

Bibliography of the Writings of David Lewis

1966

- "An Argument for the Identity Theory," *Journal of Philosophy* 63 (1966): 17–25; reprinted with additions in David Rosenthal, ed., *Materialism and the Mind-Body Problem* (Prentice-Hall, 1971); German translation by Andreas Kemmerling published as "Eine Argumentation für die Identitätstheorie," in Ansgar Beckermann, ed., *Analytische Handlungstheorie*, Volume II (Suhrkamp Verlag, 1977); Spanish translation by Enrique Villaneuva published as "Un argumento en favor de la teoría de la identidad," *Cuadernos de Crítica* No. 30 (Instituto de Investigaciones Filosóficas, 1984); reprinted with additions in David Lewis, *Philosophical Papers*, Volume I.
- "Percepts and Color Mosaics in Visual Experience," *Philosophical Review* 75 (1966): 357–68.

Abstract. Roderick Firth, in his "Sense-Data and the Percept Theory," opposes his own theory that visual experience consists of *percepts* of ostensible external objects or facts to the old-fashioned theory that it consists of a mosaic of color-spots. I claim to resolve the opposition thus: Call two visual experiences *modification-equivalent* if they are connected by a chain of actual or possible visual experiences such that, given any two adjacent members of the chain, one can pass from one to the other with change of percept but no percept of change. We often ignore differences between modification-equivalent visual experiences. Some visual experience, at least, consists of a percept of a color-mosaic; it is plausible that any visual experience is modification-equivalent to experiences of some

definite color-mosaic. If so, then any visual experience is indistinguishable from color mosaic experience for some practical purposes.

"Scriven on Human Unpredictability," *Philosophical Studies* 17 (1966): 69–74 (Jane S. Richardson, co-author).

Abstract. Michael Scriven has argued that we are unpredictable: if I want to foil your attempts to predict me, I can in principle replicate your prediction and do the opposite. But Scriven assumes that it is possible both that you have time to finish your prediction (else your failure is of no significance) and that I have time to finish my replication (else you might not fail). This assumption is suspect, since the times consumed by our two tasks are increasing functions of each other.

1968

"Counterpart Theory and Quantified Modal Logic," *Journal of Philosophy* 65 (1968): 113–26; reprinted in Michael J. Loux, ed., *The Possible and the Actual* (Cornell University Press, 1979); reprinted in David Lewis, *Philosophical Papers*, Volume I.

"Finitude and Infinitude in the Atomic Calculus of Individuals," *Noûs* 2 (1968): 405–10 (Wilfrid Hodges, co-author).

Abstract. Nelson Goodman has raised the question whether there is any sentence in the language of his calculus of individuals which is true in every finite intended model no matter how large, but false in every infinite atomic intended model. We prove that there is no such sentence. This negative answer to Goodman's question is obtained as a corollary to the following theorem: any sentence in the language is equivalent—under certain axioms which hold in every atomic intended model—to a truth-functional compound of sentences setting lower limits on the number of atomic individuals.

1969

"Policing the Aufbau," *Philosophical Studies* 20 (1969): 13–17.

Abstract. The method of construction employed in Carnap's "Logische Aufbau der Welt" is not certain to work properly in every case, as Carnap, Goodman, and others have shown; but certain error-detecting procedures can be added to the construction which ought to increase the rate of success.

Review of Capitan and Merrill, eds., *Art, Mind, and Religion*, *Journal of Philosophy* 66 (1969): 22–27; excerpt reprinted in Ned Block, ed., *Readings in the Philosophy of Psychology*, Volume I (Harvard University Press, 1980).

Abstract. Concerning "Psychological Predicates," by Hilary Putnam: I

respond to Putnam's principal objection against the identity of mental and brain states by suggesting that mental terms may denote different brain states in the case of different species, or even different individuals.

I briefly discuss other papers in the collection.

Convention: A Philosophical Study (Harvard University Press, 1969; reprinted, Blackwell and Harvard University Press, 1986); preliminary version titled *Conventions of Language* submitted as a doctoral dissertation (Harvard, 1966); Italian translation by Gabriele Usberti published as *La Convenzione* (Bompiani, 1974); excerpt reprinted in Gilbert Harman, ed., *On Noam Chomsky: Critical Essays* (Anchor, 1974); German translation by Roland Posner and Detlef Wenzel published as *Konvention: Eine Sprachphilosophische Abhandlung* (Walter de Gruyter, 1975).

