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Kit Fine. Annotated bibliography of the studies on His philosophy

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Studies on the Philosophy of Kit Fine

1. Correia, Fabrice. 2005. Existential Dependence and Cognate Notions. München: Philosophia Verlag.

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"This is a work in analytic metaphysics. Its main purpose is to clarify a notion of central importance in metaphysics since Aristotle, to wit the notion of existential dependence. All currently available analyses of the notion are examined and then rejected, and a new account is defended. This work is the first comprehensive one on the topic. The first chapter is devoted to introducing and explaining some notions which are crucial for the central parts of the work, namely the notions of

existence, necessity, (individual and plural) quantification and essence. In chapters 2 and 4 focus is made on the relation of "simple" existential dependence, the relation which holds between two objects when the first cannot exist without the other. Three accounts of simple dependence - each endorsed by some contemporary philosophers, among them Kit Fine, E. Jonathan Lowe, Kevin Mulligan, Peter Simons and Barry Smith - are presented and then rejected. A new account, inspired by suggestions by Fine and Lowe, is defended. According to that account - the " foundational" account - simple dependence is to be defined in terms of a relation called grounding, which is presented in chapter 3. Chapters 5 and 6 deal with relations belonging to the family of simple dependence, among others (i) generic dependence, (ii) various forms of temporal dependence, and (iii) supervenience, a complex dependence relation largely invoked in current debates on the philosophy of mind. It is shown that foundationalist accounts of these notions - i.e. accounts framed in terms of grounding - are superior to other existing accounts. These chapters also contain some applications of the foundational conception of dependence, in particular a characterization of substances and a formulation of the distinction between two well known conceptions of universals, the Aristotelian and the Platonician conception. The last part of the work is a technical appendix where one can find, among other things, a system for the logic of essence, which is proved to be sound and complete with respect to a possible world semantics." "The notion of metaphysical grounding is close to a notion Fine introduces in [Fine, 2001] (§5) and which he calls 'ground'. In Fine's sense, the proposition that A is grounded in the propositions that B, C,... iff its being the case that A consists in nothing more than its being the case that B, C,... According to Fine, grounding propositions explain what they ground. Fine's notion of ground is strictly stronger than metaphysical grounding: I wish to leave room for the view that the existence of a set is explained by, but does not merely consist in, the existence of its members. And it is likewise strictly stronger than logical grounding. It is also close to Bolzano's notion of grounding. (2) One difference is that Bolzano takes this notion to express a relation between propositions or pluralities of propositions, construed as genuine, mind-independent entities. (3) For my part, as I previously stressed, I leave aside the question as to whether statements of ground

point to propositions, facts or states of affairs. A second difference lies in that Bolzano takes it that causal connections give rise to facts of grounding: for every causal fact, a proposition describing some relevant features of the effect is grounded in a proposition describing some relevant features of the cause. (4) This presumably does not hold of metaphysical grounding. Bolzano's notion of grounding is perhaps equivalent to the "logical sum" of all qualified notions of grounding." (p. 56)

(2) [Bolzano, 1973], §§ 168-177 and §§ 198-221.

(3) §§ 19ff. and §§ 168-177.

(4) § 201.3.

References

[Bolzano, 1973] B. Bolzano. Theory of Science, Dordrecht: D. Reidel. {Fine, K, 2001] K. Fine, "The Question o Realism", Philosophers Imprint, 1(1): 1-30.

2. Dumitru, Mircea, ed. 2020. Metaphysics, Meaning and Modality: Themes from Kit Fine. New York: Oxford University Press.

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Bibliography of the Publications of Kit Fine 503; Index 509-519.

- 3. Rieber, Steven. 2002. "A Defense of Indeterminism." *Acta Analytica* no. 17:75-82. Abstract: "My goal is to defend the indeterminist approach to vagueness, according to which a borderline vague utterance is neither true nor false. Indeterminism appears to contradict bivalence and the disquotational schema for truth. I agree that indeterminism compels us to modify each of these principles. Kit Fine has defended indeterminism by claiming that ordinary ambiguous sentences are neither true nor false when one disambiguation is true and the other is false. But even if Fine is right about sentences, his point does not seem to generalize the utterances. What the indeterminist needs -- and what ordinary ambiguity does not provide -- is an ambiguous utterance where what is being said is indeterminate between two different propositions. I will show that such cases exist. These cases imply that the modifications that indeterminism makes to bivalence and the disquotational schema are required independently of indeterminism, in fact independently of vagueness."
- 4. Suster, Danilo. 2005. "The Modality Principle and Work-relativity of Modality." *Acta Analytica* no. 20:41-52.

"If we accept Fine's theory then modal properties, contrary to the modal principle, are not an independent guide to constitutive properties of an artwork. Rather, they depend on a prior decision on the identity of a work. Of course, all essential properties are necessary, so those modal intuitions that track the nature of the object in question still remain a guide to essentiality. But in the first part of my comment I expressed a fear that even those modal intuitions are not a reliable guide, they do

not fix something objective and unique. Individual essences are murky properties and I am afraid that our appreciative engagement with a work of art cannot offer objective answers about them. My scruples could be read as scruples about contextualism in general and not directed specifically to Davies' proposal. (*) Anyway, maybe this is the price we have to pay when we evaluate ontological proposals on the basis of their fit with a more comprehensive philosophical framework that makes sense of our artistic practice as that practice is 'codified' upon rational reflection." (p. 52)

[David Davies, Art as Performance, Oxford, Blackwell 2004.]

- 5. Sosa, David. 2010. "The Fine Line." Analysis no. 70:347-358. Critical notice of Kit Fine, Semantic Relationism (2007). "The purpose of Fine's book is to show how the guiding idea, the 'semantic relationism' of the title, helps with deep puzzles in philosophy of language and mind. Russell's antinomy of the variable, Frege's puzzle in both a linguistic and a cognitive version, and Kripke's puzzle about belief are said to be solved adequately only by adopting his relationism. But the book is also a defence of 'referentialism' in philosophy of language. Fine holds that the fundamental semantic relations that need to be added to the assigned intrinsic values in our overall semantic theory, especially the relation he calls 'coordination', can do much of the work of sense. A relationist referentialism 'can secure many of the advantages of the Fregean position without being committed to the existence of sense'. In this selective review, I will not evaluate how Fine's line on these matters fares overall. There's a risk of unfairness in that, since part of any view's success can be measured only holistically, by balancing whatever disadvantages it might have with such emergent features as its unifying power and generality, and the consistency of its successes (as against its failures). Having signalled this, however, I will focus on just a few specific passages, and raise some corresponding issues and concerns." (p. 347)
- deRosset, Louis. 2015. "Better Semantics for the Pure Logic of Ground." Analytic 6. Philosophy no. 56:229-252. Abstract: Philosophers have spilled a lot of ink over the past few years exploring the nature and significance of grounding. Kit Fine has made several seminal contributions to this discussion, including an exact treatment of the formal features of grounding [Fine, 2012a]. He has specified a language in which grounding claims may be expressed, proposed a system of axioms which capture the relevant formal features, and offered a semantics which interprets the language. Unfortunately, the semantics Fine offers faces a number of problems. In this paper, I review the problems and offer an alternative that avoids them. I offer a semantics for the pure logic of ground that is motivated by ideas already present in the grounding literature, and for which a natural axiomatization capturing central formal features of grounding is sound and complete. I also show how the semantics I offer avoids the problems faced by Fine's semantics." References Kit Fine. The Pure Logic of Ground. Review of Symbolic Logic, 5(1):1–25, March
- 7. Correia, Fabrice, and Rosenkranz, Sven. 2012. "Eternal Facts in an Ageing Universe." *Australasian Journal of Philosophy* no. 90:307-320.

 Abstract: "In recent publications, Kit Fine devises a classification of A-theories of time and defends a non-standard A-theory he calls fragmentalism, according to which reality as a whole is incoherent but fragments into classes of mutually coherent tensed facts. We argue that Fine's classification is not exhaustive, as it ignores another non-standard A-theory we dub dynamic absolutism, according to which there are tensed facts that stay numerically the same and yet undergo qualitative changes as time goes by. We expound this theory in some detail and argue that it is a serious alternative to the positions identified by Fine."

