

THE FLIPPANT DADAIST

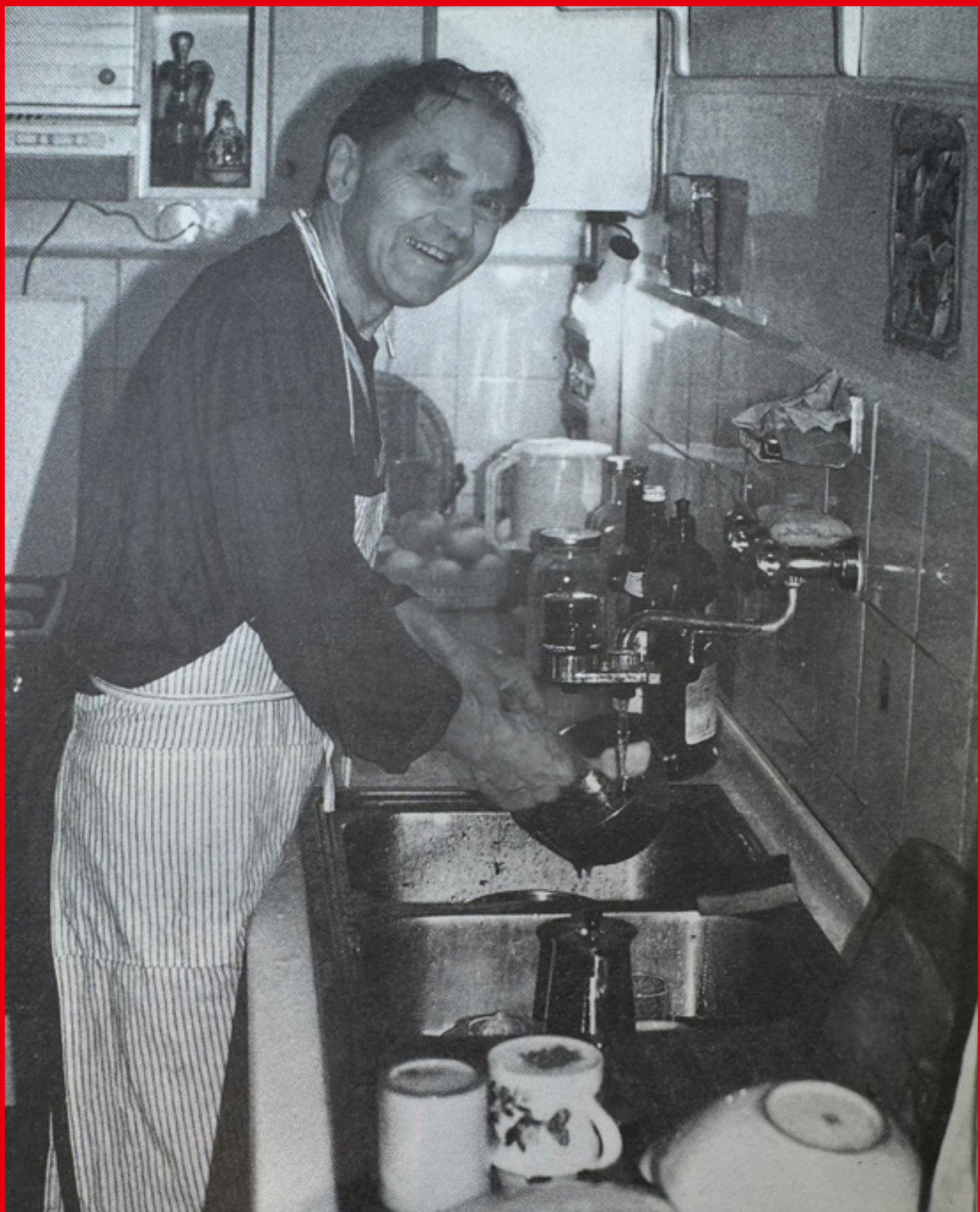
Paul Feyerabend, one of the most original and nonconformist epistemologists of the 20th century, is known for describing science as an essentially anarchic enterprise characterized by different, sometimes contradictory, methods, approaches and ways of reasoning. But it was through his reflections on art and myth that he developed an even more radical view: there are different forms of human thought, each characterized by a different rationality and reality, and science is only one of them. And in intellectual history there is only change, but not progress.

