

## Recurrence: a rejoinder

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I am grateful to Nathan Salmon [in Salmon (2012)] for being willing to spill so much ink over my monograph on semantic relationism (2007), even if what he has to say is not altogether complimentary. There is a great deal in his criticisms to which I take exception but I wish to focus on one point, what he calls my ‘formal disproof’ of standard Millianism. He believes that ‘the alleged hard result is nearly demonstrably false’ (p. 420) and that the disproof contains a ‘serious error’ (p. 407). Neither claim is correct; and it is the aim of this short note to explain why.

First some background. In some cases, we are justified (from an internalist standpoint) in inferring the singular proposition  $F \& G(x)$  from  $F(x)$  and  $G(x)$  (as when I learn more and more about Obama, for example); and in other cases, we are not so justified (as when Peter, in Kripke’s puzzle case, knows that Paderewski is a pianist and that Paderewski is a politician but does not know that anyone is both a pianist and a politician). What is the difference between the two cases?

Let us say that an inference is *manifestly valid* if a rational subject would be justified in drawing the inference no matter what her access to the premisses. Thus the argument from  $F(x)$  and  $G(x)$  to  $F \& G(x)$  will not (in general) be manifestly valid since our access to the object  $x$  in the two premisses may not be appropriately ‘coordinated’.<sup>1</sup> On the other hand, the inference from  $F(x)$  to  $\exists xF(x)$  is manifestly valid, since we can justifiably draw the conclusion regardless of our access to the premiss.

In arguing against the standard Millian, I assumed that the difference between the two cases for him would consist in whether or not the subject possessed some

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<sup>1</sup> As Salmon points out (fn. 17, p. 418), the definition of manifest consequence on p. 48 of SR is not properly formulated, at least on the most obvious reading. A proper formulation is given on p. 136n14 of SR.

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additional information  $I$  which, in conjunction with the premisses  $F(x)$  and  $G(x)$  (perhaps appropriately supplemented) would render the resulting inference to  $F \& G(x)$  manifestly valid. I would have thought that it was clear from the text both that I made this assumption and that I considered myself to have good reason to make it. For, as I had previously argued, if the inference is to be justified then it should be justified at ‘the level of thought’ (SR, 81), i.e. on the basis of the content of some premisses; and if it is justified on the basis of the content of some premisses, then it must be manifestly valid since there is nothing at the level of content on the standard Millian view that would require our access to that content to be coordinated.<sup>2</sup> Salmon writes that the “raison d’être of  $I$ ” is “to open the reasoner’s eyes to the recurrence of  $x$ ” (p. 426). But one may well wonder how it could do this if the inference from  $I$ ,  $F(x)$  and  $G(x)$  to  $F \& G(x)$  is still as opaque to her as the original inference from  $F(x)$  and  $G(x)$  to  $F \& G(x)$ .

No doubt there is a great deal more to be said on the matter<sup>3</sup>; and Salmon is surely right in thinking that the Millian’s best—and, indeed, only defense—is to deny that  $I$  need play this manifest-making role. Perhaps Salmon means to say no more than this and is perfectly happy to admit that my argument is valid under the assumption that  $I$  should play this role. But if this is so and given that he concedes that I intended  $I$  to have this role (p. 424n22), then why does he go to such lengths to show that a particular step of the disproof is in error and that the ‘alleged hard result is nearly demonstrably false’? So let me proceed on the assumption that he did in fact wish to question the result and the disproof.

Here, more or less, is how I presented the argument in SR (p. 137n4), for  $P$  a purely qualitative property  $P$  and  $\perp$  a manifest contradiction, such as  $\exists x(x \neq x)$ :

- (1)  $F \& P \& G \& \sim P(x)$  is a manifest consequence of  $I$ ,  $F \& P(x)$  and  $G \& \sim P(x)$ , given  $I$ ’s manifest-making role
- (2)  $\perp$  is a manifest consequence of  $F \& P \& G \& \sim P(x)$
- (3)  $\perp$  is a manifest consequence of  $I$ ,  $F \& P(x)$  and  $G \& \sim P(x)$ , from (1) and (2)
- (4)  $\perp$  is a manifest consequence of  $I$ ,  $\exists x(F \& P(x))$  and  $\exists x(G \& \sim P(x))$ , from (3) given that the consequence relation in (3) is *manifest*
- (5)  $\exists x(F \& G \& P(x)) \supset \forall x(F \& G(x) \supset P(x))$  is a consequence of  $I$ , from (4).<sup>4</sup>

