

David Lewis

By Alan Hájek

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David Lewis was one of the most important philosophers of the 20th century working in the Anglo-American analytic tradition. His corpus is extraordinary for its breadth of subject matter and for its systematicity. For both these reasons, it is difficult to do justice to his work in a short space—there are rich interconnections among his myriad writings, and numerous possible entry points. This article approaches Lewis and his work in three passes: first, a biographical tracing of his intellectual influences; second, a summary of his metaphilosophy; third, a survey of his more specific philosophical views, mostly following their order of conceptual dependence.

Intellectual biography

While Lewis was a strikingly original thinker, a number of others helped to shape his eventual intellectual outlook to varying degrees, as he acknowledged. He was born in Oberlin, Ohio in 1941, the eldest child of a professor of Government and a medieval historian. Shortly before his 16th birthday he entered Swarthmore College, where his teachers Jerome Schaffer and Michael Scriven, and such fellow students as Gilbert Harman, Allan Gibbard, Barbara Hall (now Hall Partee) and Peter Unger, were early philosophical interlocutors and influences. Lewis initially planned to major in chemistry. That changed during a year in Oxford in 1959-60, where he was tutored by Iris Murdoch and he attended lectures by Gilbert Ryle, P.F. Strawson, Paul Grice, and J.L. Austin. (Lewis returned to Oxford to deliver the John Locke Lectures in 1984.)

After graduating from Swarthmore in 1962, he went to Harvard University for his doctoral studies under the supervision of W.V. Quine. Lewis's dissertation, which became his first book, *Convention*, was partly a rehabilitation of the analytic/synthetic distinction in the face of Quine's famous rejection of it. Lewis's application of game theory to analyzing conventions, understood as coordination problems, was to some extent inspired by Thomas Schelling (a Harvard economics professor at the time), who had deployed game theory in his study of the strategy of conflict. Lewis was attracted to Goodman's egalitarianism about properties, and to D.C. Williams's four-dimensionalist approach to time, with its analogizing of time to space (and temporal parts to spatial parts). These figures were also fine philosophical writers, and as such they arguably served as models for Lewis, who went on to earn a reputation himself as a master of philosophical prose.

In 1963 he befriended J.J.C. Smart, who visited Harvard from Australia, consolidating Lewis as an 'Australian materialist' about the mind: mental states are physical states—specifically, neurochemical states—that play certain causal roles. An argument for this position is expounded in his first publication, "An Argument for the Identity Theory". In Smart's graduate seminar, Lewis met Stephanie Robinson, whom he married in 1965. Lewis's friendship with Smart led to an ongoing connection with Australia, and annual trips there for thirty years. D.M. Armstrong became a long-time friend and correspondent of Lewis's, playing an important role in what he later described as "a big turning point in my philosophical position": recognizing the distinction between *natural* properties (such as 'green') and gerrymandered properties (such as 'grue').

Lewis was hired by UCLA, working there from 1966 to 1970. The philosophy department was a hot-house for formal semantics, with colleagues such as Rudolf

Carnap, Donald Kalish, Hans Kamp, Richard Montague, David Kaplan, and Barbara Hall Partee, whose collective influence can be discerned in some of Lewis's early publications in the philosophy of language and philosophical logic. He moved to Princeton in 1971, where he was Associate Professor, then Professor from 1973, subsequently holding a series of endowed chairs. Richard Jeffrey's Bayesian decision theory proved influential on Lewis, underpinning his early work on interpretivism in the philosophy of mind, and later work on rational credence and decision.

