

*A Marxist on the history of empiricism*<sup>1</sup>  
(Notes by Chris Wright)

Reading George Novack's *Empiricism and Its Evolution: A Marxist View* (1968). It's a flawed book, but it does contain a lot of useful material.

Starts out by noting that "empiricism" has a twofold meaning: empirical habits of thought and investigation (scientific investigation), and the empiricist philosophy of Locke and his successors. The latter wasn't totally original. "Some earlier philosophers had taught that human knowledge must be based on sense experience. Among the Greeks, thinkers who were otherwise so unlike as Democritus and Aristotle assigned the primary role in the process of knowledge to sense experience. Even such eminent schoolmen as Thomas Aquinas and Albert the Great aspired to develop their science of nature through a rational interpretation of sense experience rather than on Christian revelation." Novack continues: "However, except for the Atomists, these ancient and medieval schools did not make the origin of knowledge in sense experience the governing principle which was central to their whole system of thought. That was the epoch-making innovation of Locke and his successors."

Both empiricism and the modern science on which it was based and from which it took inspiration were essentially progressive forces, intimately connected to and caused by "the bourgeois transformation of Western society." For instance, empiricism helped destroy the obsolete categories of scholastic thought (feudal thought, Catholic thought), thus helping to accomplish in the realm of theory and ideology what capitalism was accomplishing in the realm of the economy and politics, namely the overcoming of the old regime and liberating of the potential of human knowledge, technology, productivity, and sheer individuality. This whole *empirical* way of thought and behavior, which in its skeptical and inquisitive essence was intrinsically opposed to old authorities and shibboleths, became the spirit of the Enlightenment—which was the spirit of freedom, reason, criticism, science, universality, rebellion. In this sense empiricism, emerging organically out of the growing capitalist economy and its scientific and technological offshoots, was an absolutely essential world-historical force.

But I'd say that the anti-innatist, anti-rationalist doctrines of this tendency of thought—that the mind/brain doesn't bring very much to experience but is somewhat passive and easily moldable—(notions that are radically false, as cognitive science has shown) gradually became anti-progressive and useful to authoritarianism later on, in the twentieth century. As Chomsky says, "If in fact man is an indefinitely malleable, completely plastic being [as empiricism holds him to be], with no innate structures of mind and no intrinsic needs of a cultural or social character, then he is a fit subject for the 'shaping of behavior' by the state authority, the corporate manager, the technocrat, or the central committee."<sup>2</sup> So, while empiricism originally became dominant as a tool of the struggle against reactionary old authorities such as the Church, it has persisted, in various forms (e.g., behaviorism), among intellectual and political circles perhaps in part because it became *useful to state-capitalist* authorities, whether in the Soviet Union or in the U.S.

In any case, Novack is right that "since the seventeenth century, empiricism, in one form or another, has been the major philosophy of the English-speaking peoples on both sides of the Atlantic." Evidently it is the preferred philosophy—or one aspect of the preferred philosophy—of capitalism. As Novack goes on to say, "From Bacon to Hume, it acted as a powerful stimulant

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<sup>1</sup> See also [these notes](#) on the history of modern philosophy.

<sup>2</sup> Anthony Arnone, ed., *The Essential Chomsky* (New York: The New Press, 2008), 89.

to progress in Western thought. It challenged medieval ideas, shattered scholasticism, dislodged many props of feudal theology, and undercut established modes of idealism. It sought to devise a new logic and a more fruitful method of investigation of natural phenomena, of society, and of the reasoning processes to replace the formalized logic and sterile speculations of the scholastics. It aided the revival of materialism and helped clear the ground for the growth of the natural and social sciences.”

Francis Bacon “may be regarded as the father of British materialism and the grandfather of empiricism.” For one thing, he severed natural philosophy from religion, by arguing that humans could know God’s nature only through revelation, not reason or sensation. So science was allocated its own autonomous territory, “in which it could expand more freely.” Ultimately this separation of science and philosophy from theology undermined the theological foundations of religious dogmas, “and so cleared a path for materialist and even directly atheist conclusions.”