Luca Sciortino

Few epistemologists have feared the enormous power of science and its claimed superiority over other forms of knowledge as much as Paul Feyerabend. His philosophy can be described as a fierce struggle against all totalitarian forms of knowledge in a desperate attempt to affirm human creativity and freedom. Throughout his life, he never ceased to defend pluralism in all fields of culture, insisting that the proliferation of theories, methods and forms of thought is beneficial to the development of knowledge and that uniformity hinders the free development of the individual. In this sense, no sentence is more emblematic than the one in the opening pages of *Against Method* (1975), one of his seminal works. Feyerabend wrote that knowledge is not a series of theories in themselves consistent that gradually converge to truth, but 'it is rather an ever-increasing *ocean of mutually incompatible*

alternatives' (Feyerabend, 1993 [1975], p. 21).

Feyerabend was a paradoxical, nonconformist and ironic philosopher, as when he traced his original interest in philosophy not to intellectual motivations but to the necessity of taking full advantage of a purchase at a pre-auction sale: 'tons of books could be had for a few pennies. They came in bundles; you had to buy a whole bundle or nothing at all. I selected bundles that were rich in plays or novels, but I could not avoid an occasional Plato or Descartes. I may have started reading these unwanted additions out of curiosity or simply to cut my losses' (Feyerabend, 1996, p. 27). As a teenager, he loved opera, theater and astronomy so much that he would spend his afternoons practicing on a stage and his evenings stargazing. His passion for theater never left him, to the point that in several interviews he declared that he would have preferred to be



an actor or director rather than a philosopher.

THE WAR AND EARLY STUDIES

Feyerabend was born in Vienna on the 13th of January 1924 to a middle-class family. After passing his high school final exams in March 1942, he was drafted into the Arbeitsdienst (the labor service introduced by the Nazis) and later participated as an officer in several engagements against the Russians, in one of which he was wounded. The bullet, lodged in his spine, paralyzed him from the waist down, forcing him first to use a wheelchair, then to walk with crutches and finally with the help of a stick. With his trademark humor, he recounted how his first wheelchair for the disabled had three wheels, was operated by levers and could acquire great speed: ‘pedestrians scattered in terror from when I approached at full speed’ (Feyerabend, 1996, p. 56).

After the war ended, he returned to Vienna to study physics with such scientists as Hans Thirring (1888-1976) and Felix Ehrenhaft (1879-1952). He would later jokingly describe himself as a physicist who converted to philosophy for lack of talent. The reality is that those studies helped Feyerabend gain a deep understanding of the issues being debated in the Vienna of his time, where various thinkers were pondering the philosophical implications of scientific theories, particularly quantum theory and the theory of relativity.