- 8. Simons, Peter M. 2008. "Modes of Extension: Comments on Kit Fine's 'In Defence of Three-Dimensionalism'." In *Being: Developments in Contemporary Metaphysics*, edited by Le Poidevin, Robin, 17-22. Cambridge: Cambridge University Press. "The debate between 3- and 4-dimensionalists is one of the most lively and pervasive in current metaphysics. At stake is a glittering prize: the correct metaphysical analysis of material things and other objects commonly thought to persist in time by enduring. Since we count ourselves among such objects the outcome of the debate is of more than merely academic interest to us. Obviously the ramifications of the debate, even of the points raised by Kit Fine, go far beyond what I can discuss here, so I shall simply select some salient issues and comment on them from my own somewhat heterodox point of view." (p. 17)
- 9. Cook, Roy T., and Ebert, Philip. 2004. "Discussion Note: Kit Fine's *Limits of Abstraction*." *British Journal for the Philosophy of Science* no. 55:791-800. "Kit Fine's recent *The Limits of Abstraction*, an extended version of his [1998] paper, contains four chapters. The first two deal with philosophical aspects of abstraction, while the latter two provide the formal framework for a general theory of abstraction. Here we focus on the philosophical material, and, given the depth and complexity of the material, cannot attempt even a superficial summary of the entirety of the philosophical material. Thus, we content ourselves with sketching the contents. Two particular issues will then be examined in greater detail."
- Evnine, Simon J. 2009. "Constitution and Qua Objects in the Ontology of Music." 10. British Journal of Aesthetics no. 49:203-217. Abstract: "Musical Platonists identify musical works with abstract sound structures but this implies that they are not created but only discovered. Jerrold Levinson adapts Platonism to allow for creation by identifying musical works with indicated sound structures. In this paper I explore the similarities between Levinson's view and Kit Fine's theory of qua objects. Fine offers the theory of qua objects as an account of constitution, as it obtains, for example, between a statue and the clay the statue is made out of. I argue that Fine's theory does not adequately characterize the constitution relation and that the problems it faces extend to Levinson's account of musical works as indicated structures. I develop an alternative theory of constitution, based on the notion of being made out of. This approach to constitution enables me to offer an account of musical works as abstract objects that are constituted by sound structures. I argue that my account has several advantages over the Levinson/Fine approach."

References

Jerrold Levinson, 'What a Musical Work Is', *Journal of Philosophy*, vol. 77 (1980), pp. 5-28.

Kit Fine, 'Acts, Events and Things', in *Sprache und Ontologie* (Vienna: Hoelder-Pichler-Tempsky, 1982) (for the theory of qua objects in general) Kit Fine, 'The Problem of Non-Existents. I. Internalism', *Topoi*, vol. 1 (1982) pp. 97 – 140 (for its application to literary works and, as he notes in passing, to musical works as well.)

11. "The Philosophy of Kit Fine." 2007. *Dialectica. International Journal of Philosophy* no. 61:3-200.

The papers in this special volume were presented at a conference entitled 'Fine Philosophy – the Philosophy of Kit Fine' which took place at the University of Geneva on the 3rd, 4th and 5th of July 2005.

Guest editor: Kevin Mulligan.

Contents: Kit Fine: Introduction 3; Paul Horwich: The Quest for Reality 5; Kit Fine: Response to Paul Horwich 17; Fraser MacBride: Neutral Relations Revisited 25; Kit Fine: Response to Fraser MacBride 57; Fabrice Correia: (Finean) Essence and (Priorean) Modality 63; Kit Fine: Response to Fabrice Correia 85; Alan Weir: Honest Toil or Sheer Magic? 89; Kit Fine: Response to Alan Weir 117; Kathrin Koslicki: Towards a Neo-Aristotelian Mereology 127; Kit Fine: Response to Kathrin Koslicki 161; Manuel García-Carpintero: Bivalence and What Is Said 167;

Kit Fine: Response to Manuel García-Carpintero 191; Bibliography of Kit Fine 195–200.

12. Correia, Fabrice. 2007. "(Finean) Essence and (Priorean) Modality." Dialectica.International Journal of Philosophy no. 61:63-84. Abstract: "In Fine 1994, Kit Fine challenges the (widespread) view that the notion of essence is to be understood in terms of the metaphysical modalities, and he argues that it is not essence which reduces to metaphysical modality, but rather metaphysical modality which reduces to essence.
In this paper I put forward a modal account of essence and argue that it is immune from Fine's objections. The account presupposes a non-standard, independently motivated conception of the metaphysical modalities which I dub Priorean. Arthur Prior never endorsed that very conception, but in some respects his own views on the topic are so close to it, and different from all (most?) currently accepted views, that the label 'Priorean' is perfectly appropriate."
References

Fine, K. 1994, 'Essence and Modality', *Philosophical Perspectives* 8, pp. 1–16.

13. García-Carpintero, Manuel. 2007. "Bivalence and What Is Said." *Dialectica.International Journal of Philosophy* no. 61:167-190.

Abstract: "On standard versions of supervaluationism, truth is equated with supertruth, and does not satisfy bivalence: some truth-bearers are neither true nor false. In this paper I want to confront a well known worry about this, recently put by Wright as follows: 'The downside . . . rightly emphasized by Williamson . . . is the implicit surrender of the T-scheme'. I will argue that such a cost is not high: independently motivated philosophical distinctions support the surrender of the T-scheme, and suggest acceptable approximations."

References

Williamson, T. 1994, Vagueness, London: Routledge.

Williamson, T. 1999, 'Schiffer on the Epistemic Theory of Vagueness', in: J. Tomberlin, ed., *Philosophical Perspectives* vol. 13, *Epistemology*, Oxford: Blackwell, pp. 505–517.

Wright, C. 2004, 'Vagueness: A Fifth Column Approach', in J. C. Beall, *Liars and Heaps*, Oxford: Oxford University Press, pp. 84–105.

- 14. Horwich, Paul. 2007. "The Quest for Reality." *Dialectica.International Journal of Philosophy* no. 61:5-16.
 - Abstract: "A widespread concern within philosophy has been, and continues to be, to determine which domains of discourse address real, robust, not-merely-deflationary facts, and which do not. But a threat to the legitimacy of this concern (together with the claims provoked by it) is the extreme lack of consensus amongst philosophers on the question of how to tell whether or not a given domain is oriented towards 'robust reality'. The present paper criticizes Kit Fine's attempt to settle that question. This discussion is followed by some considerations suggesting that there is no good answer to it, that (as the 'quietists' maintain) the notion of 'robust reality' is defective and ought to be abandoned."
- 15. Koslicki, Kathrin. 2007. "Towards a Neo-Aristotelian Mereology."

 Dialectica.International Journal of Philosophy no. 61:127-159.

 Abstract: "This paper provides a detailed examination of Kit Fine's sizeable contribution to the development of a neo-Aristotelian alternative to standard mereology; I focus especially on the theory of 'rigid' and 'variable embodiments', as defended in Fine 1999. Section 2 briefly describes the system I call 'standard mereology'. Section 3 lays out some of the main principles and consequences of Aristotle's own mereology, in order to be able to compare Fine's system with its historical precursor. Section 4 gives an exposition of Fine's theory of embodiments and goes on to isolate a number of potential concerns to which this account gives rise. In particular, I argue that (i) Fine's theory threatens to proliferate primitive sui generis relations of parthood and composition, whose characteristics must be stipulatively imposed on them, relative to particular domains; (ii) given its

'superabundance' of objects, Fine's system far outstrips the (arguably) already inflated ontological commitments of standard mereology; and (iii) there is a legitimate question as to why we should consider Fine's primitive and sui generis relations of parthood and composition to be genuinely mereological at all, given their formal profile. These three objections lead me to conclude that we ought to explore other avenues that preserve the highly desirable, hylomorphic, features of Fine's mereology, while avoiding its methodological and ontological excesses." References

Fine, K. 1999, 'Things and Their Parts', *Midwest Studies in Philosophy* 23, pp. 61–74.

- MacBride, Fraser. 2007. "Neutral Relations Revisited." *Dialectica.International Journal of Philosophy* no. 61:25-56.
 Abstract: "Do non-symmetric relations apply to the objects they relate in an order? According to the standard view of relations, the difference between aRb and bRa obtaining, where R is nonsymmetric, corresponds to a difference in the order in which the non-symmetric relation R applies to a and b. Recently Kit Fine has challenged the standard view in his important paper 'Neutral Relations' arguing that non-symmetric relations are neutral, lacking direction or order.
 In this paper I argue that Fine cannot account for the application of non-symmetric relations to their relata; so far from being neutral, these relations are inherently directional."
- 17. Weir, Alan. 2007. "Honest Toil or Sheer Magic?" *Dialectica.International Journal of Philosophy* no. 61:89-115.

 Abstract: "In this article I discuss the 'procedural postulationist' view of mathematics advanced by Kit Fine in a recent paper [*]. I argue that he has not shown that this view provides an avenue to knowledge of mathematical truths, at least if such truths are objective truths. In particular, more needs to be said about the criteria which constrain which types of entities can be postulated. I also argue that his reliance on second-order quantification means that his background logic is not free of ontological commitment and that his doctrine of 'creative expansion' only makes sense from a radically anti-realist perspective."