Abstract. Social conventions are analyzed, roughly, as regularities in the solution of recurrent coordination problems—situations of interdependent decision in which common interest predominates. An example is our regularity of driving on the right: each does so to coordinate with his fellow drivers, but we would have been just as well off to coordinate by all driving on the left. Other examples are discussed; conventions are contrasted with other sorts of regularities; conventions governing systems of communication are singled out for special attention. It is shown that the latter can be described as conventions to be truthful with respect to a particular assignment of truth conditions to sentences or other units of communication.

"Lucas against Mechanism," *Philosophy* 44 (1969): 231–33.

Abstract. J. R. Lucas's contention (in "Minds, Machines, and Gödel") that his potential output of truths of arithmetic cannot be duplicated by a machine is true to this extent: a certain infinitary inference rule, which Lucas can recognize to be truth-preserving, will yield a set of truths of arithmetic which cannot be the potential output of a machine. However, there is no reason to believe that Lucas can verify, in every case, that a sentence of arithmetic is one of the ones that the rule yields. Therefore it may yet be that Lucas's output could be duplicated by a machine.

1970

"Anselm and Actuality," *Noûs* 4 (1970): 175–88; reprinted in Baruch A. Brody, ed., *Readings in the Philosophy of Religion* (Prentice-Hall, 1974); reprinted in David Lewis, *Philosophical Papers*, Volume I.

"How to Define Theoretical Terms," *Journal of Philosophy* 67 (1970): 427–46; reprinted in David Lewis, *Philosophical Papers*, Volume I.

"Holes," *Australasian Journal of Philosophy* 48 (1970): 206–12 (Stephanie R. Lewis, co-author); reprinted in David Lewis, *Philosophical Papers*, Volume I.

"Nominalistic Set Theory," *Noûs* 4 (1970): 225–40.

Abstract. Taking as primitive the calculus of individuals and a relation of nextness between atoms, it is possible to define several pseudo-membership relations between individuals. These relations have many of the properties of the membership relation, and can be employed to provide nominalistic counterparts of various standard set-theoretic constructions.

"General Semantics", *Synthese* 22 (1970): 18–67; reprinted in Donald Davidson and Gilbert Harman, eds., *Semantics of Natural Language* (Reidel, 1972); Italian translation by Ugo Volli of an excerpt published as "Semantica Generale" in Andrea Bonomi, ed., *La Struttura Logica del Linguaggio* (Bompiani, 1973); reprinted in Barbara Partee, ed., *Montague Grammar* (Academic Press, 1976); Spanish translation by Alejandro Herrera Ibáñez published as "Semántica general," *Cuadernos de Crítica* No. 29 (Instituto de Investigaciones Filosóficas, 1984); reprinted in David Lewis, *Philosophical Papers*, Volume I.

1971

"Immodest Inductive Methods," *Philosophy of Science* 38 (1971): 54–63.

Abstract. Inductive methods can be used to estimate the accuracies of inductive methods. Call a method *immodest* if it estimates that it is at least as accurate as any of its rivals. It would be unreasonable to adopt any but an immodest method. Under certain assumptions, exactly one of Carnap's lambda-methods is immodest. This may seem to solve the problem of choosing among the lambda-methods; but sometimes the immodest lambda-method is $\lambda = 0$, which it would not be reasonable to adopt. We should therefore reconsider the assumptions that led to this conclusion: for instance, the measure of accuracy.

"Counterparts of Persons and Their Bodies," *Journal of Philosophy* 68 (1971): 203–11; reprinted in David Lewis, *Philosophical Papers*, Volume I.

"Analog and Digital," *Noûs* 5 (1971): 321–27.

Abstract. Counterexamples are offered to Nelson Goodman's proposal, in *Languages of Art*, that the difference between analog and digital systems of representation is the difference between dense systems and differentiated ones. Alternative definitions of analog and digital representations are proposed.

"Completeness and Decidability of Three Logics of Counterfactual Conditionals," *Theoria* 37 (1971): 74–85.