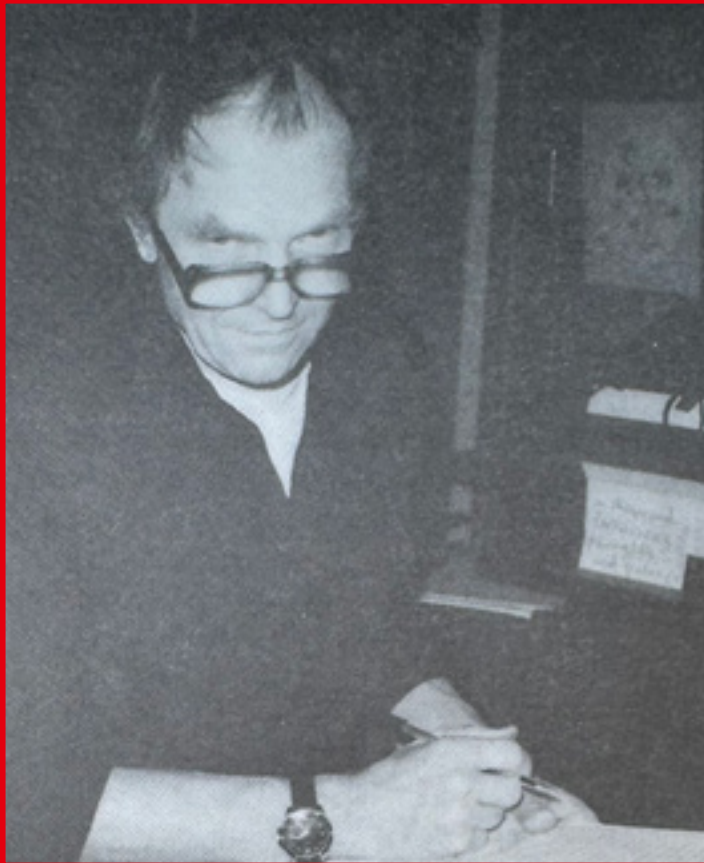
After finishing his studies in physics, he moved to London where he obtained a doctorate in philosophy under Karl Popper (1902-1994) in 1951. His doctoral dissertation, entitled *Zur Theorie der Basissätze* (‘On the Theory of Basic Statements’), was conceived under the influence of logical positivism: in 1949, when he was in Austria, Feyerabend had founded the ‘Kraft Circle’, a society of young philosophers who were interested in ‘considering philosophical problems in a non-metaphysical manner and with special reference to the findings of the sciences (Feyerabend, 1966, p. 3-4). His first articles reveal Popper’s influence. For example, when he was in Bristol, where he had obtained his first teaching position, Feyerabend wrote two articles advocating a realist view of scientific theories (Feyerabend, 1957, 1958). And in 1961 he defended Popper’s view regarding the transition from myth to logos, that is, from the mental universe of the mythological writers to

that of the early Greek philosophers. He described the latter as ‘very brave and optimistic’ and the world of the Homeric poems as ‘closed and dogmatic’ (Feyerabend, 1961). However, around 1967, Feyerabend matured an aversion to Popper’s critical rationalism, culminating in *Against Method* and other later works.