 {* Fine, K. 2005, 'Our Knowledge of Mathematical Objects', in: T. Z. Gendler and J. Hawthorne eds., *Oxford Studies in Epistemology* Vol. 1, Oxford: Clarendon Press, pp. 89–109.]
- Hinzen, Wolfram. 2003. "Constructive versus Ontological Construals of Cantorian Ordinals." *History and Philosophy of Logic* no. 24:45-63.

 Abstract: "In a recent paper, Kit Fine offers a reconstruction of Cantor's theory of ordinals. It avoids certain mentalistic overtones in it through both a non-standard ontology and a non-standard notion of abstraction. I argue that this reconstruction misses an essential constructive and computational content of Cantor's theory, which I in turn reconstruct using Martin-Löf's theory of types. Throughout, I emphasize Kantian themes in Cantor's epistemology, and I also argue, as against Michael Hallett's interpretation, for the need for a constructive understanding of Cantorian 'existence principles'."
- Kuhn, Steven T. 2006. "Review of *Modality and Tense: Philosophical Papers*, by Kit Fine." *International Philosophical Review* no. 46:492-502.

 "Fine sees himself as defending two very plausible views--that the distinction between the necessary and the contingent is intelligible and that merely possible worlds are not real in the same sense as the actual world–against pervasive philosophical orthodoxies that deny them. I can't resist noting that his own theories occasionally lead him to views that seem implausible: Ordinary objects (or at least sequences of them) have logical form, abstract objects may exist contingently. A formula of the form [A if and only if the proposition expressed by A is true] may be false. "Being" should to be distinguished from existence and (as was noted above) there is a sense in which the fountain of youth exists. There are good reasons to embrace the view that reality contains contradictory facts. It is a testament to Fine's

- meticulous examination of the issues involved and his skill in communicating it that many of these positions seem quite plausible, and all of them far less implausible, after the book is read." (p. 502)
- 20. Correia, Fabrice. 2000. "Propositional Logic of Essence." *Journal of Philosophical Logic* no. 29:295-313.

Abstract: "This paper presents a propositional version of Kit Fine's (quantified) logic for essentialist statements, provides it with a semantics, and proves the former adequate (i.e. sound and complete) with respect to the latter."

"The present paper can be considered as a companion to Kit Fine's papers 'The Logic of Essence' and 'Semantics for the Logic of Essence'. (1) In the first paper Fine presents a logical system for quantified essentialist statements, E5. (2) In the second he presents a semantics for a variant of the system, and proves this system adequate (i.e. sound and complete) with respect to that semantics. I propose here a Kripke-style semantics for $E5\pi$, a propositional counterpart of E5, and prove the adequacy of the latter with respect to the former.

There are many, more or less natural, more or less interesting, ways to extend $E5\pi$ (or one of its cousins) to a system of quantified logic of essence. $E5\pi$, together with its semantics, is intended to constitute the core of subsequent, more expressive, logics of essence. So, the study of $E5\pi$ per se, regardless of possible quantificational extensions, is of great interest.

Another interesting point about the present study lies in the fact that the completeness proof given here is much simpler than the one Fine gives for his quantificational system.

The reader is strongly urged to take a look at Fine's papers on the logic of essence, if only because no detailed comparison between Fine's material and mine will be offred." (p. 295)

- (1) At the time I worked on the present paper only the first of Fine's papers was available to me. I became acquainted with 'Semantics for the Logic of Essence' after obtaining the results presented here.
- (2) Fine aims at developing such a system in response to his own objections to the standard modal contruals of essence. See his 'Essence and Modality'.
- 21. Kremer, Philip. 1989. "Relevant Predication: Grammatical Characterisations." Journal of Philosophical Logic no. 18:349-382. Abstract: "This paper reformulates and decides a certain conjecture in Dunn's Relevant Predication 1: The Formal Theory (Journal of Philosophical Logic 16, 347-381, 1987). This conjecture of Dunn's relates his object-language characterisation of a property's being relevant in a variable x to certain grammatical characterisations of relevance, analogous to some given by Helman, in Relevant Implication and Relevant Functions (in Entailment: The Logic of Relevance and Necessity, vol. 2, by Alan Ross Anderson, Nuel Belnap, and J. Michael Dunn et al.) In the course of the investigation this paper also investigates Kit Fine's semantics for quantified relevance logics, which appears in his appropriately titled Semantics for Quantified Relevance Logic."
- Mares, Edwin D., and Goldblatt, Robert. 2006. "An Alternative Semantics for Quantified Relevant Logic." *Journal of Symbolic Logic*.

 Abstract: "The quantified relevant logic RQ is given a new semantics in which a formula ∀x A is true when there is some true proposition that implies all xinstantiations of A. Formulae are modelled as functions from variable-assignments to propositions, where a proposition is a set of worlds in a relevant model structure. A completeness proof is given for a basic quantificational system QR from which RQ is obtained by adding the axiom EC of 'extensional confinement': ∀x(A ∨ B) → (A ∨ ∀xB), with x not free in A. Validity of EC requires an additional model condition involving the boolean difference of propositions. A QR-model falsifying EC is constructed by forming the disjoint union of two natural arithmetical structures in which negation is interpreted by the minus operation."

"Kit Fine [10] showed that the quantified relevant logic RQ is incomplete over Routley and Meyer's relational semantics with constant domains. In its place he developed [9] an increasing domain semantics over which RQ is complete, and for which a model includes a set of frames which are related to one another by a number of relations and operators. This semantics is powerful and ingenious. But Fine's semantics is very complicated. Since it was produced it in the mid-1980s relevant logicians have wanted to simplify it. J. Michael Dunn and Greg Restall say [7, p 83]:

[I]t must be said that while the semantic structure pins down the behaviour of RQ and related systems exactly, it is not altogether clear whether the rich and complex structure of Fine's semantics is necessary to give a semantics for quantified relevance logics.(1)

To those of us who have seriously attempted to simplify Fine's semantics, it is becoming clear that the "rich and complex structure" is in a certain sense necessary. The elements of the theory seem to work in concert with one another and eliminating even one operator or relation seems to make the entire structure collapse. Thus, in order to create a simpler semantics for quantified relevant logic we need to take an alternative approach.

In this paper, we take an alternative approach. (2)" (pp. 163-164)

- (1) Restall also says [14, p 5]: "The groundbreaking work of [9] is formally astounding but philosophically opaque".
- (2) After seventeen years of trying to modify Fine's semantics, Mares in particular is glad that an alternative has suggested itself.
- 23. Savitt, Steven. 2016. "Kit Fine on Tense and Reality." *Manuscrito* no. 39:75-96. Abstract: "Kit Fine (2005, 2006) recently described and defended a novel position in the philosophy of time, fragmentalism. It is not often that a new (and even perhaps a radically new) option appears in this old field, and for that reason alone these two essays merit serious attention. I will try to present briefly but fairly some of the considerations that Fine thinks favour fragmentalism. I will also weigh the merits of fragmentalism against the view that Fine presents as its chief rival, relativism, as well as the merits of both against the view that he calls anti-realism. Along the way, we should pick up a clearer picture of fragmentalism itself."

Fine, K. "Tense and Reality" in his *Modality and Tense: Philosophical Papers*. Oxford: Oxford University Press, 2005.

"The Reality of Tense," *Synthese* 150: 399-414, 2006.

24. Almog, Joseph. 2020. "One Absolutely Infinite Universe to Rule Them All. Reverse Reflection, Reverse Metaphysics." In *Metaphysics, Meaning and Modality: Themes from Kit Fine*, edited by Dumitru, Mircea, 52-86. New York: Oxford University Press.

"Three questions are to guide us. They are about the three segments in the title: the nature of the universe proper, reflection (up-to and down-from) the universe and the method with which to describe the metaphysics (as opposed to constructive justification epistemology) of the universe." (p. 52, a note omitted)

25. Bonardi, Paolo. 2020. "Coordination, Understanding, and Semantic Requirements." In *Metaphysics, Meaning and Modality: Themes from Kit Fine*, edited by Dumitru, Mircea, 360-367. New York: Oxford University Press.

"Coordination is the central notion of Kit Fine's (1007) theory of meaning called *semantic relationism*.

 (\ldots)

The present manuscript attempts to answer the following question: What is coordination between proper names? Fine proposes two characterizations of this sort of coordination, which he also labels *representing as the same*: an intuitive test; and a technical definition. On the basis of the intuitive characterization, I will maintain that coordination (viz. representing as the same) is grounded in a notion of understanding

distinct from the notion of linguistic competence. Whereas—as I will argue—we need a characterization of understanding in order to elucidate Fine's coordination, it is unclear how to provide one: three *prima facie* appealing proposals to characterize it will be examined and then dismissed as intrinsically implausible or as incompatible with Fine's relational semantics. Not even his technical characterization of coordination, involving the notion of semantic requirement, will enable us to escape the impasse. Ultimately, the problem of determining what exactly coordination between names is will remain open." (p. 360)

26. Correia, Fabrice. 2020. "More on the Reduction of Necessity to Essence." In *Metaphysics, Meaning and Modality: Themes from Kit Fine*, edited by Dumitru, Mircea, 265-282. New York: Oxford University Press.