Abstract. Three axiomatic systems for the counterfactual conditional connective are given: one equivalent to the system C2 of Stalnaker and Thomason, and two weaker systems. The systems are shown to be sound and complete (under various combinations of conditions) if the counterfactual is taken to be true at a world if and only if, roughly, the consequent is true in those of the worlds where the antecedent is true that are closest in similarity to the given world. Further, the systems are decidable.

1972

"Utilitarianism and Truthfulness," *Australasian Journal of Philosophy* 50 (1972): 17–19; reprinted in this volume.

"Psychophysical and Theoretical Identifications," *Australasian Journal of Philosophy* 50 (1972): 249–58; reprinted in Chung-ying Cheng, ed., *Philosophical Aspects of the Mind-Body Problem* (University Press of Hawaii, 1975); reprinted in Ned Block, ed., *Readings in the Philosophy of Psychology*, Volume I (Harvard University Press, 1980).

Abstract. The psychophysical identity theory may be subsumed under a general account of the meaning of theoretical terms and the nature of theoretical identifications, as follows. Theoretical terms, by their meaning, denote whichever entities uniquely realize the theory that introduced them; by learning which entities do so, we can establish an identification. In particular, the names of mental states denote whichever entities uniquely realize common-sense psychology; if certain neural states do so, they must be identical to the mental states.

1973

Counterfactuals (Blackwell and Harvard University Press, 1973; revised printing, 1986); excerpt reprinted as "Possible Worlds," in Michael J. Loux, ed., *The Possible and the Actual* (Cornell University Press, 1979).

Abstract. A counterfactual conditional has the form: if it were that *A*, then it would be that *B* (where *A* is usually assumed false). What does this mean? Roughly: in certain possible worlds where *A* holds, *B* holds also. But which *A*-worlds should we consider? Not all; those that differ gratuitously from our actual world should be ignored. Not those that differ from our world only in that *A* holds; for no two worlds can differ in one respect only. Rather, we should consider the *A*-worlds most similar, overall, to our world. If there are no most similar *A*-worlds, then we should consider whether some *A*-world where *B* holds is more similar to ours than any where *B* does not hold.

An analysis of counterfactuals is given along these lines. It is shown to admit of various formulations. It is compared with other theories of counterfactuals. Its foundations, in comparative similarity of possible worlds, are defended. Analogies are drawn between counterfactuals, thus analyzed, and other concepts. An axiomatic logic of counterfactuals is given.

"Causation," *Journal of Philosophy* 70 (1973): 556–67; reprinted in Ernest Sosa, ed., *Causation and Conditionals* (Oxford University Press, 1975); German translation by Gunter Pösch (with additions) published as "Kausalität," in Gunter Pösch, ed., *Kausalität—Neue Texte* (Philip Reclam, 1981); reprinted in this volume.

- "Counterfactuals and Comparative Possibility," *Journal of Philosophical Logic* 2 (1973): 418–46; reprinted in Donald Hockney et al., eds., *Contemporary Research in Philosophical Logic and Linguistic Semantics* (Reidel, 1975); Italian translation by Claudio Pizzi published as "Controfattuali e possibilità comparativa," in Claudio Pizzi, ed., *Leggi di natura, modalità, ipotesi* (Feltrinelli, 1978); reprinted in W. L. Harper et al., eds., *Ifs* (Reidel, 1981); reprinted in this volume.

1974

- "Semantic Analyses for Dyadic Deontic Logic," in Sören Stenlund, ed., *Logical Theory and Semantic Analysis: Essays Dedicated to Stig Kanger on His Fiftieth Birthday* (Reidel, 1974).

Abstract. According to one conception of deontic conditionals, "Ought *A* given *B*" means roughly that *A* holds at the best of the worlds where *B* holds. I compare different ways of developing this approach to the semantics of dyadic deontic logic, seeking to distinguish deep from superficial differences.

- "Spielman and Lewis on Inductive Immodesty," *Philosophy of Science* 41 (1974): 84–85.

Abstract. Recent theorems on inductive immodesty due to S. Spielman and D. Lewis appear to be contradictory when applied to the case of null evidence: Spielman's theorem implies that every method in Carnap's continuum is immodest in this case, whereas Lewis's theorem implies that the straight rule alone is. The contradiction is resolved by observing that Spielman and Lewis are speaking of immodesty under slightly different measures of inductive accuracy.