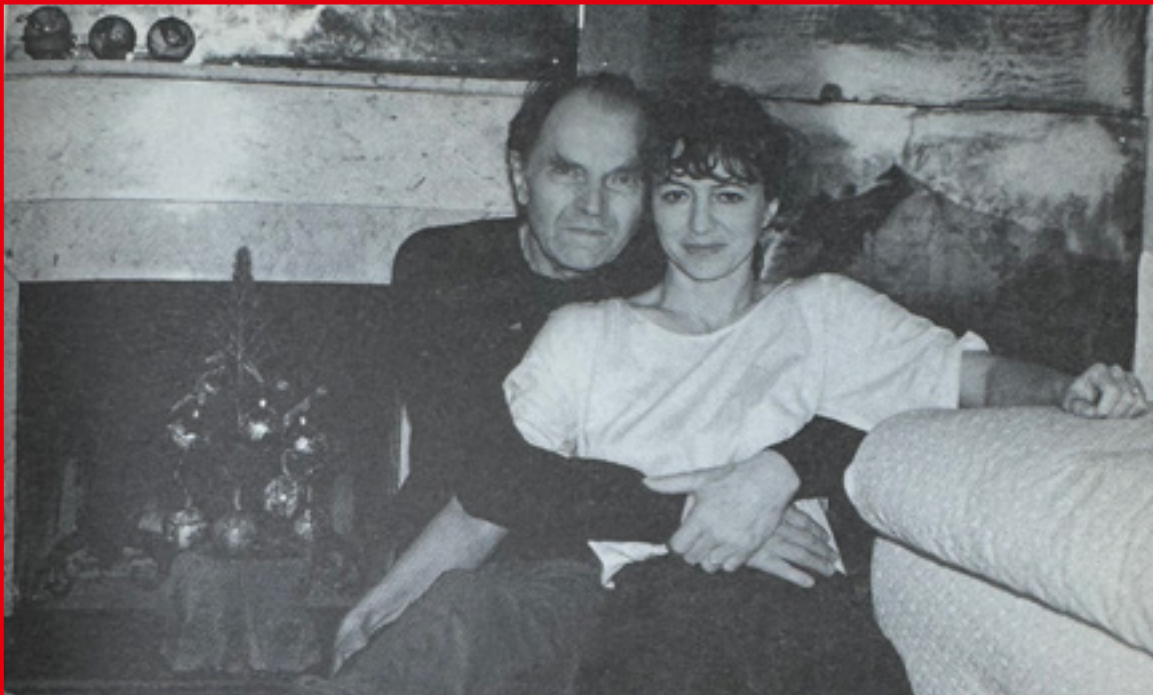
AGAINST METHOD

At first Feyerabend raised a point concerning the existence of methodological rules implicit in the process of producing scientific knowledge. One of these consisted of excluding hypotheses inconsistent with well-confirmed theories or facts (Feyerabend, 1970). Feyerabend argued that instead we should encourage the proliferation of theories and not exclude anything, not even what is considered non-scientific and may provide insights for new theories: for example, metaphysics, myth and religious cosmologies (Feyerabend, 1962; 1981 [1965]). While at this stage Feyerabend relied on general arguments to justify why scientists used or violated certain methodological rules, in time he became convinced that this was an unworkable path. An explanation of why in certain circumstances progress in knowledge is made by abiding by or violating certain methodological rules could not be universally valid. One had to take into account the domain to which the rules apply, the conditions under which they are considered valid, and which of the possible ways of using them promote progress (Feyerabend, 1993 [1975]).

Thus, in *Against Method*, Feyerabend asserted that ‘the idea of a method containing firm, unchanging, and absolutely binding principles for conducting the business of science meets considerable difficulty when confronted with the results of historical research’ (Feyerabend, 1993 [1975], p. 18). His point was that in the evolution of scientific research situations emerge which require new methodological rules and even new categories of thought. For example, Feyerabend examined ‘the tower argument’ that the Aristotelians used to examine the motion of the Earth: according to the latter, the ‘fact’ that a stone in free fall from a tower falls along the perpendicular disproves the hypothesis that the Earth is in motion. The argument is perfectly rational and in line with Popper’s falsificationist epistemology, but Galileo destroyed it by introducing an ad hoc hypothesis,



Paul Karl Feyerabend (Vienna, January 13, 1924 - Genolier, February 11, 1994) was an Austrian philosopher of science and sociologist. His work was particularly impactful in the 1960s and 1970s, his life has been rather erratic, with frequent moves: from Austria to the UK, from the US to New Zealand, from Italy to Switzerland. The images in this feature, taken from *Ammazzando il tempo*, in english "Killing time" (Laterza, 1994), depict him in scenes of everyday life: washing dishes (on the article's opening page), at work (here on the side), and hugging his wife Grazia Borrini (here below), now president of the Paul K. Feyerabend Foundation.



the law of inertia: since the stone dropped from the tower maintains the initial velocity imparted by the Earth's motion, which is also that of the tower, the stone falls along the perpendicular. Thus, according to Feyerabend, Galileo skillfully introduced ad hoc hypotheses by violating the rational standards of Aristotelian reasoning and succeeded in being convincing.

It could then be said that the tower argument 'was valid' in the time of the Aristotelians and the inertia argument in the time of Galileo. Hence the famous principle that 'anything goes', introduced by Feyerabend in a half-serious tone. Far from being an irrationalist principle, as it is often interpreted, it is actually an admission of the existence, and sometimes coexistence, of different forms of rationality within the history of science. But 'anything goes' is neither a principle expressing Feyerabend's position nor a methodological recommendation for conducting scientific research: "anything goes" does not express any conviction of mine, it is jocular summary of the predicament of the rationalist: if you want universal standards, I say, if you cannot live without principles that hold independently of situation, shape of world, exigencies of research or temperamental peculiarities, then I can give you such a principle. It will be empty, useless and pretty ridiculous -- but it will be a "principle". It will be the "principle" "anything goes" (Feyerabend, 1978, p. 188).