Bacon’s experimentalism, inductivism (as opposed to scholastic deductivism), and materialism—matter was “indestructible, self-moving, ever active, and constantly changing,” and not interfered with by God (who had created the universe but then left it to its own devices)—inspired later developments. He conceived the main function of philosophy not as providing arguments for religious dogmas but as serving the practical needs of mankind. As for empiricism:

For Bacon, experience, based upon what we learn through the senses and aids to the senses like the telescope, was the sole valid source and sure road to useful knowledge. Unlike most of his empirical successors, he did not interpret sensuous experience as primarily passive. He was one of the first to emphasize that the acquisition of knowledge had its active side in the manipulating and shaping of objects as is done by a craftsman. It is through such practical activity that the senses disclose the essential features of nature to us.

Later on, “the materialism he pioneered acquired an aristocratic and monarchist form in the hands of his companion Thomas Hobbes and a plebeian and democratic expression in the Leveller leader, Richard Overton (1597–1663).”

Novack’s discussion of Locke is inadequate, but he does make a few suggestive remarks. In particular, he traces Locke’s general tendency to stake out a *middle* position to his role as an ideologist for the British bourgeoisie. For example, “the victorious bourgeoisie [after the Glorious Revolution] needed institutions of the Christian faith to uphold their regime, just as they had to foster natural science to promote their material interests. But they could not maintain the same sort of religion as the absolute monarchy. They sought a religion tailored to their special requirements, a utilitarian Protestantism which blessed the union of Church and State, tolerated a certain degree of nonconformism, and reconciled the new findings of physical science with the religious viewpoint.” Locke was their spokesman. In *The Reasonableness of Christianity* he discarded some objectionable doctrines, such as the Trinity, and retained others. He argued for religious toleration—except for Catholics and atheists (threats to the bourgeoisie from opposing sides). Like Boyle and Newton, he defended the idea of God as the efficient cause of the universe—which proved an unstable compromise between religion and science, a compromise that opened up the possibility for later mechanists like Laplace to discard the idea of God entirely. (“Sire, I have no need for that hypothesis,” Laplace answered when Napoleon asked him what place God had in his system.)

“Locke’s positions that substance exists (even though it cannot be intimately known), that sensation is the basis of knowledge, and that matter might think, were closely akin to materialism. These elements in Locke’s philosophy encouraged more thoroughgoing materialist conclusions. His influence in that direction can be most clearly seen in the writings of John Toland, of the deist Anthony Collins, and in the sensationalist and materialist schools of eighteenth-century France. [But the scholar Jonathan Israel argues, plausibly, that *Spinoza* had much more to do with this later materialism than Locke did.] But Locke himself did not take a stand firmly and fully upon materialist grounds.”

A rather un-empiricist notion of the empiricists from Locke to Hume was that the highest type of knowledge came not from sense experience but from the direct intuition of the mind: most obviously in the case of mathematics. (But for Locke, moral truths too were as unassailable as mathematics.) Empirical ideas gave only probable knowledge. This argument, of course, is very Cartesian. As is Locke’s idea that we have intuitive certainty only of our own existence: external existence “is not altogether so certain as our intuitive knowledge, or the deductions of our own reason employed about the clear abstract ideas of our own minds.” As Novack says, it isn’t difficult to arrive at Berkeley’s subjective idealism from this starting point.

Locke’s general atomism obviously correlates with the atomism of capitalism:

[Locke’s “separatism” runs all through his mechanical empiricism.] In his view of nature only particular things exist; in society the isolated individual is the primary reality; in the human mind simple self-sufficient ideas are the basic units out of which knowledge is compounded.

Since Locke starts with dissociated particles, individuals, and ideas, the problem then arises in all the domains of existence: how do these originally independent entities come together? The single principle of unification in his empiricism is mechanical aggregation by way of arithmetical addition. The atoms constitute material aggregates which have only external relations with one another; individuals combine into social groupings and set up governments by means of a contract; the simple ideas which are the elementary components of thought make up complex ideas by way of association.