In an earlier draft of his paper, Salmon in effect questioned the step from (3) to (4) and took it to be a fallacy analogous to inferring  $\exists x(F(x) \& G(x))$  from

<sup>2</sup> Thus Salmon’s charge that I make this assumption ‘without argument and with no notification’ (p. 423) is unduly harsh. I might add that his claim (fn. 25, p. 427) that relationism fares no better than standard Millian in regard to my disproof is also unwarranted. Salmon fails to appreciate that the formal definition of manifest consequence is only meant to apply to uncoordinated propositions. If extended to coordinated propositions, then it must be done in such a way that  $F \& G(x)$  will be a manifest consequence of  $F(x)$  and  $G(x)$  when the two  $x$ ’s in the premisses are coordinated. I had thought that this point would be obvious to the sympathetic reader of my text.

<sup>3</sup> I say a little more in Fine (2010).

<sup>4</sup> For simplicity I have assumed that  $F$  and  $G$  are purely qualitative so that there is no need to distinguish them from their existential counterparts  $F^c$  and  $G^c$ . I also talk explicitly of manifest consequence rather than justified inference.

$\exists xF(x)$  and  $\exists xG(x)$ . I pointed out in my written response to the draft that I was relying on the following indirect rule for manifest consequence:

$\exists E^m$ : if the purely qualitative conclusion  $\chi$  is a manifest consequence of  $\varphi(x)$  and  $\psi(x)$  and other premisses then it is a manifest consequence of  $\exists x\varphi(x)$  and  $\exists x\psi(x)$  and those other premisses.

This rule is not, of course, valid for classical consequence but it is valid for manifest consequence since, from the standpoint of the reasoner, it is as if the two  $x$ 's are 'new' individuals  $y$  and  $z$ ; and so if  $\chi$  is a manifest consequence of  $\varphi(x)$  and  $\psi(x)$  (given the other premisses), it is a manifest consequence  $\varphi(y)$  and  $\psi(z)$  and hence a manifest consequence of  $\exists x\varphi(x)$  and  $\exists x\psi(x)$ .

I had assumed this would be the end of the matter. The misunderstanding about the step from (3) to (4) had been cleared up; and the resulting argument is clearly valid. Salmon might quarrel with the philosophical presuppositions behind the argument but he could hardly quarrel with the argument itself.

What was Salmon's response? To my astonishment, I discovered upon reading the published paper that he insisted upon presenting the same problematic reconstruction of the argument within the Kalish–Montague system which he had used before (p. 422) and then accused me of fallaciously arguing from  $I$  along with:

- (6)  $\exists x(G \& \sim P(x))$ , and
- (7)  $F \& P(x)$

to:

- (8)  $G \& \sim P(x)$ .

Given  $I$ 's specific manifest-making role, it is, of course, unclear that the inference is justified and, whether justified or not, it certainly was not and should not be used as one of the steps in the argument.<sup>5</sup>

What can have gone wrong? A valid argument was staring Salmon in the face and so why would he insist upon dealing with a problematic reconstruction of the argument rather than with the argument itself? It should have been evident to him that there was something wrong with the reconstruction, both because it involves a step *not* present in the original argument and because it failed to involve a step that was present, *viz.*, the critical application of  $\exists E^m$ .

Perhaps part of the reason is that Salmon was so accustomed to presenting arguments within the system of Kalish and Montague that he took for granted that the same must be possible in this case. But Kalish and Montague's system involves a rule of existential instantiation,<sup>6</sup> allowing one to pass from a premiss of the form  $\exists xA(x)$  to a conclusion of the form  $A(y)$ . Such rules correspond to standard rules of existential elimination. However, in the presence of an elimination rule like  $\exists E^m$ , it

<sup>5</sup> For this reason, Salmon is mistaken in thinking that I tacitly assume 'that either  $I$  entails  $I_F$  or  $I$  entails  $I'_F$ '. I make no tacit assumptions, merely the explicit assumption that, in the presence of  $I$ , the inference from  $F \& P(x)$  and  $G \& \sim P(x)$  to  $F \& P \& G \& \sim P(x)$  will be manifest.

<sup>6</sup> Fine (1985) is a general study of systems with such rules and of the system of Kalish and Montague, in particular.

is far from clear what the corresponding rule of existential instantiation should be; and prior to investigation of the matter, nothing but confusion can (and did, in fact) result from using an instancial rule in place of the elimination rule.