EPISTEMOLOGICAL ANARCHISM

Feyerabend reformulated these ideas by stating that his was an 'anarchist theory of knowledge' that stemmed from an application to scientific methodology of the ideas of John Stuart Mill (1806-1873) contained in the essay *On Liberty* (Mill, 1992 [1859]). The latter had argued, among other things, that pluralism of opinion fosters the search for truth. The central thesis of Feyerabend's epistemological anarchism is that there is no such thing as *the* scientific method: scientists are methodological opportunists who use whatever moves are available to them, even those that violate the canons of empiricist methodology. Later, with his usual polemical verve, Feyerabend preferred the term 'dadaism' to 'anarchism': 'anarchy cares very little about human life and human happiness [...] so I prefer the term *dadaism*'. And then he added: 'I hope that after reading this pamphlet

[*Against Method*] the reader will remember me as a flippant dadaist and not as a serious anarchist' (Lakatos & Feyerabend, 2010, p. 295). The term 'dadaist' suited Feyerabend's attitude more than the term 'anarchist' because of its allusions to the exaltation of creative freedom, the rejection for the pursuit of aesthetic standards, and the critique of the artwork itself. Last but not least, the Dadaists emphasized humor and extravagance, features that were well suited to Feyerabend's character. Taking a cue from the 'dadaist artist', the 'dadaist epistemologist' had to look with detachment and levity at the attempt to find rules defining the scientific enterprise and thus also at the very philosophy of science conceived in a normative sense: 'A dadaist is utterly unimpressed by any serious enterprise and he smells a rat when people stop smiling and assume that attitude and those facial expressions which indicate that something important is about to be said. A dadaist is convinced that a worthwhile life will arise only when we start taking things lightly and when we remove from our speech the profound but already putrid meanings it has

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accumulated over the centuries ('search for the truth', 'fight for justice', 'passionate concern', etc.)" (Lakatos & Feyerabend, 2010, p. 295).

Over time, Feyerabend's theses took on a more radical form. He realized that non-scientific worldviews could be considered real alternatives to scientific theories precisely because they too had factual and cognitive content. For example, myths conveyed knowledge for the purpose of promoting social harmony; and the dramas of ancient Greece laid bare the contradictions of society and used particular methods to suggest the reasons for them. In 1975, Feyerabend came to argue that the worldview of myth and that of the early Greek philosophers are 'incommensurable' and based on two different ways of perceiving the world. The term 'incommensurable' had first appeared in 1962 to describe two theories that could not be deduced from each other because no deductive relationship existed between their respective basic concepts. Now, Feyerabend also considered the worldviews of the Homeric poems and those of the early Greek philosophers to be incommensurable: no logical or perceptual relations could be established between them, and their respective basic concepts could not be used simultaneously. All this led to a relativistic view that embraced the whole spectrum of ways of seeing the world: the scientific view of nature that arose with the Ionian philosophers had not been defeated by argument but by history. From there, Feyerabend went so far as to question even the existence of a general criterion demarcating science from non-science: the latter could be distinguished neither on the basis of method, nor on the basis of norms of rationality, nor on the basis of content. Any criterion for distinguishing science from non-science could only be identified 'locally', that is, in certain particular contexts.

ART MYTH AND SCIENCE

In a 1963 letter to the Australian philosopher Jack Smart (1920-2012), Feyerabend revealed that he had always been interested in the nature of myths, which he regarded as completely autonomous and independent ways of perceiving the world. According to some scholars, this conviction made possible the radicalization of the last phase of Feyerabend's thought, that is, the shift from defending the proliferation of theories as a means