- "Intensional Logics Without Iterative Axioms," *Journal of Philosophical Logic* 3 (1974): 457–66.

Abstract. Any classical intensional propositional logic that can be axiomatized in such a way that no intensional operator appears within the scope of another in any axiom is complete, in the sense that it is determined by the class of all classical frames with unrestricted valuations that validate it.

- "Radical Interpretation," *Synthese* 23 (1974): 331–44; reprinted in David Lewis, *Philosophical Papers*, Volume I.

- "Tensions," in Milton K. Munitz and Peter K. Unger, eds., *Semantics and Philosophy* (New York University Press, 1974); reprinted in David Lewis, *Philosophical Papers*, Volume I.

1975

- "Languages and Language," in Keith Gunderson, ed., *Minnesota Studies in the Philosophy of Science*, Volume VII (University of Minnesota Press, 1975); Italian translation by Ugo Volli of a preliminary version published as

"Lingue e Lingua," *Versus* 4 (1973): 2–21; excerpt preprinted in Gilbert Harman, ed., *On Noam Chomsky: Critical Essays* (Anchor, 1974); German translation by Georg Meggle published as "Die Sprachen und die Sprache," in Georg Meggle, ed., *Handlung, Kommunikation, Bedeutung* (Suhrkamp Verlag, 1979); reprinted in A. P. Martinich, ed., *The Philosophy of Language* (Oxford University Press, 1985); reprinted in David Lewis, *Philosophical Papers*, Volume I.

"Adverbs of Quantification," in Edward L. Keenan, ed., *Formal Semantics of Natural Language* (Cambridge University Press, 1975).

Abstract. Such adverbs as "always," "sometimes," "never," "usually," "often," and "seldom" are quantifiers; but often, contrary to first impression, they do not quantify over moments of time. They can be seen as unselective quantifiers, binding all variables in their scopes. Various sentences, including some notorious puzzlers, can be seen as transformed versions of sentences formed using adverbs of quantification with restrictive "if"-clauses.

Review of Olson and Paul, *Contemporary Philosophy in Scandinavia*, *Theoria* 41 (1975): 39–60 (Stephanie R. Lewis, co-author).

Abstract. Concerning "Rights and Parliamentarianism," by Stig and Helle Kanger: We question whether their taxonomy of rights covers rights versus the world at large.

Concerning "On the Analysis and Logic of Questions," by Lennart Åqvist: We argue that Åqvist's imperative-epistemic analysis should give way to an imperative-assertoric analysis. Where Åqvist says "Let it be that I know . . ." we suggest "Let it be that you tell me. . . ." Either way, we note that questions may join other imperatives as deontic sentences made true by their appropriate utterance.

Concerning "Decision-theoretic Approaches to Rules of Acceptance," by Risto Hilpinen: We pose a dilemma. Does the agent have a full system of quantitative degrees of belief? If so, why does he also need non-quantitative acceptance? If not, how can he govern his acceptances by decision-theoretic rules?

We briefly discuss some other papers in the collection.

1976

"Convention: Reply to Jamieson," *Canadian Journal of Philosophy* 6 (1976): 113–20.

Abstract. Several proposed counterexamples against my analysis of social convention are considered. Some exemplify derivative usages of the term "convention". The rest fail either (1) through disregarding unconscious preferences and expectations, or (2) through disregarding the relativity of conventions to populations, or (3) through confusing conditional preferences with conditionals about preferences.

- "The Paradoxes of Time Travel," *American Philosophical Quarterly* 13 (1976): 145–52; reprinted in Fred D. Miller, Jr., and Nicholas D. Smith, eds., *Thought Probes* (Prentice-Hall, 1981); reprinted in this volume.
- "Probabilities of Conditionals and Conditional Probabilities," *Philosophical Review* 85 (1976): 297–315; reprinted in W. L. Harper et al., eds., *Ifs* (Reidel, 1981); reprinted in this volume.
- "Survival and Identity," in Amélie O. Rorty, ed., *The Identities of Persons* (University of California Press, 1976); German translation by Thomas Nenon published as "Überleben und Identität," in Ludwig Siep, ed., *Identität der Person* (Schwabe, 1983); Spanish translation by Mercedes García Oteyza published as "Supervivencia e identidad," *Cuadernos de Crítica* No. 27 (Instituto de Investigaciones Filosóficas, 1984); reprinted in David Lewis, *Philosophical Papers*, Volume I.

