

Historical-Critical Dictionary of Marxism

Empiricism

A: imbrīqīya. – G: Empirismus. – F: empirisme. – R: empirizm. – S: empirismo. – C: jingyan zhuyi 经验主义.

‘Empiricism’ is often employed in a way which is either vague or ambiguous. Indeed, it might be best to speak of ‘empiricisms’, united by various ‘family resemblances’ (Wittgenstein), rather than of ‘empiricism’ *simpliciter*. However, the term is deeply entrenched in the philosophical vocabulary, and it is necessary to come to an accommodation with this fact.

In the broadest terms, there are two very different areas of usage: one comprises various philosophical doctrines which may be called, collectively, ‘mainstream’ empiricism, embracing a number of significantly different variants, both traditional and modern; and the other is a conception of knowledge thus designated originally by Louis Althusser.

1. *Historical Sources of the Term ‘Empiricism’.* The etymological source of empiricism is the ancient Greek word *empeiria*, meaning ‘experience’, normally employed in a favourable sense (e.g., Aristotle *EN* 1143b11), but also used, often disapprovingly, of a practice denied to be a skill or craft because it lacks a theory (e.g., Plato *Grg* 463b), especially with regard to medicine (e.g., Plato *Laws* 857c). Some physicians, however, accepted the name, calling themselves *empeirikoi* (Celsus, *De med.*, Praef.), and their doctrines *empeirike* (Pliny, *HN* 29, 5).

‘Empiricism’ was used in seventeenth and eighteenth-century English in a generally unfavourable sense. Samuel Johnson defines it in his great *Dictionary of the English Language* (1755) thus: ‘Dependence on experience with-

out knowledge or art; quackery’. Though there are anticipations in Leibniz, the term ‘empiricism’ seems to have been introduced into the vocabulary of philosophy by Kant, in the *Critique of Pure Reason*.

Though the word ‘empiricism’ occurs in the *Critique of Pure Reason* first at B 494, an explicit explanation of it is not given until B 882, where Kant distinguishes ‘in respect of the origin of the modes of “knowledge through pure reason” two trends, one holding that ‘they are derived from experience’, the other claiming that ‘in independence of experience [...] they have their origin in reason’. The first are called ‘*Empiristen*’, of which the ‘chief’ is Aristotle, with Locke being cited as belonging to this school ‘in modern times’. The distinction made here ties up closely with what is said at B 1: ‘There can be no doubt that all our knowledge begins with experience. . . . But though all our knowledge begins *with* experience, it does not follow that it all arises *out of* experience’.

It may be said that for Kant ‘empiricism’ is the doctrine that all knowledge not only ‘begins with’ experience, but also is ‘derived’ or ‘arises out of’ experience. Put negatively, it is the claim that no knowledge of the truth of ‘synthetic’ statements (ones whose truth-value cannot be derived from the meaning of the terms used; cf. A 6–7) has its ‘source’ otherwise than in ‘experience’.

2. The history of empiricism displays a *materialist* and also an *idealist* tendency. A fundamental historical and systematic distinction between these two tendencies is often obscured in bourgeois historiography of philosophy. An important source for the correct understanding of the situation here is Marx’s remarks on the history of materialism in *The*

Holy Family (MECW 4, 124 et sqq.; cf. also Hegel's in many ways perceptive treatment in his *History of Philosophy*).

Empiricism, in modern times anyway, began life, particularly in the doctrines of Francis Bacon (e.g., *Novum Organum*, 1623), Pierre Gassendi (e.g., *Syntagma Philosophicum*, 1658) and Thomas Hobbes (e.g., *De homine*, 1658), as a *materialist* trend, in the context of the rise of modern natural science and the accompanying revival of ancient atomism, a trend associated with a basic critique of the cognitive pretensions of the received metaphysics. Important aspects of this are well described by Hegel at the beginning of his treatment of empiricism as the second of three basic 'attitudes of thought to objectivity' in the *Shorter Logic*: 'Partly it was the need of a concrete subject-matter, as a counterpoise to the abstract theories of the understanding, which is unable to advance unaided from its generalities to specialisation and determination. Partly, too, it was the demand for something fixed and secure, so as to exclude the possibility of proving anything and everything in the sphere, and according to the method, of the finite formulae of thought. Such was the genesis of empirical philosophy, which abandons the search for truth in thought itself, and goes to fetch it from experience, the outward and the inward present' (§ 37).