of progress in the sciences to more relativistic views concerning the scientific tradition as such (Heit, 2016, p. 71). But for similar reasons, one cannot help but attribute to Feyerabend's studies on the history of art an equally crucial role in the evolution of his thought. In 1947, in Vienna, the young Feyerabend had attended the lectures of the art historians Otto Demus (1902-1990) and Karl Swoboda (1889-1977). The latter, a student of the influential art historian Alois Riegl (1858-1905), had drawn his attention to Giotto's style and the transition to pictorial realism. An essay on art and science appeared in 1967, followed by a collection in 1984; and in 1993, the new edition of *Against Method* was expanded and revised to incorporate new reflections on the subject, also present in *Conquest of Abundance* (1999), which came out posthumously. In these writings, Feyerabend explored the similarities and differences between art and science, rejecting the thesis that the latter is the only valid form of knowledge; suggested that the creativity and flexibility of artists can offer useful lessons for scientific practice; argued that it is crucial to take different perspectives into account in research; and criticized various methodologies considered scientific. Of his writings on art and science, *Wissenschaft als Kunst (Science as Art)* (Feyerabend, 1984) is the most important because it is there that Feyerabend outlines a notion of 'scientific style' in analogy with the notion of style in art proposed by Riegl. This move, not only allowed him to show that one cannot speak of progress in science, but also to characterize the scientific enterprise more precisely, thus reaching the radical conclusions mentioned above.

To argue for these claims, it is useful to start from the fact that in the late 19th century several German-speaking thinkers brought forward a radical historicization of Kantian transcendental aesthetics. Among them, Alois Riegl, the art historian most cited by Feyerabend, claimed that in distinct epochs human beings have 'looked at the world' in different ways. With this in mind, in 1901, Riegl joined what was a long discussion about the Arch of Constantine, which is located in Rome and was dedicated to Emperor Constantine in 315 A.D., rejecting the narratives of decline in art history. In fact, bas-reliefs from two different eras appear in this triumphal arch: some, dating back three centuries earlier, were probably dismantled from

earlier monuments and added as an ornament at the time of the arch's construction. Comparing the bas-reliefs from the two different periods, both Raphael Sanzio (1483- 1520) and Giorgio Vasari (1511-1574) argued that they showed a regression from one artistic era to another. In contrast, Riegl argued that the reliefs of the age of Constantine instead revealed a new way of perceiving space and symmetry rather than an age of regress. For Riegl, the transition from one style to another marked a change in the creative intention of the artist [*Kunstwollen*] as a consequence of a mutation in the worldview of an era. The artist was not looking at an already constituted world, but constructing the world.

STYLES IN ART, STYLES IN THOUGHT

In the wake of these ideas, Feyerabend asserted that 'in art there is neither progress nor decadence, but only different stylistic forms. Each stylistic form is in itself accomplished and obeys its own laws. [...] This conception was founded and developed with great clarity by Alois Riegl in 1901' (Feyerabend, 1984, p. 115). And then he argued that 'they [the sciences] have also developed a number of styles, including styles of verification, and the evolution from one style to another is quite analogous, let us say, to the evolution of art from Classical Antiquity to the Gothic style' (Feyerabend, 1984, p. 154). An example of a transition between two different styles of thinking is that, as Feyerabend puts it, from Homer's 'universe of aggregates' to the 'universe of substances' of Greek philosophy and science, that is, from the way of thinking of mythological writers to that of the early Greek philosophers. When the rational way of thinking of the early philosophers emerged, it brought with it a 'movement tending toward more abstract and schematic concepts' (Paul Feyerabend, 1984, p. 140). Thus, if myth explained God with a series of episodes rich in detail, the new rational thought replaced this wealth of description with 'a concept of power, or being' (Feyerabend, 1984, p. 141). New ideas or concepts thus emerged, such as that of 'soul'. In fact, the man of Homer's time had no unified concept of what we call 'soul' or 'personality' (Feyerabend, 2016 [2009], p. 71). In Feyerabend's terminology, that was the transition from a 'universe of aggregates' to a 'universe of substances', one in which an aggregate of events,

actions, descriptions was replaced by an abstract concept.

Moreover, for Feyerabend 'the strange events described in the myths, as well as the strange creatures with which they populate the world, were *truly perceived* in it' (Feyerabend, 2016 [2009], p. 38). For example, in the mythological way of thinking 'the world really appears to this early thinking as a "You", not as an "It", the sky as a "picture book" rather than a "computation book"' (Feyerabend, 2016 [2009], p. 38) as in the style of rational thinking. Finally, the *method* used by mythological writers to represent the world differed from that of rational thought. This point can be explained with a comparison: 'where Euclidean science used circles, squares, lines, points and the like, the inventors of myths [...] used a story represented in pictorial images' (Feyerabend, 2016 [2009], pp. 37-38). Just as a physical theory introduces a model without being interested in all aspects of what it describes, so a myth may use social or zoological episodes with the purpose of illustrating only some general cosmological structures (Feyerabend, 2016 [2009], p. 38).