Empiricism can take either materialist or idealist forms. The French sensationalists of the Enlightenment, including Diderot, Condillac, La Mettrie, Helvétius, and Holbach, developed its materialist side; Berkeley went in the other direction. Proceeding from Locke’s argument that the mind “has no other *immediate* object but its own ideas,” from which it follows that physical objects are not directly experienced but are only inferred from our impressions and ideas, Berkeley simply dropped the concept of external objects. This was especially easy to do since Locke had conceived of matter as essentially passive and inert (a conception with which John Toland disagreed, in 1704). “How could so passive a cause produce the diversity of perceptions that people experience, Berkeley asked.”

Hume, of course, built on Locke and Berkeley to show how their empiricism leads inexorably to a thoroughgoing skepticism. Berkeley had denied that we have any abstract general ideas such as substance or triangle or whatever; we have only particular ideas, because everything we encounter in sense is particular. Hume essentially took over this argument. Whatever wasn’t given in perception couldn’t be an object of knowledge. We can’t know if there’s an external world independent of our senses; we can’t know if a substantial self exists, since we don’t encounter it in our inner perceptions; we can’t know if God exists or the soul is

immortal. Our idea of causation has no objective basis. “When we examine our sense perceptions,” Novack paraphrases, “they do not provide any evidence that one event has any necessary or essential connections with one another or that one thing is instrumental in producing another. All that our experience enables us to say, or our reason to know, is that one thing follows another or accompanies another. But there is nothing given in our impressions to warrant the conclusion that one is the cause and the other the effect.” We’re not acquainted with *necessity* in our experience. We simply instinctually *imagine* that we are. (In modern language, we’re genetically programmed to believe all these ideas, or to have all these cognitive structures, that Hume finds problematic.)

It seems to me that, even if one rejects much of empiricism, this skepticism is still unavoidable. I can’t see that Hume is wrong when he says, “Let us fix our attention out of ourselves as much as possible; let us chase our imaginations to the heavens, or to the ultimate limits of the universe; we never really advance a step beyond ourselves, nor can we conceive of any kind of existence, but the perceptions which have appeared in that narrow compass. This is the universe of the imagination, nor have we any idea but what is here produced.” One may disagree with the last sentence, since we surely *do* have “ideas” that don’t arise from perception but that we *bring to* perception (as rationalists and cognitive scientists argue), but the general Cartesian and Lockean conception that in a sense we’re imprisoned within ourselves seems obviously true, being confirmed by science. The brain constructs our experience; we’re aware only of what the brain has produced. Thus you get skepticism about the external world and so on. Of course, there must *be* an external world, and we might as well imagine it to be as science describes it, but still, its existence can’t be *proven*.

“Hume’s skepticism laid the basis for phenomenalism, positivism, empirio-criticism, pragmatism, agnosticism and similar mutations of empirical doctrine which were developed in the nineteenth and twentieth centuries.” But I’d say it’s certainly possible to admit the irrefutability of skepticism while yet rejecting all these positions.

“Hume also laid the basis for the subsequent pragmatic conception of knowledge by treating ideas as habits or rules of behavior adopted for the practical needs of getting along in the world. In place of the ‘correspondence theory of truth,’ that ideas are valid if they agree in content with their objects, he put forward what can aptly be characterized as the ‘opportunist theory of truth.’ Since our most cherished ideas cannot find a basis and backing in an independent reality then we must treat as true whatever enables us to get along best in everyday affairs. Truth, then, is determined not by the unity of the content of ideas with their references in the external world, but by purely practical considerations of expediency in conduct.”

Positivism, too, was grounded in Humean considerations: for, if we doubt that underlying reality can be understood, it makes sense to focus just on collecting data and drawing superficial connections rather than looking for the fundamental causes behind appearances. In a sense, Hume’s views on substance and causality swept away the foundation of natural and social science—which of course is why they so disturbed Kant. They also led to the idealism of later empiricists such as John Stuart Mill, Ernst Mach, and eventually [the logical positivists](#).