1977

- "Possible-World Semantics for Counterfactual Logics: A Rejoinder," *Journal of Philosophical Logic* 6 (1977): 359–63.
- Abstract.* Ellis, Jackson, and Pargetter have claimed that a certain feature of the logic of counterfactual conditionals—namely, the apparent validity of the inference from "if *A* or *B*, then *C*" to "if *A* then *C*"—cannot be accounted for by any sort of possible-world semantics. However, no less than three solutions to their problem have already been proposed by Fine and others, and they have given no reason to reject any of the three.

1978

- "Truth in Fiction," *American Philosophical Quarterly* 15 (1978): 37–46; reprinted in David Lewis, *Philosophical Papers*, Volume I.
- "Reply to McMichael," *Analysis* 38 (1978): 85–86.
- Abstract.* McMichael showed that my semantics for deontic conditionals, when applied to a ranking of worlds on radically utilitarian principles, yields counterintuitive results. I concur, but suggest that it is the radical utilitarianism—not the semantics—that goes against our common opinions.

1979

- "A Problem about Permission," in E. Saarinen et al., eds., *Essays in Honour of Jaakko Hintikka* (Reidel, 1975).
- Abstract.* Brian Chellas has produced a semantic analysis for imperative and permissive sentences, modeled on the standard possible world semantics for deontic modalities. I show how to incorporate this semantic analysis into the description of a language game of commanding and

permitting. The crucial rule of the game stipulates that the permissibility of possible worlds shall change when commands and permissions are given, in such a way that any imperative or permissive sentence uttered by someone in authority shall be true under Chellas's semantics. A precise formulation of this rule is easy in the case of commands; the case of permissions, however, is problematic.

"Prisoners' Dilemma is a Newcomb Problem," *Philosophy and Public Affairs* 8 (1979): 235–40; reprinted in R. Campbell and L. Sowden, eds., *Paradoxes of Rationality and Cooperation: Prisoner's Dilemma and Newcomb's Problem* (University of British Columbia Press, 1985); reprinted in this volume.

"Counterfactual Dependence and Time's Arrow," *Noûs* 13 (1979): 455–76; reprinted in this volume.

"Scorekeeping in a Language Game," *Journal of Philosophical Logic* 8 (1979): 339–59; reprinted in R. Bäuerle et al., eds., *Semantics from Different Points of View* (Springer-Verlag, 1970); reprinted in David Lewis, *Philosophical Papers*, Volume I.

"Attitudes *De Dicto* and *De Se*," *Philosophical Review* 88 (1979): 513–43; reprinted in D. L. Boyer et al., eds., *The Philosopher's Annual*, Volume III (Ridgeview, 1981); reprinted in David Lewis, *Philosophical Papers*, Volume I.

"Lucas Against Mechanism II," *Canadian Journal of Philosophy* 9 (1979): 373–76.

Abstract. Lucas insists on the dialectical character of his Gödelian refutation of mechanism. This means that his arithmetical output depends on the mechanistic accusation he is out to refute. Then if he is a machine, he is one that responds to input. But if he is such a machine, there is no reason to think that his arithmetical output (when responding to a mechanistic accusation in the way he intends to) is true or consistent, hence no reason to doubt that it might contain a false sentence expressing its own consistency. The refutation therefore fails.

1980

"A Subjectivist's Guide to Objective Chance," in Richard C. Jeffrey, ed., *Studies in Inductive Logic and Probability*, Volume II (University of California Press, 1980); reprinted in W. L. Harper et al., eds., *Ifs* (Reidel, 1981); reprinted in this volume.

"Mad Pain and Martian Pain," in Ned Block, ed., *Readings in Philosophy of Psychology*, Volume I (Harvard University Press, 1980); reprinted in David Lewis, *Philosophical Papers*, Volume I.

"Index, Context, and Content," in Stig Kanger and Sven Öhman, eds., *Philosophy and Grammar* (Reidel, 1980).