"Essence and Modality" has had a considerable impact on subsequent philosophic

"Essence and Modality" has had a considerable impact on subsequent philosophical thinking about essence and modality. The paper argues that the traditional view that essence reduces to metaphysical modality is wrong. Many have found these arguments convincing and have accordingly abandoned the view. The paper also argues that the reduction goes the other way around, that is, that it is metaphysical modality which reduces to essence. Twenty years after the publication of "Essence and Modality," Kit Fine's reductive view has become widely recognized as one of the main contenders for a reductive account of metaphysical modality.

There are several ways in which such a reductive account can be spelled out. In Correia 2012, I raised objections against one natural way of doing so, and developed an alternative account—the "rule-based" account—which relies on a brief suggestion Fine makes in Fine 1995a. The aim of the present chapter is twofold: first, I wish to strengthen the case for the rule-based account by criticizing alternative accounts,

including some accounts based on other suggestions made by Fine, or inspired by material one can find in his work; and second, I wish to discuss certain objections to the rule-based account and suggest how they can be met." (p. 265)

Correia, F. 2012. "On the Reduction of Necessity to Essence," *Philosophy and Phenomenological Research* 84: 639-53.

Fine, K. 1995a. "Senses of Essence," in W. Sinnott-Armstrong (ed.), *Modality, Morality and Belief*, Cambridge: Cambridge University Press, 53–73.

- 27. Dumitru, Mircea. 2020. "Introduction: Kit Fine—A Philosopher's Philosopher." In *Metaphysics, Meaning and Modality: Themes from Kit Fine*, edited by Dumitru, Mircea, 1-9. New York: Oxford University Press.
 - "This book is the first edited volume on the philosophy of one of the most seminal and profound contemporary philosophers. Over the last forty-odd years, Kit Fine has been one of the most influential and original analytic philosophers. He has made provocative and innovative contributions to several areas of systematic philosophy, including philosophy of language, metaphysics, and the philosophy of mathematics.
 - as well as a number of topics in philosophical logic, such as modal logic, relevance logic, the logic of essence, and the logic of vagueness. These contributions have helped reshape the agendas of those fields and have given fresh impetus to a number of perennial debates." (p. 1)
- 28. Forbes, Graeme. 2020. "Fine's New Semantics of Vagueness." In *Metaphysics, Meaning and Modality: Themes from Kit Fine*, edited by Dumitru, Mircea, 164-179. New York: Oxford University Press.
 - "My conclusion about Fine's discussion of the three formulations of Sorites reasoning, then, is that it is a very great strength of compatibilist semantics that it diagnoses a problem in each of the three, using the same formal apparatus, and other approaches which cannot do something like this are at an immediate disadvantage.

However, I also think that the fuzzy logic analysis of the three formulations is overall equally as effective, in particular because it is independently plausible that

29.

embedding fixed-point negation in "it is the case" produces an operator expressing semantic negation. So the seductiveness of apparent $\neg \Lambda$ -formulations is explained by revealing them to be $\sim \Lambda$ -formulations." (p. 178, note omitted)

Godeon, Rosen. 2020. "What is Normative Necessity?" In Metaphysics, Meaning

- and Modality: Themes from Kit Fine, edited by Dumitru, Mircea, 205-233. New York: Oxford University Press.

 "If the account I have sketched is cogent, you can now entertain an alternative to Strong Supervenience: the view that the normative supervenes on the natural as a matter of normative necessity. (This follows from the normative necessity of pure moral principles, together with the further assumption that all normative facts are ultimately grounded in pure principles plus nonnormative facts.) These views disagree about the modal classification of remote worlds—worlds in which act utilitarianism is true and the natural facts are just as they are, for example. Everyone agrees that such worlds are impossible in a sense. The open question concerns the interpretation of the modal word in this formulation. Having seen the alternative, are you confident that these remote worlds must be metaphysically impossible—ruled out by the *natures* of the moral properties and
- Goldblatt, Robert. 2020. "Fine's Theorem on First-Order Complete Modal Logics." In *Metaphysics, Meaning and Modality: Themes from Kit Fine*, edited by Dumitru, Mircea, 316-334. New York: Oxford University Press.

 "In his PhD research, completed in 1969, and over the next half-dozen years, Kit Fine made a series of fundamental contributions to the semantic analysis and metatheory of propositional modal logic, proving general theorems about notable classes of logics and providing examples of failure of some significant properties." (p. 316)

 (...)

relations? If so, you see more deeply into these natures than I do." (p. 228)

"My interest here is in what was arguably the most influential contribution: the paper "Some Connections between Elementary and Modal Logic" (1975b), and in particular its Theorem 3, which will be referred to as *Fine's Canonicity Theorem*. It states that

any logic that is complete with respect to a first-order definable class of Kripke frames must be valid in its canonical frames ." (p. 317)

- 31. Hale, Bob. 2020. "The Problem of Modality." In *Metaphysics, Meaning and Modality: Themes from Kit Fine*, edited by Dumitru, Mircea, 234-246. New York: Oxford University Press.
 - "There is no doubt that one major reason why *de re* modality has seemed especially problematic lies in the broadly linguistic conception of the source of necessary truth which was widely accepted by analytic philosophers throughout the middle decades of last century, in spite of Quine's major onslaught on the notion of analytic truth or truth in virtue of meaning. Indeed, Quine himself—somewhat surprisingly, given his
 - misgivings about analyticity—finds the essentialism to which he thinks acceptance of *de re* modalities commits us unpalatable precisely because it clashes with the logical empiricist orthodoxy that all necessity is rooted in meanings." (p. 235)
- 32. Koslicki, Kathrin. 2020. "Essence and Identity." In *Metaphysics, Meaning and Modality: Themes from Kit Fine*, edited by Dumitru, Mircea, 113-140. New York: Oxford University Press.

"4 Conclusion

My primary focus in this chapter has been on the question of how essentialists should attempt to meet Quine's demand for necessary and sufficient conditions for the crossworld identity of individuals. I examined six contenders for the role of crossworld identity principles: (i) an object's qualitative character; (ii) matter; (iii) origins; (iv) haecceities; (v) world-indexed properties; and (vi) form.

(...)

On balance, then, the sixth option deserves to be taken very seriously as a possible response to Quine's challenge, especially by neo-Aristotelians who are already motivated for other reasons to take on board a

hylomorphic conception of unified wholes. Many of these hylomorphists also accept a non-modal conception of essence and thus face the further difficult task, over and above what is required to meet Quine's challenge, of having to explain an object's *de re* modal profile in terms of facts about its essence. Haecceities and world-indexed properties are unlikely to be of much help with respect to this second challenge, while the forms of hylomorphic compounds are in fact well suited for this purpose." (p. 136)

33. Kroon, Fred, and McKeown-Green, Jonathan. 2020. "Ontology: What's the (Real) Question?" In *Metaphysics, Meaning and Modality: Themes from Kit Fine*, edited by Dumitru, Mircea, 13-37. New York: Oxford University Press.

"One way to philosophize is to ontologize: about physical objects, moral properties, properties, possibilia, numbers, sets, and much else. For Kit Fine, ontologizing differs from what happens in ordinary life when I affirm that there are chairs and from what happens at school when I explain that there is a prime number less than three.

(...)

Fine's most extensive treatment is to be found "The Question of Ontology" (Fine 2009) and related considerations are advanced in "The Question of Realism" (Fine 2001). In the first three, expository, sections of this chapter, we present Fine's ideas in the context of broader views that he elaborates in "What is Metaphysics?" (Fine 2012). Then we offer our responses." (p. 13)

- 34. Kuhn, Steven T. 2020. "Necessary, Transcendental, and Universal Truth." In Metaphysics, Meaning and Modality: Themes from Kit Fine, edited by Dumitru, Mircea, 183-204. New York: Oxford University Press. "The argument that Fine's puzzle, as originally formulated, provides evidence that Socrates' humanness is a transcendental, rather than a worldly, fact assumes that we are more reluctant to attribute necessity to propositions true because of the nature of individuals than to propositions true because of worldly circumstances, and that we find it still more difficult to attribute necessity to "hybrid" sentences. A simpler version of the argument, however, reaches the same conclusion under a more plausible understanding of the relation between necessary and transcendental truth. We may question Fine's emphasis on his two-premise puzzle and even, perhaps, his principal example of a transcendental truth. It is difficulty to deny, however, the interest and importance of the worldly–unworldly distinction and Fine's thought about it. We should be grateful to him for bringing this, as many other neglected topics in metaphysics, into focus." (p. 203)
- 35. Mackie, Penelope. 2020. "Can Metaphysical Modality Be Based on Essence?" In *Metaphysics, Meaning and Modality: Themes from Kit Fine*, edited by Dumitru, Mircea, 247-264. New York: Oxford University Press.