John Locke's work (especially his *Essay Concerning Human Understanding*, 1690) occupies a crucial place in the further development of this trend. Kant remarks that 'Locke... after having derived all concepts and principles from experience, goes so far in the use of them as to assert that we can prove the existence of God and the immortality of the soul with the same conclusiveness as any mathematical proposition – though both lie entirely outside the limits of possible experience' (B 882 et sq.; cf. B 127). It is true that Locke wished both to provide a theory of knowledge adequate for the new natural science, including a critique of much traditional metaphysics (e.g., the theory of 'innate ideas'), and also to do this consistently with central tenets of Christian religious belief. However, what is crucial is the problem embedded in Locke's fundamental epistemological concept of the 'idea'. Locke uses this

term to designate the primary building block of knowledge. As such Locke presents it as both (1) *representing* the 'substance' = matter which causes it, but also (2) an essentially *subjective* entity.

(1) is a *materialist* tendency in Locke, strongly criticised by idealists (during Locke's lifetime especially by Leibniz (*Nouveaux essais sur l'entendement humain*, 1704–5)). It flowed into the eighteenth-century French Enlightenment, especially Diderot (*De l'Interprétation de la nature*, 1753), and thence into modern materialism. However, (2) is an *idealist* tendency: as was shown with brutal definitiveness by Bishop Berkeley (*The Principles of Human Knowledge*, 1710). Insofar as 'ideas' are purely subjective states of individuals, they make knowledge of – even meaningful reference to – 'substance' impossible. Berkeley used this effectively to eliminate the latter with the aim of defending theism. David Hume (*A Treatise of Human Nature*, 1739–40) completed the development by showing that the latter was also ruled out by Berkeley's own critique of Locke. It is this tendency which tended to become identified subsequently with empiricism.

3. Hume's version became the 'classical', 'paradigmatic' form of what may be called 'strict' empiricism. Variants of this (often mixed with elements inconsistent with it) made up a central strand in nineteenth and early twentieth-century philosophy, for example, in John Stuart Mill (1843, 1865), Ernst Mach (1905) and William James (1912), reinforced by the version entitled 'positivism' by Auguste Comte (1849). (For a more nuanced view of the latter's work, see Macherrey 1989.) It took on a new lease of life in early 'logical positivism'/'logical empiricism', which reformulated classical strict empiricism with the means afforded by modern logic. 'Constructive empiricism' is a much discussed contemporary relative of strict empiricism (van Fraassen 1980).

Consistent strict empiricism assumes a sharp and fundamental distinction between two sorts of admissible synthetic statements. (1) The basic sort comprises ones which refer exclusively to, and can therefore be validated solely by, immediate, non-inferential experience of sensory particulars. (2) The second

sort, whilst it may contain putatively referring expressions not included in (1) (e.g. 'subatomic particle'), and may also be of unrestrictedly general form (e.g., 'laws of nature'), must be semantically reducible to/inductively inferable from (1).

This is the sort of empiricism to which **Hegel** is obviously referring when he writes: 'the Empirical School elevates the facts included under sensation, feeling, and perception into the form of general ideas, propositions, or laws. This, however, it does with the reservation that these general principles (such as force) are to have no further import or validity of their own beyond that taken from the sense impression, and that no connection shall be deemed legitimate except what can be shown to exist in phenomena' (*Shorter Logic* § 38).