Mill, for example, defined matter as “the permanent possibility of sensation.” As Novack says, “This is a considerable retreat from Locke’s views on the reality of objects in the external world. Mill made the existence of objects depend upon the *possibility* of their being perceived by us. This is a concession, not simply to Hume’s skepticism, but to Berkeley’s idealism which made the existence of objects depend upon their being *actually* perceived by us. Indeed, Mill did not hesitate to proclaim his agreement with Berkeley’s school of subjective idealism.” A. J. Ayer, among other logical positivists, later adopted Mill’s definition of matter.

And yet at other times Mill seemed to accept that there is an external world in which we are implanted, and which science investigates. As the Stanford Encyclopedia's article on Mill says, "Mill's claim that the process of science involves finding the structure *already present* in nature seems at least in tension with [his idealism]." Yes, very much so! The two positions are obviously contradictory. But Mill's contradictory stance was that of many empiricists—even though I don't see any reason why, from their Lockean premises, they were logically bound to adopt idealist positions.

"Mill's phenomenalism led on to the empirio-criticism and positivism of the late nineteenth and twentieth centuries. These tendencies, starting from the premise that objects are nothing but combinations of sense data, cast doubt on our ability to know material reality and culminate in all kinds of quasi-idealistic conclusions." Again, I don't see why accepting the obvious premise that our experiences of objects are "nothing but combinations of sense data"—constructions out of the sensory input the brain is given—necessitates idealism. As for our ability to know material reality, it *is* limited and uncertain. Obviously. The 'paradoxes' and incredible theories of quantum mechanics and relativity, which are scarcely intelligible to the human brain, are enough to prove that. In this sense, Hume—and Locke (who was skeptical about humans' ability to understand everything)—was right. And Novack's scorn for the notion that human knowledge is necessarily limited is stupid.

Mach was another idealist. "Mach passes over from the proposition that *knowledge* consists of nothing but sensations to the quite different assertion that the *world* consists solely of our sensations. His non-materialist standpoint can be gauged by the following assertion regarding bodies on the natural world. 'To claim that there are in nature the objective counterparts of this conceptual apparatus is an unjustifiable piece of metaphysics; we may find the concept of a body, for example, useful, but we must not allow ourselves to think that there are bodies in the natural world; we experience only sensations.'" Idiocy.

Novack continues:

Over the past three centuries, the empirical school has exhibited an ever stronger impulsion to break loose from the moorings in material reality already attenuated in Locke's philosophy and thrash about in a cloudland of self-enclosed sense-data divorced from the external world... The immense distance that latter-day empiricism has traveled from its pristine association with materialism can be measured by contrasting the view of Hobbes and Mach. Hobbes defined philosophy as reasoning about causes and effects generated by matter in motion and known through sensation and computation. Mach denied that causation was anything more than a conventional and convenient idea [Bertrand Russell, too, cast doubt on the notion of causation], and he was dubious about the capacity of sensations to reach beyond themselves and convey knowledge of an objective world.

In the latter respect, Mach's doubt was well-founded. Sensations in themselves don't necessarily convey accurate knowledge of an external reality (for they're constructed by the brain and aren't really *copies* of anything). For that, we need science.

I'll skip over Novack's uninteresting and confused discussions of Marxism, dialectical materialism, supposed negative effects of "empiricism" on the labor movement, etc. I'd concede to Novack only that empiricism and positivism are indeed suited in many ways to capitalism and opposed both to a radical social science and to advancing the cause of labor. (Superficial

investigations of phenomena, atomistic conceptions of society, etc.) See [my notes on E. P. Thompson's \*The Poverty of Theory\*](#). Novack isn't wrong that "empiricism instills and encourages many harmful habits of thought, [including] inconclusiveness, relativism, impressionism, eclecticism, subjectivism, and skepticism." (What does he mean by impressionism? "Impressionism relies upon personally enclosed or otherwise narrowed experiences as the practical standard for appraising and analyzing phenomena.") A rejection of positivism—liberalism—and its conservative preference for "piecemeal social engineering" can only be good for the cause of radical social change.

Novack's critique of pragmatism is mildly interesting. He argues that "pragmatism is essentially a belated and updated branch of the empirical tradition... Empiricism, pragmatism, and instrumentalism, or its variant, 'operationalism,' represent three consecutive phases in the evolution of the same trend of thought. Empiricism was the matrix, the rudimentary and general form from which pragmatism sprang, while Dewey's instrumentalism is the highest expression of pragmatism."