 "1 Introduction

In his hugely influential paper "Essence and Modality" (1994), Kit Fine argued that the then orthodox view that essence can be understood in terms of metaphysical modality is fundamentally flawed. He proposed, in its place, the view that all metaphysical modality has its source in the essences or natures of things, where the notion of a thing's essence or nature can be understood in terms of a broadly Aristotelian notion of real definition.

(...)

In spite of the attention that it has received, however, one aspect of Fine's revolutionary theory seems to me to have been surprisingly neglected. The theory appears to require that the relevant conception of real definition can itself be isolated without appeal to metaphysical modality. And I do not see how this requirement can be met. Hence I am genuinely puzzled about how an "essence-based" theory of metaphysical modality is possible. In this chapter, I explain my

- reasons for skepticism about this issue. I then briefly consider the implications of my argument for the relation between essence and metaphysical modality." (p. 247)
- 36. Moltmann, Friederike. 2020. "Variable Objects and Truthmaking." In *Metaphysics, Meaning and Modality: Themes from Kit Fine*, edited by Dumitru, Mircea, 368-394. New York: Oxford University Press.

"This chapter will focus on a philosophically significant construction whose semantics brings together two important notions in Kit Fine's philosophy: the notion of truthmaking and the notion of a variable embodiment, or its extension, namely what I call a "variable object."

The analysis of the construction this paper will develop will be based on an account of clausal complements of intensional verbs that is of more general interest, based on truthmaking and the notion of a cognitive product, such as a promise or a belief, rather than that of a proposition. On that account, the clausal complement of, for example, promise will characterize satisfaction situations of the reported promise, and the clausal complement of believe will characterize the truthmakers of the reported belief." (p. 368)

- 37. Ostertag, Gary. 2020. "Fine on Frege's Puzzle." In *Metaphysics, Meaning and Modality: Themes from Kit Fine*, edited by Dumitru, Mircea, 337-359. New York: Oxford University Press.
 - "Kit Fine's *Semantic Relationism* (SR) provides a novel defense of referentialism—novel, in part, because of the specific challenge to referentialism it addresses and in part because of the techniques it introduces in its defense. SR takes on a number of interrelated concerns, involving, principally, the interpretation of variables and the phenomenon of strict, or de jure, coreference. The purpose of the current chapter is to clarify, and place in a broader context, the problem of strict coreference and to provide a framework for understanding the proposed solution." (p. 337, a note omitted)
- 38. Percival, Philip. 2020. "Beyond Reality?" In *Metaphysics, Meaning and Modality: Themes from Kit Fine*, edited by Dumitru, Mircea, 38-51. New York: Oxford University Press.

"My focus is the divide between reality and that which is beyond reality. On what I call an "all-encompassing" view of reality, this is the divide between everything and nothing: reality encompasses everything, and beyond it there is nothing at all. Opposed to the all-encompassing view is what I call a "restriction" view of reality: reality is coincident with some kind of restriction on, or partition of, what there is; it is not the case that what resides beyond reality is nothing.

I have two main aims: to first classify restriction views of reality (§ 1), and then to assess a species of the restriction view that pertains to time and modality (§ 2)." (p. 38)

- 39. Sandu, Gabriel. 2020. "Indefinites, Skolem Functions, and Arbitrary Objects." In *Metaphysics, Meaning and Modality: Themes from Kit Fine*, edited by Dumitru, Mircea, 98-112. New York: Oxford University Press.
 - "1 Introduction: Indefinites

Indefinites can occur in a nested sequence of quantificational phrases like

- 1. Every student read every paper that a professor recommended and also in combination with anaphoric pronouns as in
- 2. A man smiles. He is happy.

The nesting, on one side, and the anaphoric link, on the other, create an interpretational tension. The nesting favors a quantificational interpretation of the indefinites according to which they behave more like any other quantificational NP, for example they enter into scopal (dependency) relations with other quantificational phrases. But the presence of discourse anaphora creates some pressure to interpret the indefinites referentially in a way which makes their semantical behavior resemble more that of proper names." (p. 98)

40. Shalkowski, Scott A. 2020. "Essence and Nominalism." In *Metaphysics, Meaning and Modality: Themes from Kit Fine*, edited by Dumitru, Mircea, 301-315. New York: Oxford University Press.

"Kit Fine has produced an extensive and rich body of work bearing on the philosophy of modality.

 (\ldots)

"What is less than usual, though, I will also argue that essentialism can be made safe for nominalists. Not only should we be unimpressed with philosophy that expands our ontology for the sake of eliminating modality, we should also be unimpressed with philosophy that expands the domain to admit the abstract when it is in the business of being completely sober, serious, and aiming at non-modal truth-telling.

Abstraction involves not arriving at principled, well-justified beliefs about abstract objects. It simply involves the failure to regard as important more and more features of (concrete) reality. One can hardly discover new ontology by caring less about—or by paying less attention to—the old ontology. The end result will be essentialism that is safe for nominalists." (pp. 301-302, anote omitted)

41. Urquhart, Alasdair. 2020. "Fine on Arbitrary Objects." In *Metaphysics, Meaning and Modality: Themes from Kit Fine*, edited by Dumitru, Mircea, 87-97. New York: Oxford University Press.

"Introduction

Fine's remarkable theory of arbitrary objects has attracted less attention than it deserves. He expounded his theory in two papers (Fine, 1983; Fine, 19858a), and a monograph (Fine, 1985b). The aim of the present chapter is to provide a brief introduction to the theory, to discuss some of the historical background, and finally to sketch some connections with other areas in logic and philosophy. In the historical section, I shall try to elucidate the extent to which earlier writers anticipated Fine's theory, while in the last section, I attempt to expand on some of Fine's brief but suggestive remarks in his monograph." (p. 87)

Fine, 1983. Kit Fine. A Defence of Arbitrary Objects. *Proceedings of the Aristotelian Society, Supplementary Volume*, 15:55-77.

Fine, 1985a. Kit Fine. Natural Deduction and Arbitrary Objects. *Journal of Philosophical Logic*, 14:57-107.

Fine, 1985b. Kit Fine. *Reasoning with Arbitrary Objects*. Basil Blackwell. Aristotelian Society Monograph Series 3.

- 42. Wilson, Jessica. 2020. "Essence and Dependence." In *Metaphysics, Meaning and Modality: Themes from Kit Fine*, edited by Dumitru, Mircea, 283-300. New York: Oxford University Press.
 - "I have offered certain counterexamples to Fine's essence-based account of dependence, which more generally pose a difficulty for some of the principles (e.g., Localization) that he takes to characterize the connection between essence and dependence. Still, it will not have been lost on anyone that my criticisms here accept and aim to implement exactly the methodology that Fine took to show that modal accounts of essence and ontological dependence are incorrect, and for the same reason—namely, that it is of the first importance to characterize the key metaphysical notions in such a way that they do not inappropriately exclude any intelligible applications of those notions." (p. 299)
- 43. Frances, Bryan. 2006. "The New Leibniz' Law Arguments for Pluralism." *Mind* no. 115:1007-1022.

"Ordinary macroscopic material objects A and B coincide at a time if at that time they share the very same spatial regions and are made of the same underlying matter. Many philosophers hold that some easily possible or even actual material objects that coincide at a time are nonidentical, for example, a statue and the hunk of clay that it is materially coincident with. Following Kit Fine (2003), I will call

those philosophers pluralists. Other philosophers, monists, think that there are no pairs of distinct coincident ordinary material objects.

Some of the paradoxes of material constitution are frightfully difficult to solve, and it is almost always agreed that any response to them will be at least somewhat counterintuitive, so the oddity of pluralism is not its refutation. (1) Fine (2003) has developed further than anyone else a new set of Leibniz's Law arguments for pluralism. Using Leibniz's Law to argue for pluralism is not new. Many find intuitive the idea that a statue but not the hunk of clay from which it is made cannot survive being flattened; by Leibniz's Law we can conclude that the statue is not the hunk of clay, or so it appears. The new arguments are intended to be superior to the familiar arguments in two ways: they do not rely on controversial modal and temporal intuitions, and they suggest serious errors in the monist's replies to the old Leibniz's Law arguments.

The new arguments are a welcome addition to the literature, as the traditional Leibniz's Law arguments for pluralism have already been very thoroughly examined. However, it seems to me that the monist has plausible responses to the new arguments. I agree with Fine that monism is probably false, but I do not see how the new arguments mount a good case against it." (pp. 1007-1008) (1) I do not mean to imply that the problems of coincidence are the only problems of material composition. Even more serious composition problems are found when investigating the questions 'Under what conditions does composition happen?' and 'When taking atoms away from a pumpkin, when does one no longer have a pumpkin?' Indeed, without a satisfactory solution to the latter problems, I do not see how we can be confident regarding our responses to the material coincidence problems.