Strict empiricism was early strongly criticised by, for example, **Thomas Reid** (in his writings from 1764 onwards; cf. **Reid** 1846), and soon afterwards by, among others, **Kant** (who nevertheless acknowledged its crucial influence on him) and **Hegel**. **Kant's** critique was continued especially by the 'Marburg' school of Neo-Kantianism, most effectively by **Ernst Cassirer**, in both historical (1907) and systematic (1910) contexts. Related to **Hegel's** critique was that by representatives of English 'Absolute Idealism' (mainly **Green** 1874, and **Bradley** 1883). Other attacks came from some varieties of American pragmatism (C.S. **Peirce** 1868, **Dewey et al.** 1903) and from phenomenology (**Husserl** 1900). The development of logical positivism/empiricism touched off a new round of criticisms from various standpoints: K.R. **Popper's** 'falsificationism' (1935), essentially intra-empiricist ones (e.g., **Russell** 1948), so-called 'linguistic' philosophy in its very different variants (e.g., **Wittgenstein** 1953, **Austin** 1962), the pragmatism of **Dewey** (1938), **Quine** (influenced by pragmatism), **Feyerabend's** 'epistemological anarchism' (1967, 1981), and **Sellars's** realism (1963). See also **Chomsky's** (1966) distinctive critique of the behaviourist variant of strict empiricism as it occurs in the theory of language acquisition. These criticisms include, but are by no means exhausted by, the following:

First, it was early argued, for instance, by **Hegel** in the *Phenomenology of Spirit*, that

there can be no knowledge of pure sensory particulars of the sort assumed by strict empiricism. (b) This aside, it was urged by many that at least there was no purely sensory knowledge independent of the theoretical elements which the latter was meant to ground, that is, in one later terminology, that there is and can be no class of 'theory-free' observation statements, and that the latter are always 'theory-laden'.

Second, it has been further argued that even if it were possible to have knowledge of a purely sensory domain, it is not possible to justify other sorts of putative knowledge in terms of this; that is, that strict empiricism implies general epistemological scepticism about, for instance, the existence of an external world and laws of nature. Indeed, **Hume** himself made no secret of this. (Furthermore, in an example of astonishing intellectual honesty, **Hume** had admitted, in an appendix to his *Treatise*, that he could give no account in these terms of the self which allegedly senses these particulars, though this did not prevent him from continuing to assume, in later works, that this was possible.) However, it was emphasised by both **Kant** and **Hegel**, who writes, for instance: 'in what we call experience... there are two elements. The one is the matter, infinite in its multiplicity, and as it stands a mere set of singulars: the other is the form, the characteristics of universality and necessity. Mere experience no doubt offers many, perhaps innumerable, cases of similar perceptions: but, after all, no multitude, however great, can be the same thing as universality. Similarly, mere experience affords perceptions of changes succeeding each other and of objects in juxtaposition; but it presents no necessary connection. If perception, therefore, is to maintain its claim to be the sole basis of what men hold for truth, universality and necessity appear something illegitimate: they become an accident of our minds, a mere custom, the content of which might be otherwise constituted than it is' (*Shorter Logic* § 39).

6. 'Broad' Empiricism. It was largely as a response to problems of this sort that there developed what may be called a 'broad' empiricism, in the work of **David Armstrong**, **Richard Boyd** or **Wilfrid Sellars** (to name only some),

which sought to preserve the main thrust of the original 'strict' form without being subject to the difficulties which had been shown to beset it. Such a broad empiricism differs from strict empiricism in, *inter alia*, one or more of the following ways: *first*, it is not necessarily assumed that there is a set of completely theory-free observation statements; it is claimed only that reference to sensory observation is the ultimate court of appeal in assessing claims to (synthetic) knowledge; *second*, it may be allowed that claims about what is apparently unobservable need not be semantically reducible to what is observable, but may be about what they seem to refer to (e.g., subatomic particles), so long as the condition stated in the first condition is observed; *third*, the idea that what is not more or less directly observable may be *inferred*, either deductively or non-deductively (inductively) from what is, may be replaced by the idea that hypotheses about the former may be arrived at in many different ways and need only be ultimately *tested* by reference to the latter in accordance with the first condition (the 'hypothetico-deductive' approach).