Abstract. A context is a location—time, place, world—in which a sen-

tence may be said; an index is an n -tuple of features of context that can vary independently. I argue that semantics of natural language must involve both context-dependence and index-dependence; neither can replace the other. I also argue that two different strategies for combining the two dependences differ only superficially.

"Veridical Hallucination and Prosthetic Vision," *Australasian Journal of Philosophy* 58 (1980): 239–49; reprinted in this volume.

1981

"Causal Decision Theory," *Australasian Journal of Philosophy* 59 (1981): 5–30; reprinted in this volume.

"Ordering Semantics and Premise Semantics for Counterfactuals," *Journal of Philosophical Logic* 10 (1981): 217–34.

Abstract. The analysis of counterfactual conditionals requires some device for taking account of factual background. Orderings of worlds, perhaps partial, may be used, as in the theories of Stalnaker, Lewis, and Pollock; or premise sets, as in the theory of Kratzer. The two approaches are shown to be equivalent.

"What Puzzling Pierre Does Not Believe," *Australasian Journal of Philosophy* 59 (1981): 283–89.

Abstract. Kripke's puzzle about belief refutes a certain simple analysis of belief sentences. The analysis fails for another reason as well, since it requires believers to have a knowledge of essences which they do not in fact possess.

"Why Ain'cha Rich?" *Noûs* 15 (1981): 377–80.

Abstract. Under the conception of rationality favored by two-boxers, Newcomb's problem is an arrangement in which predicted irrationality is rewarded. One-boxers favor a different conception of rationality. Could we devise a problem in which predicted irrationality according to this different conception is rewarded? It turns out that we could not.

"Are We Free To Break the Laws?" *Theoria* 47 (1981): 113–21; reprinted in this volume.

1982

"Logic for Equivocators," *Noûs* 16 (1982): 431–41.

Abstract. It has been argued that relevance must be respected in logic because irrelevant implication may not preserve truth when we are dealing with sentences that are both true and false. I suggest that the best way to understand how a sentence may be both true and false is that it may be both true on some disambiguations and false on some disambiguations; and accordingly I commend a form of (partly) relevant logic to those who

fear they cannot fully disambiguate the sentences that figure in their reasoning.

“‘Whether’ Report,” in Tom Pauli et al., eds., 320311: *Philosophical Essays Dedicated to Lennart Åqvist on his Fiftieth Birthday* (Filosofiska Studier, 1982).

Abstract. By exploiting double indexing, it is possible to treat a “whether”-clause as a sentence expressing whichever is the true one of the alternative propositions presented in it, hence as a suitable argument for epistemic or assertoric modalities. It is further possible to treat the “or”s that punctuate these clauses as ordinary disjunctions.

1983

“Individuation by Acquaintance and by Stipulation,” *Philosophical Review* 92 (1983): 3–32; reprinted in Fred Landman and Frank Veltman, eds., *Varieties of Formal Semantics: Groningen-Amsterdam Studies in Semantics III* (Foris Publications, 1984).

Abstract. Hintikka has demonstrated the importance of cross-identification by acquaintance, in which individuals that figure in alternative possibilities are united by likeness in their relations to a subject of attitudes. This requires prior cross-identification of the subject, which cannot be either by acquaintance or by description. The problem is solved if we take the alternatives not as possible worlds but as possible individuals situated in worlds.

Philosophical Papers, Volume I (Oxford University Press, 1983).

“Extrinsic Properties,” *Philosophical Studies* 44 (1983): 197–200.

Abstract. Kim has suggested, roughly, that an extrinsic property is a property that implies accompaniment: a property that could not belong to a thing unless some other, distinct thing coexisted with it. I offer counter-examples to Kim’s proposal and to certain near relatives of it.

“New Work For a Theory of Universals,” *Australasian Journal of Philosophy* 61 (1983): 343–77; reprinted in P. Athay et al., eds., *The Philosopher’s Annual*, Volume VI (Ridgeview, 1985).

Abstract. D. M. Armstrong puts forward his theory of universals as a solution to the problem of one over many. But this problem, depending on how we understand it, either admits of nominalistic solutions or else admits of no solution of any kind. Nevertheless, Armstrong’s theory meets other urgent needs in systematic philosophy: its very sparing admission of genuine universals offers us a means to make sense of several otherwise elusive distinctions.