Perhaps another reason is that Salmon was so convinced that he had a counter-example to the result that he did not much care where exactly the fault in the reasoning was seen to lie. So what is the counter-example? He asks us (p. 420) to consider the case in which  $I$  is ‘the recognition knowledge that  $A$  gains by learning that the  $\phi =$  the  $\psi$ , while recognizing the relevant occurrences of  $\phi$ -ness and  $\psi$ -ness as also occurring in his beliefs that the  $\phi$  has  $F$  and that the  $\psi$  has  $G$ ’. The reader may be forgiven for wondering how to parlay this case into an actual counter-example to the theorem. Clearly,  $I$  is meant to be the proposition that the  $\phi =$  the  $\psi$ , but this will not combine with  $F(x)$  and  $G(x)$  to give  $F\&G(x)$  as a manifest consequence.  $\phi$  and  $\psi$  must somehow be incorporated into  $F$  and  $G$ . But if they are, then  $F\&G$  will presumably be true of a unique object and so  $x$  will be qualitatively indiscernible from any other object that has  $F\&G$  (since no other object does have  $F\&G$ ). Thus there is no counter-example to the result (and nor could there be, given that the argument is valid).

His exposure of the alleged error in my disproof affords him the occasion to deliver a flowery homily on method (p. 427):

Skillful footwork, meticulous and painstaking thought, and philosophical common sense must work together, all in the service of the uncompromising search for truth. A very capable defender of common sense, Fine certainly does not lack logical acumen. It is a relief to be reminded that even the best of us occasionally commit a serious error. This is all the more reason that a claimed hard result, especially if suspicious, must not be accepted unchecked, lest the noble search be derailed’.

I am tempted to say that people in glass houses should not throw stones, especially when they have no stones to throw.

## References

- Fine, K. (1985). *Reasoning with arbitrary objects*. Oxford: Blackwell.  
 Fine, K. (2007). *Semantic relationism*. Oxford: Blackwell.  
 Fine, K. (2010). Comments on Scott Soames. *Coordination Problems, in Philosophy and Phenomenological Research*, 81, 475–484.  
 Salmon, N. (2012). Recurrence. *Philosophical Studies*, 159, 407–411.

## Recurrence again

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**Abstract** Kit Fine has replied to my criticism of a technical objection he had given to the version of Millianism that I advocate. Fine evidently objects to my use of classical existential instantiation (EI) in an object-theoretic rendering of his meta-proof. Fine’s reply appears to involve both an egregious misreading of my criticism and a significant logical error. I argue that my rendering is unimpeachable, that the issue over my use of classical EI is a red herring, and that Fine’s original argument commits the straw-man fallacy. I argue further that contrary to Fine’s gratuitous attribution, what Kripke’s Pierre lacks and a typical bilingual has is not knowledge (“possession”) of a “manifest-making” (in fact, spectacularly false) premise, but the capacity to recognize London when it is differently designated. Fine’s argument refutes a preposterous theory no one advocates while leaving standard Millianism unscathed. The failure of his argument threatens to render Fine’s central notion of “coordination” redundant or empty.

**Keywords** Kit fine · Kripke · Pierre · Manifest · Straw man

I thank Kit Fine for responding in “Recurrence: A Rejoinder” to some of my criticisms in “Recurrence,” which is a critique of his *Semantic Relationism* (SR).<sup>1</sup>

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<sup>1</sup> Fine (2007, 2014) and Salmon (2012, pp. 407–441).

I take this opportunity to correct some of the misformulations in “Recurrence”: On p. 412, line 4, ‘dissents from’ should read ‘assents to’. On p. 422, lines 13 from top, 8 from bottom, and also 5–4 from bottom, the recurring clause ‘each is self-consistent’ should read ‘they are consistent’. On p. 423, line 6, ‘each of the two propositions is itself’ should read ‘the two propositions are’. On p. 423, lines 7–8, ‘are then also perfectly consistent with each other’ should read ‘in that case do not entail any contradiction’.

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Specifically he responds to criticisms of his technical objection to the conjunction of Millianism with standard compositionality—a position I advocate.<sup>2</sup> Fine claimed that his objection “comes close to constituting a *reductio* of” standard Millianism (*SR*, p. 83). Far from it, Fine’s objection does not pose any genuine theoretical difficulty for standard Millianism. Fine misinterprets my criticisms. His replies are largely to a criticism I neither made nor endorse. It is possible to extrapolate claims that would address some of my actual criticisms, but the path is circuitous and the distance no mere stone’s throw. Worse, the extrapolated reply rests on logical mistakes and ultimately subverts Fine’s argument. The issues go to the heart of *SR*. If I am right, *SR*’s central phenomenon of content “coordination” is for all intents and purposes the epistemic phenomenon of recognizing someone or something, and has no significant role to play in philosophical semantics beyond what standard Millianism already assigns to recognition, or else it is nothing real.