Critiques of various aspects of 'broad' empiricism include those by **Kuhn** (1973 [1962]), **Putnam** (1990), **Rorty** (1979), and by various contributors in **Weinert** (1995).

'Restricted' empiricism. An even further extension of the meaning of the term 'empiricism' is required if it is to embrace various positions which have certain elements in common with both strict and broad empiricism but also various important dissimilarities. For instance, Pierre **Duhem** was an empiricist as regards his account of scientific knowledge (1906), but combined this with religious belief by making the latter a matter of faith, rather than of knowledge in the scientific sense. Again, the early **Wittgenstein** was, in effect at least, an empiricist as regards anything which was significantly sayable, but held that there were truths which were not so sayable, belonging to the realm of 'the mystical' (1922, 6.44, 6.45, 6.522).

4. The treatment of empiricism in the philosophical line stemming from **Marx** is in the

first place a critical reception of strict empiricism, in general very similar to that resulting in broad empiricism. In a letter to **Marx** of 19 November 1844, discussing their future polemics, **Engels** writes: 'We must take our departure from empiricism and materialism' (*MECW* 38, 10), thus clearly using 'empiricism' in the sense of 'experimental science', the idea of which was ascribed to **Bacon** in the exactly contemporary *The Holy Family* (*MECW* 2, 125). In the *German Ideology* there is a simple affirmation of the distinction between, on the one hand, what seems to be the case on the basis of 'imagination' (in particular where this is infected by 'ideology') and, on the other hand, what is revealed as empirically verifiable by 'empirical observation... without any mystification and speculation' (*MECW* 5, 35). This is echoed, verbally anyway, by the distinction in the 'Preface' of 1859 between 'ideological forms' and what is verifiable 'with the prevision of natural science' (*MECW* 29, 263). That forgets the concept of mediation, central for the dialectical knowledge of the critique of political economy.

Engels criticised ('strict') empiricism in three ways: *first*, he underlines the scepticism that is necessarily associated with a Humean position, as regards the external world and causality; *second*, connected with this is his critique of inductive inference, essentially in favour of a 'hypothetico-deductive' conception; and *third*, he criticises the idea of 'theory-free' observation. 'Exclusive empiricism, which at most allows itself thinking in the form of mathematical calculation, imagines that it operates only with undeniable facts. In reality, however, it operates predominantly with traditional notions, with the largely obsolete products of thought of its predecessors... This kind of empiricism is as credulous towards the results of the thought of its predecessors as it is sceptical in its attitude to the results of contemporary thought. For it, even the experimentally established facts have gradually become inseparable from their traditional interpretations' (*MECW* 25, 423).

Lenin's critique of a variant of empiricism, namely, 'empirio-criticism', relied heavily on **Engels's** notion of knowledge as an 'Abbild'

or 'Spiegelbild'. This critique determined the main lines of the Marxist-Leninist 'Diamat' approach to empiricism.

More contemporary criticisms of empiricism from a Marxist direction, or from one at least sympathetic to Marxism, include D. and J. Willer (1973), Hindess (1977), Doyal and Harris (1986), and Miller (1987). However, certain currents, especially in Italian Marxism (e.g., Preti 1957), have tended to some degree of *rapprochement* with logical positivism/empiricism.

5. The complexity of the question of Marx's theories of science has only recently been opened up (e.g., Han 1995). These have been picked up and developed, originally by Althusser, in conjunction with other ideas to be found in Marx, to produce a critique of 'empiricism' in an idiosyncratic sense (though it covers, *inter alia*, all forms of traditional empiricism), from the point of view of a fundamentally different account of knowledge.