“Levi Against U-Maximization,” *Journal of Philosophy* 80 (1983): 531–34.

Abstract. Isaac Levi claims that Gibbard and Harper’s theory of U-maximizing, unless clarified by the addition of further principles, yields contradictory recommendations. But the only “further principles”

needed are (1) a prohibition against fallacies of equivocation, and (2) a stipulation, already made explicitly by Gibbard and Harper, that outcomes are completely specific with respect to the agent's concerns.

1984

"Devil's Bargains and the Real World," in Douglas MacLean, ed., *The Security Gamble: Deterrence in the Nuclear Age* (Rowman and Allenheld, 1984).

Abstract. I agree with Kavka, against Kenny and Gauthier, that in some hypothetical cases it is not wrong to form an effective conditional intention to retaliate, even though it would be wrong to fulfill that intention by retaliating. I compare such cases with a Devil's bargain in which a hero volunteers for damnation to buy salvation for seven others. But the most important thing to say about the Devil's bargain is that the case is bogus; and likewise for cases of "paradoxical" deterrence. Fascinating though they may be, they have no place in serious discussions of public policy.

"Putnam's Paradox," *Australasian Journal of Philosophy* 62 (1984): 221–36.

Abstract. Putnam's "model-theoretic argument against metaphysical realism" is a correct refutation of a global description theory of reference. It demonstrates that if, as we usually suppose, we achieve more-or-less determinate reference, that must be so in virtue of constraints not established by our own stipulation—perhaps, as Merrill has suggested, constraints based on an objective discrimination between things and classes which are more and less eligible to serve as referents.

1986

On the Plurality of Worlds (Blackwell, 1986).

Abstract. We ought to believe in other possible worlds and individuals because systematic philosophy goes more smoothly in many ways if we do; the reason parallels the mathematicians' reason for believing in the set-theoretical universe. By "other worlds" I mean other things of a kind with the world we are part of: concrete particulars, unified by spatiotemporal unification or something analogous, sufficient in number and variety to satisfy a principle to the effect, roughly, that anything can coexist with anything. I answer objections claiming that such modal realism is trivially inconsistent, or leads to paradoxes akin to those of naive set theory, or undermines the possibility of modal knowledge, or leads to scepticism or indifference or a loss of the seeming arbitrariness of things. But I concede that its extreme disagreement with common opinion is a high price to pay for its advantages. I therefore consider various versions of ersatz model realism, in which abstract representations are supposed to replace the other worlds; different versions suffer from different objections, and none is satisfactory. Finally, I consider the so-called problem of trans-world

identity. I stress a distinction between the uncontroversial thesis that things exist *according to* many worlds and the very problematic thesis that things exist *as part of* many worlds.

"Against Structural Universals," *Australasian Journal of Philosophy* 64 (1986): 25–46.

Abstract. A structural universal is one such that, necessarily, any instance of it consists of proper parts that instantiate certain simpler universals in a certain pattern. Forrest has suggested that structural universals could serve as ersatz possible worlds; Armstrong has offered several reasons why a theory of universals must accept them. I distinguish three conceptions of what a structural universal is, and I raise objections against structural universals under all three conceptions. I then consider whether uninstantiated structural universals, which are required by Forrest's proposal, are more problematic than instantiated ones.

"A Comment on Armstrong and Forrest," *Australasian Journal of Philosophy* 64 (1986): 92–93.

Abstract. Armstrong and Forrest observe that my case against structural universals has equal force against "structures" composed of universals plus particular instances thereof. To this I say that the friend of universals might get by without the structures. Whether he can depends on what work he wants his theory to do, in particular on whether he wants it to provide truthmaking entities for all truths.

Philosophical Papers, Volume II (Oxford University Press, 1986).

"Probabilities of Conditionals and Conditional Probabilities II," *Philosophical Review* 95 (1986): 581–89.

Abstract. In the paper to which this is a sequel, I had shown that no uniform interpretation of \rightarrow guarantees the equality $P(A \rightarrow C) = P(C/A)$ throughout a class of non-trivial probability functions closed under conditionalizing. Here I extend that result to classes satisfying weaker closure conditions.