, as privileged windows into the concepts, views and beliefs about the world held by other cultures. In the case at hand, this would mean that the Greek archaic art style depicts an aggregate or Homeric world-view. Unfortunately, Feyerabend does not explicitly address this issue and at times his talk of “an aggregate universe” or of Homeric humans being “far less compact that today’s sensually nervous subject” (71), suggests that the distinction between ontological claims and epistemological claims (or between ontology and world-views) is a blurred one. So, the ambiguities remain.

In the rest of the chapters, until the end of the book, Feyerabend attempts to point at some causes of the dissolution of the Homeric worldview and the gradual emergence of a conceptual approach to nature. He refers to this process as the transition from an aggregate universe to a substance universe. The Homeric world-view faded away to give place to the “new” world of philosophers thanks to a series of factors, among which are

(i) the appearance of attempts to explicitly formulate the cosmological principles contained in myths;
(ii) vigorous criticism to the divinity of the Greek gods and the coherence of their mythical accounts; and,
(iii) the use of concepts as tools that appeal to the universal aspect of particular instances of natural and social phenomena.
The world that once was taken to be a collection of elements that could be directly perceived by the senses and which were “sewn together”—such as human beings being an aggregate of limbs and feelings (92)—was slowly and steadily replaced by a world where the “reality” of things was hidden from plain sight. Our senses only captured the appearance of things, which was always concrete and particular, while our mind was able to grasp the abstract and universal essence hidden underneath. The transition ends with Parmenides, to whom, in Feyerabend’s words, we owe the final step in the “separation of the experience of the world from reality” and “the belief in eternal laws and its axiomatic method of representation, which has now come to be regarded as the universally valid basis of understanding” (106).

With the advent of a new conception of nature, not only new ontological and epistemological considerations began to appear in Western thought, but also a sense of detachment from the world that placed mankind apart from the rest of the things that compose everything there is. From being a constituent of a larger scheme of things, and thus, highly susceptible to external influences, the world of the philosophers slowly started considering men as individual substances, with independent principles of action, that were, in a sense, isolated from the rest of nature and observers of their surroundings. This transition became, in the eyes of the author, the base upon which the modern way of studying and approaching nature is built.

As a final remark, this well written book is successful in stimulating the reader to think about the issue of whether there are incommensurable worldviews acting as the grounding of different approaches to the world and society. With a direct and, at times, provocative style, Feyerabend puts forward controversial ideas that challenge the privileged status of our contemporary scientific worldview in a way that is accessible to students and scholars alike. As such, this book would serve as excellent material for an introductory course on general philosophy of science as well as a resource for specialized seminars on topics such as scientism and culturalism.

Nevertheless, the book is not exempt from difficulties, as it fails to provide detailed justification for several of the theses and statements put forward across the chapters and leaves open ambiguities that might lead to implausible conclusions. Crucial elements of Feyerabend’s argumentative structure, such as the reasons that support the choice of a refined epistemology as the framework upon which his analysis rests, and an account of how exactly our cognitive processes are shaped by the factors in which we are immersed, are absent. In this sense, a complete understanding of this work requires turning to other works of the author, especially those where the ontological and
epistemological groundwork of these theses is developed. This book, then, may be considered a good companion to the rest of Feyerabend’s proposals, insofar it is the place where the application of his more abstract proposals can be found.

Acknowledgment

My gratitude to María Jesús Parga, Gabriela Arriagada, Chihon Ley, Julian Husmann and Markus Schrenk for their insightful comments and suggestions.

Diego Morales  
Department of Social, Political and Cognitive Studies, Università degli Studi di Siena, Siena, Italy  
diego.moralesperez@student.unisi.it