Metaphilosophy

Lewis's metaphilosophy is intertwined with his first-order philosophy. He takes seriously Quine's maxim regarding ontological commitment—we should regard as existing everything over which we quantify in our best theories—and the pragmatism that underlies his related 'indispensability' argument for mathematical objects. Shades of the indispensability argument are recognizable in the Lewisian doctrine that philosophical positions should be judged by how well their costs trade off against their benefits. Their costs are measured by the extent to which their consequences are unintuitive or in tension with our best science (including mathematics); their benefits are measured by their ability to systematize folk theory and the findings of science. But despite these fundamental regulative roles played by commonsense and science, they are not to be deferred to unquestioningly. Like Carnapian explications, philosophical theories may not perfectly respect our pretheoretical judgments; and science itself (particularly quantum mechanics) may need further refinement. According to Lewis, then, philosophical analysis looks to folk theory, identifies the theoretical roles of target terms in this theory, and looks for best 'deservers' of those words—things in the world that best play the specified roles. To be sure, nothing may

play these roles perfectly; but imperfect candidates may suffice for many philosophical purposes.

The *best-systematization* approach that Lewis exemplifies in his philosophical methodology resonates with some of his more specific philosophical positions. He analyzes *laws of nature*, for example, as the regularities that appear in the true theories of the universe that best balance simplicity and strength. Likewise, he contends that *mental states* should be attributed to others by balancing various standards for best interpreting their behavior.

More of Lewis's regard for science, and perhaps a ghost of Carnapian positivism, underpins his thesis of *Humean supervenience*: "all there is to the world is a vast mosaic of local matters of particular fact". The natural properties discovered by science (many familiar to commonsense) are crucial here: everything is determined by the distribution of perfectly natural intrinsic properties of space-time points. Here again, Lewis's metaphilosophy shades seamlessly into his philosophy proper.

Philosophical positions

Lewis's Quinean methodology yields some positions quite at odds with Quine's. Applied to *modality*, it results in Lewis's most notorious doctrine: his *modal realism*, as defended in *On the Plurality of Worlds*. On this view, for each way that a world (universe) *could* be, there is a world that *is* that way—we may call these worlds *concrete* to emphasize that they are of a kind with our world, not merely abstract objects or linguistic entities. Our world is privileged (for us) only insofar as it is *actual* (for us); but worlds in which donkeys talk, or in which there are alien properties, are just as real as ours. Indeed, Lewis believes that gods exist in infinitely many worlds, even though our world happens to be godless! He argues that modal

realism strikes the best overall balance of costs and benefits among philosophical accounts of modality. Its primary cost is its offence to commonsense, enshrined in what he calls the “incredulous stare” objection. But this cost is more than offset by the manifold ways in which the doctrine is serviceable to philosophy, and that, Lewis insists, is a reason to believe that it is true. It provides elegant analyses of such philosophical bugbears as possibility and necessity, supervenience, counterfactuals, verisimilitude, mental content, and properties. Moreover, he maintains that these benefits cannot be realized as well by any rival philosophical theory—in particular, by any theory that offers some ‘ersatz’ alternative to concrete possible worlds.

Many of Lewis’s specific philosophical positions can be fitted into a bravura chain of reductions or dependences. Several of them appeal to the notion of *causation*. For example, he regards things (objects, persons) that persist through time as consisting of temporal parts, typically united by causal continuity: later parts depend causally on earlier parts for their existence and nature. In the case of persisting persons, such causal dependence will be among psychological states. Psychological states underpin his analyses of *conventions*, as we find in languages—for example, semantic facts exist in virtue of the mutual expectations of members of a linguistic community. And psychological states, in turn, are definable as the occupants of certain causal roles. Beliefs and desires—or more generally, degrees of belief and degrees of desire, understood decision-theoretically—are analyzed in terms of their functional role. Perception is likewise defined in terms of appropriate causal relations between external scenes and an agent’s representations of them.