References

Fine, Kit 2003: 'The Non-Identity of a Material Thing and Its Matter'. *Mind*, 112, pp. 195–234.

- 44. King, Jeffrey C. 2006. "Semantics for Monists." Mind no. 115:1023-1058. Abstract: "Assume that the only thing before you is a statue made of some alloy. Call those who think that there is one thing before you in such a case monists. Call those who think there are at least two things before you in such a case pluralists. The most common arguments for pluralism run as follows. The statue is claimed to have some property P that the piece of alloy lacks (or vice versa), and hence it is concluded that they are distinct. Most often, the predicates employed in such arguments to express the crucial property are predicates expressing 'temporal properties', such as existing at a certain time; or 'modal properties', such as possibly being spherical; or 'constitution properties', such as being made of a certain sort of material. In a recent paper, Kit Fine has noted that such predicates suffer from various defects that make it possible for the monist to plausibly resist the relevant versions of the pluralist's arguments. For this reason, Fine considers a number of predicates that do not suffer from these defects, and constructs new versions of the above argument using them. Fine argues that any attempt on the monist's part to resist his versions of the argument force the monist to adopt implausible positions in the philosophy of language. As against this, I argue that the monist has perfectly plausible responses to Fine's arguments that require the monist to adopt only quite reasonable positions in the philosophy of language."
- Tallant, Jonathan. 2013. "A Heterodox Presentism: Kit Fine's Theory." In *New Papers on the Present: Focus on Presentism*, edited by Ciuni, Roberto, Miller, Kristie and Torrengo, Giuliano, 281-306. Munich: Philosophia Verlag. Abstract: "Kit Fine ([Fine 2005]) has articulated a position according to which reality is fragmented. In this paper I will refer to this view as 'Heterodox Presentism'. I want to try and do two things. First, I want to try and undermine the arguments presented by Fine in favour of Heterodox Presentism and show that the view is unmotivated—in part by the fact that it fails to meet some of the standards that Fine sets for it. The second target aim is to offer some very informal and sketchy remarks as to how we might better construe the 'standard' view of realism,

- or 'presentism' to which Fine objects—the view that I will define here as 'only present objects exist'. As we shall see, my own view of presentism differs quite substantially from this pithy slogan.
- 46. Burgess, John P. 2004. "Book Review: Kit Fine. *The Limits of Abstraction*. Clarendon Press, Oxford, 2002." *Notre Dame Journal of Formal Logic*:227-251. "Kit Fine's long article [13], introducing his distinctive take on neo-Fregeanism, has now been expanded into a short book of the same title. (For those familiar with the article version, the philosophical material from it appears as chapter 1 in the book, and the echnical material as chapters 3 and 4. According to the book's preface, "The major change is the addition of a new part on the context principle." This addition constitutes chapter 2 of the book. There is also an index of technical terms, which would have been more useful if it had been arranged alphabetically.)

 The present review of that book is divided into three parts of unequal length. The long introduction Section 2 surveys recent neo-Fregeanism. Then Section 3 summarizes Fine's technical contributions, which presumably are what is of primary interest for readers of the present journal. The brief conclusion Section 4 touches on more purely philosophical issues.

References

- [13] Fine, K., "The limits of abstraction," pp. 503–629 in *The Philosophy of Mathematics Today (Munich, 1993)*, edited by M. Schirn, Oxford University Press, New York, 1998.
- 47. Correia, Fabrice. 2006. "Generic Essence, Objectual Essence, and Modality." *Noûs* no. 40:753-767.

Abstract: When thinking about the notion of essence or of an essential feature, philosophers typically focus on what I will call the notion of objectual essence. The main aim of this paper is to argue that beside this familiar notion stands another one, the notion of generic essence, which contrary to appearance cannot be understood in terms of the familiar notion, and which also fails to be correctly characterized by certain other accounts which naturally come to mind as well. Some of my objections to these accounts are similar to some of Kit Fine's compelling objections to the standard modal account of (objectual) essence (Fine 1994). In the light of these objections, Fine advances the view that it is metaphysical necessity which has to be understood in terms of essence, rather than the other way around, and takes essence to be unanalyzable. When formulating his view, Fine had only objectual essence in mind (or had both concepts in mind, but assumed that the generic is a special case of the objectual), and for that reason, I will argue, his account fails. I will suggest that Fineans should modify their view, and take it that metaphysical necessity is to be understood in terms of the two notions of essence a view I myself find appealing.

Finally, I will end up with suggesting a further move which reduces the objectual to the generic, making metaphysical necessity reducible to generic essence alone—a move with which I myself have some sympathy."

References

Fine, K. (1994) "Essence and Modality", Philosophical Perspectives, 8: 1-16.

48. Asay, Jamin. 2017. "Run Aground: Kit Fine's Critique of Truthmaker Theory." *The Philosophical Quarterly* no. 67:443-463.

Abstract: "Kit Fine, the leading proponent of the metaphysical project of grounding theory, has offered a number of potentially devastating objections to truthmaker theory, the branch of metaphysics dedicated to exploring the ontological grounds for truths. In this paper, I show what presuppositions about truthmaker theory Fine's objections are based upon, and why they are false. I discuss four objections that Fine raises, and demonstrate how truthmaker theorists may respond to them. I then showcase the positive contribution that truthmaker theory can make to metaphysics, including its ability to speak to a core metaphysical topic (the ontological grounds for truths) that Fine's approach to grounding must ultimately remain silent on. I

conclude by exploring what I take to be the best option when it comes to understanding how truthmaking and grounding fit together."

49. Shapiro, Stewart. 2004. "The Nature and Limits of Abstraction." *Philosophical Quarterly* no. 54:166-174.

"To what extent can abstraction principles serve as a foundation for a branch of mathematics? Like logicism, neo-logicism is an epistemological enterprise. The neo-logicist claims that basic arithmetic principles can become known on the basis of a derivation from Hume's principle. But of course the epistemic status of the conclusion of a deduction is closely tied to the status of its premises. Thus one key batch of philosophical issues concerns the epistemic status of acceptable abstraction principles, like Hume's principle. Are they analytic, or otherwise knowable a priori? Fine explores a number of options, and finds them wanting, some more so than others.

One natural possibility is to think of Hume's principle as a definition. But definitions come in many flavours. An 'orthodox' definition is a linguistic device to identify an item - object, property, function, etc. - which is already in the range of the bound variables of the language or theory in use. There are two types of orthodox definitions. An explicit definition stipulates that a new linguistic term is to be equivalent to a given expression. Abstraction principles do not have the form of explicit definitions. For example, Hume's principle does not provide a single expression that is equivalent to the 'number of' operator." (p. 168) (...)

"There is gold in these pages, but it is often difficult to mine. The book contains a number of annoying typographical and other minor errors. In most (but not all) cases, I was able to figure out what was meant, sometimes with effort. Part of the difficulty in reading this book can be traced to the fertile mind of its author. Fine explores many highways, byways and alleyways. For example, the philosophical material deals with intensional and extensional equivalence and with abstractions whose relations are contingent as well as necessary. On several occasions, distinctions are made and discussed for a while, and then dropped, sometimes with a remark that it does not matter. On the technical side, the book deals with both standard models and non-standard Henkin models. The play with predominantly logical abstractions is a result of Fine's admirable desire for his results to be as strong as possible, but the extra detail required for this introduces a wealth of intricacy that will challenge all but a diligent reader. The second half of the book is full of new technical terms and abbreviations, and it is easy to get lost in the linguistic jungle. The only help the reader gets in this regard is an 'index of first occurrence of formal symbols and definitions'. Unfortunately, this is arranged in the order in which these terms occur in the book, not in alphabetical order. So the reader who needs to look up a forgotten notion or symbol must look through seven entire columns of terms.