In this sense, if on the one hand the Greek gods were an inseparable part of mythological thought, on the other hand the method of representation in rational thought introduced new abstract entities such as circles, squares, lines and points, which were in use in the geometric demonstrations of the Greek mathematicians. The trend toward more abstract concepts determined 'the discovery that with their help new kinds of stories could be told, so to speak new myths with surprising traits. The development of these new myths was no longer subject to the external constraint of a tradition, but was regulated from within, it "followed" by the nature of things' (Feyerabend, 1984, p. 141). Feyerabend alluded to the 'discovery of proof', of which the theorems contained in Euclid's *Elements* are the most emblematic example. Between 410 and 360 B.C. Greek mathematical texts had the peculiarity of consisting essentially of diagrams, that is, graphic representations of geometric figures, of letters, for example those placed at the vertices of a triangle, and words. Logically, these three elements were combined to form logical-deductive chains that provided knowledge of general validity (Netz, 1999). A 'sort of independence' was thus achieved, i.e. a sort of 'development regulated

from within', which 'follows from the nature of things'. 'For the intellectuals of ancient Greece there thus arose [with the emergence of proof] a new and extremely fruitful possibility of finding one and only one truth in the contrast of traditions (Feyerabend, 1984, p. 143). Ultimately, proof is the *criterion of objectivity* that characterized the Greek philosophers' style of thinking, the one on which a community of human beings in Ancient Greece achieved consensus.

The 'birth of rationalism' is thus not a transition from a closed worldview to an open one or from a worldview that is a figment of the imagination to a worldview that is the only one in accordance with truth, as the early Feyerabend believed. On the contrary, for Feyerabend 'science is much closer to myth than a scientific philosophy is prepared to admit. It is one of the any forms of thought that have been developed by man, and not necessarily the best. It is conspicuous, noisy, and impudent, but it is inherently superior only for those who have already decided in favor of a certain ideology, or who have accepted it without having ever examined its advantages and its limits' (Feyerabend, 1993 [1975], p. 129). In summary, for Feyerabend a style of thinking is characterized by new *ideas*, new *methods*, new *goals*, new *perceptions*, and new *criteria of objectivity* (Paul Feyerabend, 2016 [2009], pp. 3-4), and the transition from myth to logos can be seen as the transition from one style to another. The scientific enterprise thus becomes a succession of autonomous and independent styles that come about over time with their own methods and criteria of truth. According to Feyerabend, in the history of science it is possible to recognize other styles, such as, for example, that of Aristotelian science and that of Galilean science. Later thinkers such as Canadian philosopher Ian Hacking, also drawing on other sources, developed in more detail the notion of style of thinking in the sciences (Sciortino, 2023).

THOUGHTS BEFORE THE END

Feyerabend died in Genolier, Switzerland, on the 11th of February 1994. In some way, he suggested how we should remember him: 'My concern is that after my departure something remains of me, not papers, not final philosophical declarations, but love' (Feyerabend, 1996, p. 181). Feyerabend wrote this sentence, perhaps one of

the most humane ever written by a philosopher, in the clinic, in his last month of life, when he was partially paralyzed by a brain tumor and was being cared for by his wife Grazia Borrini. In those same pages, he explained that by 'love' he did not mean ideals such as 'love of truth' or 'love of humanity'. If anything, he alluded to that complex of actions, gestures, expressions and behaviors directed toward a human being whom one wishes to help and support along a lifetime. Love thus understood had nothing theoretical or universal about it, it was for Feyerabend a concrete gift granted only to some lives because it depends on accidents such as parental affection, some kind of stability, friendship, and—following therefrom—on a delicate balance between self-confidence and a concern for others' (Paul Feyerabend, 1996, p. 209). Feyerabend felt that he received that gift in the latter part of his life and preferred to be remembered more for a gesture of love than for writing in defense of an abstract ideal. ■

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