The pragmatists were unhappy with the state of empiricism in the late nineteenth century. They thought its account of the process of acquiring knowledge kept the body and its senses far too passive: they were pictured as inactive recipients or reflectors of whatever was pressed on them from outside. (The earlier German idealists, products of Kant and early Romanticism, had criticized empiricists along the same lines, as ignoring the active powers of sensibility and thought.) Second, pragmatists thought original empiricism was unhistorical and non-evolutionary. They embraced the idea of biological evolution and emphasized the biological origins and nature of mental phenomena. But "an even deeper defect of classical empiricism was its failure to explain the influence of the *social* environment and its changes upon the origin and evolution of man's knowledge." Unlike Bacon, Locke, and Hume, pragmatists interpreted human nature as plastic and variable, dependent in some respects on the forms of a given society. Dewey was the most profound here, but even he didn't grasp the essence of the materialist method. He did, at least, "make energetic efforts to overcome [the individualism of classical empiricism] by bringing into his structure of thought the social nature of the conditioning, thinking, and functioning of the separate personality."

The pragmatists took for granted some of the old premises of empiricism, such as the sensory origin of ideas and the nonexistence of innate principles in the mind, and occupied themselves with new questions. "They did not ask, Where do our ideas come from? That was for them a settled question. They inquired, Where do our ideas go to and what are they good for? Instead of asking, How did ideas originate and what are their roots? they asked, What functions do they perform and what effects do they have upon further experience?" William James characterized pragmatism as an attitude of mind, a mode of thought, a point of view, rather than a theory of reality or a system of the world.

Among their contributions was to reject the notion of the British empiricists that sense data are intrinsically isolated. James' psychology, for instance, was much more holistic and phenomenological—"stream of consciousness," etc.—than Hume's. And of course the pragmatic conception of truth was different from, say, Locke's. We separate truth from falsity "not by testing [ideas'] conformity with given realities," Novack paraphrases, "but by conceiving what their effects would be and noting the consequences when we act upon them. If an idea does help us get along in this stream of experience, fulfills our needs, satisfies our desires and demands, then it is true, or rather it becomes true to that extent. 'An idea is 'true' so long as to believe it is profitable to our lives' [James writes]. And 'the true is only the expedient in the way of our

thinking...in the long run and on the whole, of course.” A distinctively American conception, you can see. “Whatever works!”

On one side, the pragmatists fought against idealism; on the other side, they fought against materialism. They tended to reject the objectivity of nature and society, instead trying to unite subject and object: both are formed in interaction. For James, nature depends on experience, not experience on nature. Again, a confused and unscientific notion, as well as inadmissibly idealistic.

James proclaimed himself a “radical empiricist”: “To be radical,” he said, “an empiricist must neither admit into his constructions any element that is not directly experienced, nor exclude from them any element that is directly experienced.” Reminiscent of Hume. And quite a naïve position.

His pragmatic understanding of truth and ideas (as nothing but “working hypotheses”) led him to even greater naïveté in his justification of religion. “We cannot reject any hypothesis if consequences useful to life flow from it... If the hypothesis of God works satisfactorily in the widest sense of the word, it is true.” Wow. Okay. That it’s true *for some people* doesn’t mean it’s *true*! Naïve relativism. (You can see here the seeds of [Richard Rorty’s](#) even more explicitly relativist conception of pragmatism.)

Novack’s conclusion is perceptive: “Despite their departures from classical empiricism in certain respects, the pragmatists did not break away from its prime postulate that what is presented here and now to the individual affords the best insight into the nature of reality. *Pragmatism remained attached to the phenomenology of experience.* [My italics.] The mandates of its method inhibited persistent search for the inner causal connections in the full scope of their evolution which generate the outward appearances of things.” He goes on to say, “James and Dewey...remodeled [the] ideas [of traditional empiricism] to suit the requirements and outlook of the liberal middle-class intellectuals of their day. Indeed, the pragmatic philosophy had the same relation to empiricism as the political program of Progressivism had to capitalism and bourgeois democracy. It aspired to modernize the structure rather than change the foundations.”