That said, this is a deep and penetrating book. It should be required reading for anyone with more than a casual interest in neo-logicism, or abstraction principles generally. No one can claim to be an expert on these philosophical and logical matters until they have mastered the arguments and ideas contained in this work." (pp. 173-174)

50. Wildman, Nathan. 2013. "Modality, Sparsity, and Essence." *Philosophical Quarterly* no. 63:760-782.

Abstract: "Rather infamously, Kit Fine provided a series of counter-examples which purport to show that attempts to understand essence in terms of metaphysical necessity are 'fundamentally misguided'. Here, my aim is to put forward a new version of modalism that is, I argue, immune to Fine's counter-examples. The core of this new modalist account is a sparseness restriction, such that an object's essential properties are those sparse properties it has in every world in which it exists. After first motivating this sparseness restriction, I proceed to show how the resulting sparse modalism circumvents Fine's original counter-examples. After dismissing a potential problem concerning the membership relation, I conclude that,

- as at least one form of modalism is viable, the project of understanding essence in terms of metaphysical necessity is not so fundamentally misguided after all."
- Forbes, Graeme. 2008. "Critical Review of Kit Fine's ' Modality and Tense'." The Philosophical Review no. 117:275-287.
 "In this critical review I discuss the main themes of the papers in Kit Fine's Modality and Tense: Philosophical Papers. These themes are that modal operators are intelligible in their own right and that actualist quantifiers are to be taken as basic with respect to possibilist quantifiers. I also discuss a previously unpublished paper of Fine's on modality and existence."
- "Symposium on Kit Fine's book *The Limits of Abstraction*." 2005. *Philosophical Studies*.
 Contents: Kit Fine: Précis [of " *The Limits of Abstraction*"] 305; Stewart Shapiro: Sets and Abstracts Discussion 315; Alan Weir: On Kit Fine's ' *The Limits of Abstraction*' Discussion 333; Jamie Tappenden: On Kit Fine's ' *The Limits of Abstraction*' Discussion 349; Kit Fine: Replies 347-395.
- 53. King, Jeffrey C. 1991. "Instantial Terms, Anaphora and Arbitrary Objects." Philosophical Studies: 239-265. In recent work, Kit Fine has sought to resurrect the view that variables in mathematics refer to indefinite or, as he calls them, arbitrary objects. (3) Indeed Fine holds that instantial terms figuring in universal generalization and existential instantiation in systems of natural deduction, and some anaphoric pronouns in natural languages, refer to arbitrary objects as well. As against this, I intend to argue that the arbitrary objects account, like the theories of indefinite numbers that preceded it, obscures rather than highlights the distinctive features of the various expressions it claims to handle; and that there is another view of the semantics of these expressions which is preferable to the arbitrary objects account. (4) The plan of the present essay is first, to sketch Fine's theory of arbitrary objects; second, to sketch an alternative to Fine's account; third, to argue that Fine's arguments in support of arbitrary object theory also support the alternative; and finally, to argue that this alternative is preferable to arbitrary object theory." (p. 240) (3) See 'A Defence of Arbitrary Objects' (henceforth, DAO), *Proceedings of the* Aristotelian Society Supplementary Volume 57, 1983, pp. 55-77; 'Natural Deduction and Arbitrary Objects' (henceforth, NDAO), Journal of Philosophical Logic 14 (1985) 57-107; and Reasoning with Arbitrary Objects Aristotelian Society Series

Volume 3 (henceforth, RAO), Basil Blackwell, Oxford, 1985.

It may seem provincial of me to limit my attention to Fine s view and the alternative I intend to discuss, given the existence of sophisticated theories of anaphoric pronouns such as that outlined in Hans Kamp's 'A Theory of Truth and Semantic Representation' (in *Formal Methods in the Study of Language*, J. Groenendijk, T. Janssen, M. Stockhof (eds.), Mathematisch Centrum, Amsterdam, 1981, pp. 277-322). But Kamp's theory is incapable of handling much of the data that is at issue here. For example, that theory is incapable of handling the anaphoric pronoun in the following discourse

Every female professor has a computer. She is financially responsible for it. (I intend 'a computer' to have narrow scope with respect to 'Every female professor').

Kamp's rules of DRS [Discourse Representation Theory] construction prevent the construction of what Kamp calls a complete DRS for this discourse; and one must construct a complete DRS for a discourse for Kamp's semantics to handle the discourse. (In particular, Kamp's rule CR3 (p. 311) prevents substituting the "discourse referent" introduced by the processing of 'a computer' for 'it' in the second sentence, in effect preventing anaphoric connection between 'it' and 'a computer'; similarly for 'Every female professor' and' 'she'.) More importantly, even if the rules were changed in order to allow the construction of a complete DRS for this discourse, the semantics would not come out right. For the value of the pronoun 'it' in the second sentence depends on the value of the pronoun 'She' in the sense that

the truth of the sentence requires that for any female professor we choose (value of 'She') there must be a computer (value of 'it') such that the professor is financially responsible for the computer. Kamp's semantics does not include a device for keeping track of such dependence between the values of pronouns. This lack prevents Kamp's theory from handling instantial terms in natural deduction and English arguments, and variables in mathematics as well. But this is just the sort of data that is the subject of this essay.

- 54. Shapiro, Stewart. 2005. "Sets and Abstracts Discussion." *Philosophical Studies* no. 122:315-322.
 - "Kit Fine's *The Limits of Abstraction* (2002) is loaded with interesting and important model-theoretic results about abstraction principles. I propose to explore the bearing of these and related results on the philosophical goals of neo-logicism. I presuppose familiarity with the main themes of the book, at least as outlined in the précis published here.(1) Section 1 below analyzes particular results concerning abstraction principles, indicating consequences for acceptability of the neo-logicist program, at least as that program is articulated in the Fine study. Section 2 explores the role of set-theoretic meta-theory generally in foundational programs like that of neo-logicism (and logicism). What is an advocate of neo-logicism, or a neutral outsider, to make of the whole enterprise of model theory as based on set theory? What is a mathematician watching the neo-logicist development from the outside to make of neo-logicism?" (p. 315)
 - (1) K. Fine, Precis [of " *The Limits of Abstraction*"], *Philosophical Studies*, 122, 2005, pp. 305-313.
- 55. Tappenden, Jamie. 2005. "On Kit Fine's ' *The Limits of Abstraction'* Discussion." *Philosophical Studies* no. 122:349-366.
 - "The best place to begin these comments is to say that I found this to be a wonderful book genuinely thrilling to read. It is a challenge for me to find a contribution that hasn't been already advanced many times, since the core topics reference to abstract objects, say, or impredicativity, to choose two among many have received so much intense attention in recent decades. I'll try not to just repeat arguments that I already know are in the literature. Also, since many other people are in a better position than I am to comment on the technical side of the general theory of abstraction. I will refrain from comment, except to indicate my enthusiasm. Looking to a general account rather than remaining content with *ad hoc* justifications of this or that abstraction principle is clearly a crucial step to understanding the issues. Finally. I will have little that is critical to say, because I'm in broad agreement with those of the central reflections in *The Limits of Abstraction* on which I may have something novel to contribute. (1)" (p. 349)
 - (1) This is not to say I agree across the board, only that those disagreements I have on impredicativity, for example are for reasons that are completely unoriginal.
- 56. Weir, Alan. 2005. "On Kit Fine's ' *The Limits of Abstraction'* Discussion." *Philosophical Studies* no. 122:333-348.
 - "Kit Fine's *The Limits of Abstraction* is a magisterial study of the philosophical and technical issues raised by the neo-Fregean or neo-logicist project of founding mathematics on abstraction principles. The current interest in neo-logicism was largely generated by Crispin Wright, in his *Frege's Conception of Numbers as Objects*, and carried forward by Wright and others such as Bob Hale and Neil Tennant. Whatever one thinks of the philosophical plausibility of the project, it has been fortunate to attract the attention of superb logicians such as George Boolos and now Kit Fine, who have unearthed a wealth of interesting mathematical logic from its technical foundations.

Fine writes not as a committed, card-carrying neo-Fregean (see, for example, p. 46) but more as a sympathetic bystander concernedt o see how much light can be cast on mathematics from that perspective. This discussion, then, is not a critical review of Fine's book; rather I want to ask whether his work, in particular his 'General

- Theory of Abstraction', can be used by neo-Fregeans to rescue themselves from objections which have been made to their position." (p. 333)
- 57. Forbes, Graeme. 1993. "But a Was Arbitrary...." *Philosophical Topics* no. 21:21-34. "I offer a philosophical defense of Gentzen-style quantifier rules which explains why they are sound without employing any such notion as "arbitrary name" or "arbitrary choice". I argue that while Fine's arbitrary object semantics directly justifies reasoning in which we seem to appeal to arbitrary objects, a parallel with standard vs. non-standard analysis, in which arbitrary objects are like infinitesimals, suggests that the Gentzen approach is more fundamental."
- 58. "Book Symposium Kit Fine, Semantic Relationism." 2010. Philosophy and Phenomenological Research no. 81.

 Scott Soames: Coordination problems 464; Kit Fine: Comments on Scott Soames 'Coordination Problems' 475; Krista Lawlor: Varieties of Coreference 485; Kit Fine: Reply to Lawlor's 'Varieties of Coreference' 496; Paul Hovda: Semantics as Information about Semantic Values 502; Kit Fine: Comments on Paul Hovda's 'Semantics as Information About Semantics Values' 511-518.
- 59. Hovda, Paul. 2010. "Semantics as Information about Semantic Values." *Philosophy and Phenomenological Research* no. 81:502-510.

 Abstract: "I suggest that the core ideas of Kit Fine's *Semantic Relationism* are the notion of semantic requirement and the notion of manifest consequence, the nonclassical logical relation associated with semantic requirement.