In the 'Introduction' of 1857 Marx writes (MECW 28, 38): 'It would seem right to start with the real and concrete, with the actual presupposition. . . . Closer consideration shows, however, that this is wrong. . . . If one were to start with. . . a chaotic conception of the whole. . . through closer definition one would arrive analytically at. . . more and more tenuous abstractions'. Rather, science has to do with an 'assimilation and transformation of perceptions and images into concepts', by means of which a 'thought concrete' may be constructed, which is different in kind from the real concrete but enables knowledge of it.

Althusser takes his point of departure from these hints of a critique of the idea of knowledge as resting on 'Abstrakta' rather than on 'elaboration'. 'The empiricist conception of knowledge presents a process that takes place between a given object and a given subject. . . . The whole empiricist process of knowledge lies in fact in an operation of the subject called *abstraction*. To know is to abstract from the real object its essence, the possession of which by the subject is then called knowledge. Whatever particular variants this concept of abstraction may adopt, it defines an invariant

structure which constitutes the specific index of empiricism' (Althusser 1996, 33).

On this understanding of it, 'empiricism' applies, in effect, to all except nominalist philosophies of knowledge. (Cf. Marx: 'Nominalism, the first form of materialism'; MECW 4, 127). It applies paradigmatically to Aristotle with his conception of the 'bringing to [*epagoge*]' (e.g., *Top* 105a13) the knowing subject, by means of the latter's mental faculty (*nous*; e.g., *EN* 1140b35, 1141a7), of universals buried, as it were, in the sensible domain [*empireia*] (universals 'in re' in mediaeval terminology). But it may also be said to cover those more usually called 'empiricists' with their idea of the mind's formation of concepts by abstraction of intrinsic similarities between sense-contents (e.g., Hume, *Treatise* I.ii.7). In other words, Althusser rejects what is *common* to most empiricist and non-empiricist philosophies of knowledge, in the more ordinary sense of 'empiricist'.

Althusser (e.g. 1996, 40–7) replaces the basic subject-object set-up of empiricism in his sense and its associated picture of the former's 'extracting' something already present in the latter, by the idea of a process of 'production' of knowledge, modelled on Marx's analysis of the labour process in *Capital*.

6. As a philosophical ideology, empiricism has served different and sometimes conflicting goals. Empiricism began life, especially in its English forms (Bacon, Hobbes) as a materialist weapon of *Aufklärung* and continued to have this role in its eighteenth-century French developments. In its idealist form, Berkeley used it to *attack* materialism and its consequences, in particular 'Atheism, and Irreligion' (part of the subtitle of *Principles of Human Knowledge*). However, Hume, also in this tradition of empiricism, employed its sceptical consequences precisely *against* religious belief in general, especially in his *Dialogues concerning Natural Religion* (finished in 1776, posthumously published 1779). This ambiguity in the ideological thrust of empiricism continued. For example, at the turn of the twentieth century, both Ernst Mach and Pierre Duhem defended different variants of empiricism,

yet the first used the latter in the tradition of the *Aufklärung*, whilst it served the second to defend religion by drawing round it an epistemological *cordon sanitaire*.

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Wal Suchting

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Abstract/concrete, appearance, contemplative materialism, dialectical materialism, empirical research/theory, epistemology, essence/appearance, evidence, experience, experiment, fact, falsificationism, idealism, image, knowledge, materialism, mediation, objectivism, positivism, reflection, scepticism, speculation, subjectivism, subject-object, theory of knowledge

Abbild, abstrakt/konkret, anschauernder Materialismus, dialektischer Materialismus, Empirie/Theorie, Epistemologie, Erfahrung, Erkenntnis, Erkenntnistheorie, Erscheinung, Evidenz, Experiment, Falsifikationismus, Idealismus, Materialismus, Objektivismus, Positivismus, Skepsis, Spekulation, Subjektivismus, Subjekt-Objekt, Tatsache, Vermittlung, Wesen/Erscheinung, Widerspiegelung