Causation, for its part, is analyzed by Lewis in terms of patterns of *counterfactual dependence* among events. Indeed, it was his concern to secure proper foundations for that analysis that prompted Lewis to write his book *Counterfactuals*, a seminal work

on the truth conditions and logic of conditionals that are typically expressed in the subjunctive mood—e.g., ‘if kangaroos didn’t have tails, then they would topple over’. Lewis’s analysis of counterfactuals invokes relations of *comparative similarity* among possible worlds. Roughly, ‘if it were the case that X, it would be the case that Y’ is true (at a given world *w*) if and only if there is a world in which X and Y are true that is more similar (to *w*) than any world in which X is true and Y false. Similarity of worlds is determined by closeness of match of matters of particular fact; the sharing of laws of nature is an important respect of such match, since they codify much information about what is true at the relevant worlds.

This brings us back to the worlds themselves. They are individuated by spatiotemporal connectedness: you and I are world-mates because we are spatiotemporally related to each other. But distinct possible worlds are isolated from each other, bearing no spatiotemporal relation to each other; likewise, parts of worlds, such as you and I, are isolated from parts of other worlds. Lewis infers from this that *de re* modal claims about individuals are made true by corresponding facts about *counterparts* of these individuals in other possible worlds, rather than by facts about the individuals themselves in these other worlds. ‘You could have been a movie star’ is thus analyzed roughly as: there is a possible world in which a counterpart of yours—someone who plays a very similar role in that world to the one you play in the actual world—*is* a movie star.

Lewis’s views on other topics respect his broader philosophical commitments, especially to modal realism and to Humean supervenience. While his early work is concerned more with issues in the philosophy of language, philosophical logic, and the philosophy of mind, he moves in later work more towards metaphysics, and (to a

lesser extent) ethics/social philosophy, philosophy of mathematics, and epistemology. We close with a quick overview of some further distinctive themes.

An integrated set of papers concerns probability and decision theory. Lewis regards opinion as coming in degrees—‘credences’—and he follows Bayesians in modeling rational credences as subjective probabilities. These are constrained by the usual probability axioms, but Lewis adds a further principle that links one’s credences to one’s beliefs about corresponding *objective chances*. He provides a novel defense of a particular rule (‘conditionalization’) for updating rational credences in the face of new evidence. He famously proves various ‘triviality results’ against the equating of probabilities of conditionals with conditional probabilities. On the side of decision, Lewis offers a version of *causal decision theory*, according to which rational decisions maximize expected utilities of actions, with probabilities and utilities assigned to various ‘dependency hypotheses’ about how outcomes depend causally on one’s actions. He proves further ‘triviality results’ against an anti-Humean thesis that decision-theoretically reduces ‘desires’ to ‘beliefs’ of a certain kind.

In meta-ethics, Lewis argues for a subjectivist position that portrays our values as those properties that we are disposed to desire to desire, when suitably apprehending them. He has a number of papers on more specific topics in social philosophy, including deterrence, punishment, and tolerance. *Parts of Classes* is an important contribution to the philosophy of mathematics, in which Lewis reduces set theory to mereology (the theory of the ‘part-whole’ relation). In epistemology, his “Elusive Knowledge” is a ground-breaking work that gives a new analysis of ‘S knows that p’, accompanied by a detailed contextualist analysis of the pragmatics of knowledge ascriptions. And then there are many papers on sundry other topics: holes, properties, dispositions, truth, vagueness, fiction, quantum mechanics, and more.

Lewis's work continues to be enormously influential, and often agenda-setting. He was renowned as a great teacher and supervisor. His sudden death in 2001, due to complications arising from many years of diabetes, ended a remarkable career.¹

Bibliography

Convention: A Philosophical Study, 1969, Harvard University Press.

Counterfactuals, 1973, Blackwell and Harvard University Press.

On the Plurality of Worlds, 1986, Blackwell.

Parts of Classes, 1990, Blackwell.

Almost all of Lewis's publications, besides these books, are gathered in the following volumes of his collected papers:

Philosophical Papers, Vol. I, 1983, and Vol. II, 1986, Oxford University Press.

Papers in Philosophical Logic, 1998, Cambridge University Press.

Papers on Metaphysics and Epistemology, 1999, Cambridge University Press

Papers in Ethics and Social Philosophy, 2000, Cambridge University Press.

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