Fine’s attempted refutation of standard Millianism centers on the question of how one can be justified in deducing that *a* is both (at once) *F* and *G* from the separate premises that *Fa* and that *Ga*. How is it according to my brand of Millianism, for example, that the bilingual Jacques Cousteau is, unlike Kripke’s Pierre, rationally justified in deducing that London is a pretty capital from his beliefs that he expresses as ‘*Londres est jolie*’ and ‘London is a capital’?<sup>3</sup> Fine offers as “the natural hypothesis” for the standard Millian that Cousteau “is in possession of” some supplementary information *I*, and that Cousteau’s knowledge of *I* legitimizes the deduction that London is a pretty capital from the propositions that London is pretty and that London is a capital.<sup>4</sup> By contrast, Pierre, as long as he remains ignorant of supplementary legitimizing information *I*, would not be justified in deducing the same conclusion from the two beliefs that he expresses in exactly the same way as Cousteau. Fine takes *I* to be a proposition but he does not specify which proposition it is. He claims to demonstrate that the mere hypothesis that Cousteau’s knowledge of *I* legitimizes his deduction that London is a pretty capital is enough to entail an unacceptable conclusion, *to wit*, that the very knowledge in question places Cousteau “in possession of a complete purely qualitative description” of London (*SR*, p. 82). This, however, is overstated. More accurately, Fine purports to demonstrate that merely on the basis of his alleged knowledge of the legitimizing information *I*, Cousteau would be justified in deducing that all pretty capitals are purely-qualitatively indiscernible. Fine provides a proof that there is a legitimized object-theoretic deduction—i.e., a deduction in which every step is legitimized—from *I* alone to the conclusion ‘For every purely qualitative property

<sup>2</sup> Standard compositionality holds that mere recurrence of an expression within a sentence (as in ‘Bachelors socialize with other bachelors’, as opposed to ‘Unmarried men socialize with other bachelors’) does not itself contribute to the sentence content.

<sup>3</sup> Kripke (2007, pp. 1002–1036)

<sup>4</sup> *SR*, pp. 82. The word ‘legitimize’ is my term for the relation between whatever condition or state of affairs it is, the satisfaction of which would justify the deduction in question, and the deduction itself. See “Recurrence,” p. 414.

P, if some pretty capital is P, then every pretty capital is P'.<sup>5</sup> Since *I* is false, standard Millianism would thus be committed to denying Cousteau knowledge by deduction that London is a pretty capital. If Fine's argument is correct, the result disproves standard Millianism.

Fine's objection turns crucially on a notion of classical-logical validity of a particular sort, which he calls 'manifest validity'. There remains some question just what manifest validity is precisely, but the basic idea is that of a valid argument whose validity is independent of any recurrence of an individual among the premises, as might be represented by a recurring constant or variable. As a possible definition, where  $\models$  is classical entailment and  $\models_m$  is manifest entailment,  $\{\phi_1, \phi_2, \dots, \phi_n\} \models_m \chi$  if and only if there are formulae  $\phi'_1, \phi'_2, \dots, \phi'_n, \chi'$  such that  $\lceil \phi_1. \phi_2. \dots \phi_n \therefore \chi \rceil$  is the result of uniformly substituting free singular-term occurrences for the free-variable occurrences throughout  $\lceil \phi'_1. \phi'_2. \dots \phi'_n \therefore \chi' \rceil$ , there is no free singular-term recurrence among  $\{\phi'_1, \phi'_2, \dots, \phi'_n\}$ , and  $\{\phi'_1, \phi'_2, \dots, \phi'_n\} \models \chi'$ . In what follows I shall take this characterization as providing the relevant notion. Thus  $\{ 'Fa', 'Ga' \} \models_m 'Fa \& Ga'$  but  $\{ 'Fa \& Ga' \} \not\models_m '\exists x(Fx \& Gx)'$ .<sup>6</sup> Manifest-logical deduction is classical deduction in which certain classical proof-theoretic moves are disabled. Specifically, in a manifest-logical deduction no hay may be made of free recurrences of a constant or a variable that come from the term's free recurrence among the premises.<sup>7</sup>

One might suppose that according to standard Millianism, the supplementary information *I*, Cousteau's knowledge of which allegedly legitimizes the deduction, correlates the occurrences of London in his separate beliefs, thereby enabling him to

<sup>5</sup> SR, p. 137n4. An *inference* of a conclusion  $\chi$  from premises  $\phi_1, \phi_2, \dots, \phi_n$  is a deduction ("proof") of  $\chi$  from ("as a consequence of") those premises. This definition is adapted from Church (1983, pp. 198–199).