 Surrounding this core are novel "relational" systems of coordinated sequences of expressions, relational (as opposed to intrinsic) semantic values, coordinated propositions, and coordinated content. I take Fine to take the periphery to be reducible to the core (but see below). I will make some primarily exegetical remarks about the two core ideas, and then make more critical remarks about the periphery. I should say that I find the book, as a whole, illuminating and, for the most part, convincing. I hesitantly suggest that the core constitutes an important and novel model for thinking about semantics (and representation in general), while the periphery might result from an attempt to force the new model into the old mold."
- 60. Lawlor, Krista. 2010. "Varieties of Coreference." *Philosophy and Phenomenological Research* no. 81:485-495.

 Conclusion: "Does a comprehensive theory of language and cognition require primitive semantic relations? Fine thinks so, and I agree. Will incorporating primitive semantic relations have the result that traditional semantics will need to be dramatically re-written? Again, plausibly Yes—our understanding of compositionality, to take one instance, may have to be more subtle. Is strict coreference the right primitive in such a comprehensive theory? No, I think not—the semantic pro-form is a better primitive, because it affords a more general theory. Naturally I've pressed criticisms here, but I greatly appreciate this book. We have Fine's work to thank for turning a powerful spotlight on coreference phenomena, illuminating how central they are in thought and language, and forcing us to think harder about how to understand them." (p. 495)
- 61. Sider, Ted. 2013. "Replies to Dorr, Fine, and Hirsch." *Philosophy and Phenomenological Research* no. 87:733-754.

 Reply to Kit Fine, *Fundamental Truth and Fundamental Terms*, (2013). "Kit Fine's paper raises important and difficult issues about my approach to the metaphysics of fundamentality. In chapters 7 and 8 (*) I examined certain subtle differences between my approach and his. Our approaches are kindred because they share the assumption that fundamentality-theoretic concepts are not to be defined modally, and that some such concepts are themselves to be adopted as conceptually primitive. (1) But they differ over which concepts are to be adopted, and over how those concepts behave."

 (*) of Ted Sider, *Writing the Book of the World*, New York: Oxford University
 - (*) of Ted Sider, Writing the Book of the World, New York: Oxford University Press, 2011.

- (1) This is not to say that all the approaches regard the concepts as *metaphysically* primitive.
- 62. Soames, Scott. 2010. "Coordination problems." *Philosophy and Phenomenological Research* no. 81:465-474.

 "Although 'Rxx' and 'Rxy' are both applications of a two-place predicate to a pair of terms, 'Rxx' resembles a one-place predicate in that all one needs to evaluate it is an assignment to 'x'. A similar point applies to the sequences 'Fx', 'Gx' and 'Fx', 'Gy' even though neither is a one-place predicate. Kit Fine's semantic relationism aims to extract a common idea uniting these comparisons, and to use it to provide a Millian solution to Frege's Puzzle." (p. 463)
- 63. Deng, Natalja. 2013. "Fine's Mctaggart, Temporal Passage, and the A versus B-Debate." Ratio no. 26:19-34. Abstract: "I offer an interpretation and a partial defense of Kit Fine's 'Argument from Passage', which is situated within his reconstruction of McTaggart's paradox. Fine argues that existing A-theoretic approaches to passage are no more dynamic, i.e. capture passage no better, than the B-theory. I argue that this comparative claim is correct. Our intuitive picture of passage, which inclines us towards A-theories, suggests more than coherent A-theories can deliver. In Finean terms, the picture requires not only Realism about tensed facts, but also Neutrality, i.e. the tensed facts not being 'oriented towards' one privileged time. However unlike Fine, and unlike others who advance McTaggartian arguments, I take McTaggart's paradox to indicate neither the need for a more dynamic theory of passage nor that time does not pass. A more dynamic theory is not to be had: Fine's 'non-standard realism' amounts to no more than a conceptual gesture. But instead of concluding that time does not pass, we should conclude that theories of passage cannot deliver the dynamicity of our intuitive picture. For this reason, a B-theoretic account of passage that simply identifies passage with the succession of times is a serious contender."
- 64. Gorman, Michael. 2005. "The Essential and the Accidental." Ratio no. 18:276-289. Abstract: "The distinction between the essential and the accidental is nearly always understood in modal terms. After criticizing some recent writings by Kit Fine that question that understanding, I develop a theory according to which whether a given feature of a thing is essential turns on whether it is explained by other features of that thing. The theory differs from the modal view by leaving room for features that are accidental even though their bearers cannot exist without them. The theory has the additional advantage of being open to the results of scientific theory." "Fine tries to explain essence in terms of definition but proceeds as if we already know the real definitions of things. I propose that we travel in the opposite direction and say that a good definition of something is a statement of its essence, i.e., a statement of its fundamental characteristic(s). In other words, we first inquire into a thing's essence, and then, once we know its essence, we can define it. If we do not yet know a thing's essence, then we are not able to state its real definition, although we might be able to formulate a substitute by invoking some necessary accident that all and only things of that type possess. Such substitutes can be extremely useful. For example, suppose we become convinced that a hydrogen atom's having exactly one proton is explained by some other fact about it, while being unsure what that other fact might be. In such a situation we would be unsure of the definition of hydrogen, but we would still be able to make a lot of progress investigating the characteristics of 'atoms with exactly one proton'.(22)" (p. 289) (22) On substitutes for definitions see Aquinas, Summa theologiae I, q. 29, a. 1, ad 3. Oderberg connects essence with definition and also makes a point closely related to my remarks about substitutes, namely, that a grasp of proper accidents is the best means to grasping something's essence; see 'How to Win Essence Back', pp. 36-8, 40.

References

David S. Oderberg, 'How to Win Essence Back from Essentialists', *Philosophical Writings*, XVIII (Autumn 2001), 27-45.

65. deRosset, Louis. 2014. "On Weak Ground." *Review of Symbolic Logic* no. 7:713-744

Abstract: "Though the study of grounding is still in the early stages, Kit Fine, in "The Pure Logic of Ground", has made a seminal attempt at formalization. Formalization of this sort is supposed to bring clarity and precision to our theorizing, as it has to the study of other metaphysically important phenomena, like modality and vagueness. Unfortunately, as I will argue, Fine ties the formal treatment of grounding to the obscure notion of a weak ground. The obscurity of weak ground, together with its centrality in Fine's system, threatens to undermine the extent to which this formalization offers clarity and precision. In this paper, I show how to overcome this problem. I describe a system, the logic of strict ground (LSG) and demonstrate its adequacy; I specify a translation scheme for interpreting Fine's weak grounding claims; I show that the interpretation verifies all of the principles of Fine's system; and I show that derivability in Fine's system can be exactly characterized in terms of derivability in LSG. I conclude that Fine's system is reducible to LSG."

66. Bird, Alexander. 2009. "Essences and Natural Kinds." In *The Routledge Companion to Metaphysics*, edited by Le Poidevin, Robin, Simons, Peter, McGonigal, Andrew and Ross, P. Cameron, 497-506. New York: Routledge.

"Essentialism as applied to individuals is the claim that for at least some individuals there are properties that those individuals possess essentially. What it is to possess a property essentially is a matter of debate. To possess a property essentially is often taken to be akin to possessing a property necessarily, but stronger – although this is not a feature of Aristotle's essentialism, according to which essential properties are those properties a thing could not lose without ceasing to exist. Kit Fine (1994) takes essential properties to be those that an object has in virtue of its identity, while other essentialists refer (as Fine also does) to the nature of an object as the source of its essential properties.

It is sometimes important to distinguish the essential properties of a thing and the "full" essence of a thing. The latter is the set of the essential properties of a thing, when that set necessarily suffi ces to determine the thing's identity. One might hold that something has essential properties without agreeing that it has an identity-determining essence.

(...)

"In this chapter I shall fi rst outline certain claims and arguments concerning essentialism concerning individuals (second section). I shall then (third section) introduce the notion of a natural kind in more detail before discussing natural kind essentialism (fourth section)." (pp. 497-498)

References

Fine, K. (1994) "Essence and Modality," in J. Tomberlin (ed.), *Philosophical Perspectives*, vol. 8 of *Logic and Language*, Atascadero, CA: Ridgeview, pp. 1–16.

67. San Ginés, Aránzazu. 2014. "On Skolem Functions, and Arbitrary Objects. An Analysis of a Kit Fine's Mysterious Claim." *Teorema. Revista Internacional de Filosofía* no. 33:137-150.

Abstract: "In 1985, i n his book *Reasoning with Arbitrary Objects*, Kit Fine observed and stressed three, in his opinion, important differences between A-objects and Skolem functions. The present paper rests on one of them. According to Fine, there is some kind of dependence relationship between objects that cannot properly be represented by any function. We will analyze this claim from the perspective of natural language, and discuss the improvement that the use of arbitrary objects seemingly provides over Skolem functions in dealing with dependence."