The last chapter of Novack’s book, “Materialism and Empiricism Today,” draws some useful conclusions. It reiterates that empiricism, as such, isn’t or needn’t be opposed to materialism—or idealism. It can take both forms, and has often had a heterogeneous and unstable character. Originally, though, especially in the cases of Bacon and Hobbes, it was allied with materialism. Both outlooks defended the new sciences against medieval authorities, feudal obscurantism, idealism and mysticism. With Locke, the potential grew for the two tendencies to come apart (in Berkeley, to some degree in Hume, and in later empiricists): for “his wobbling on the crucial question of the relation of ideas to the objective world [—e.g., primary qualities inhere in substance (which we’re incapable of understanding) but secondary qualities don’t—] dislodged the empirical theory of knowledge from a firm anchorage in reality and left it susceptible to agnostic and idealist uses.” Materialist empiricism continued among French *philosophes* and in radical circles, but

The ascendancy and conservatizing of the bourgeois regimes in the nineteenth century tended to brush aside the more materialist elements and exponents of empiricism and bring the skeptical conclusions of Hume to the fore. His reasonings against the reality of causation, the existence of substance, and the objectivity of scientific knowledge frayed the materialist ties of classical empiricism, made possible a reinstatement of religious belief through irrational

faith, and steered many empiricists onto the paths of agnosticism and, in extreme cases, subjective idealism.

The successes of natural science continued to vindicate materialism, but most British thinkers of the Victorian era refused to be identified with anything so unrespectable.

Since [the mid-nineteenth century], the more popular varieties of empiricism have accentuated their nonmaterialist features. The distance between the two philosophies has been widened by the persistent challenge offered by the systematic materialist teachings of Marxism to all forms of equivocation and confusion on the principal problems of philosophy prevalent among the empiricists. They in turn have defined their positions in more conscious repulsion against dialectical materialism. This antagonism has been most sharply manifested in the social and political arena, where the confrontations between liberalism and socialism, reformism and revolutionary action, have been tied up with adherence to the rival methods of empiricism and positivism or Marxism.

Thus, starting out as intimate associates in the struggle against medievalism, the two schools of thought now stand arrayed against each other in fields extending from method in natural science to sociology and politics.

A classic example of the opposition of sociological empiricism—or positivism—to Marxism is Karl Popper. Again, see my notes on Thompson's *The Poverty of Theory*. Popper was a dogmatic anti-communist liberal idiot who denied that there are any regularities in history, in effect denying that history can teach us anything. "Non-repetitive events are the most striking aspects of historical development," he wrote. All events are unique, etc. Even the not-very-profound Novack has no trouble refuting such a facile and superficial positivism. ("Social relations themselves refute [the idea that history has no reliable regularities]; they are definite types of perennially repeated mutual interactions among men arising from continuous activities of a definite kind." Productive activities, continuously reproduced economic systems, etc.) Had Popper but read any good historical scholarship, he could hardly have maintained his liberal illusions.

On the other hand, there was some justice in his conviction that it's impossible to know where society is headed, impossible to predict the future in the way Marxism tries to. As Chomsky says, society is just too damn complex for us to know how things are going to turn out. In retrospect, it's possible to discern a logic to historical evolution (contrary to what Popper maintains), a logic [grounded primarily in class conflicts](#); but that logic, and the direction of historical progress, cannot be discerned beforehand. In this sense, Popper's critique of Marxism is valid—though commonsensical. But it doesn't entail that revolutionary social movements are misguided or doomed to utterly fail, as he seems to think they are. (Again, evidently he isn't very familiar with history. The French Revolution, for example, didn't totally fail. Nor did the 1848 revolutions, or the English civil war and 1688 revolution, or the Cuban revolution of 1959, etc. Sometimes revolutionary attempts are *necessary* in order to achieve any progress at all.)

Anyway, on the whole Novack's book is useful, despite its naïve Marxist dogmatism. Draws interesting connections, has some useful historical discussions, and gives a few insightful critiques of empiricism.

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