The "complete, purely qualitative description" of London is supposed to be simply 'pretty capital'—this on the ground that the hypothesized legitimizing knowledge together with the propositions that London is pretty and that London is a capital allegedly entail that any pretty capital is purely-qualitatively indiscernible from London. It should be noted that even if something is a pretty capital iff it has London's entire purely qualitative profile, it does not follow that the phrase 'pretty capital' entails that profile. It is quite bad enough, however, if standard Millianism commits Cousteau to the thesis that all pretty capitals are purely-qualitatively indiscernible. See note 8 below.

<sup>6</sup> On the other hand, as characterized,  $\models_m '(Fa \& Ga) \rightarrow \exists x(Fx \& Gx)'$ . The theorems of manifest logic are exactly those of classical logic. Like Cousteau, Pierre knows by logic alone that if London is pretty and London is a capital, then something is a pretty capital. Also like Cousteau, Pierre believes that London ("Londres") is pretty and London is a capital. Unlike Cousteau, and like the tortoise, Pierre does not infer that something is a pretty capital.

Fine's definition of manifest consequence in SR, pp. 48–49, is incorrect. See "Recurrence," p. 418n17 where I suggested a possible repair. Weiss (2014) explores my proposal and alternative characterizations in "A Closer Look at Manifest Consequence," *Journal of Philosophical Logic*, doi: 10.1007/s10992-013-9269-3. I am indebted to Weiss for discussion. The characterization provided here is based both on my proposal and Weiss's favored definition. The alternative definition in "Rejoinder" (first page), although imprecise, may be adequate for present purposes.

<sup>7</sup> One sure-fire way to construct a proof-theoretically valid manifest-logical deduction for an argument  $\lceil \phi_1. \phi_2. \dots \phi_n \therefore \chi \rceil$  is to proceed in two stages: first construct a proof-theoretically valid classical deduction for an argument  $\lceil \phi'_1. \phi'_2. \dots \phi'_n \therefore \chi' \rceil$  whose premises lack free recurrence of any constant or variable and from which  $\lceil \phi_1. \phi_2. \dots \phi_n \therefore \chi \rceil$  is obtainable by proper substitutions; then perform those very substitutions throughout the classical deduction.

recognize them as co-occurrences (occurrences of the same thing). Instead Fine tacitly assumed that *I* must function as a third and manifestly-validating premise of a certain sort. More precisely, Fine assumed that standard Millianism hypothesizes: (i) Cousteau is unable to deduce that London is a pretty capital merely from his beliefs that London is pretty and that London is a capital. Instead he reasons from those beliefs together with his belief of additional information *I*, his knowledge of which legitimizes the deduction; and furthermore (ii) the legitimization is such that {that London is pretty, that London is a capital, *I*}  $\models_m$  that London is a pretty capital, and as a result, for any purely qualitative properties *P* and *Q* (and in particular where *Q* is the complement of *P*), {that London is both pretty and *P*, that London is both a capital and *Q*, *I*}  $\models_m$  that London is at once pretty, *P*, a capital, and *Q*.<sup>8</sup>

If there is any legitimizing proposition *p* that satisfies these conditions, then some variant of *p* that lacks recurrence of individuals (the variant may be *p* itself) equally well legitimizes the deduction. Thus it may also be assumed that furthermore according to standard Millianism, (iii) the legitimizing information *I* is free of individual recurrence. Indeed, given that *I* satisfies conditions (i)–(ii), it is natural to suppose that *I* is a non-singular (individual free) proposition.<sup>9</sup>

In *SR* Fine characterized (i) as “the only hypothesis to which it would appear that the standard [Millian] can appeal” to explain Cousteau’s justification in deducing that London is a pretty capital (p. 82). I contend that (i) is incorrect, but the matter is controversial. Even so, there can be no doubt that the combined hypothesis (i)–(ii) is very wide of the mark. Information that satisfies (ii) does not thereby capture what Cousteau has that Pierre lacks. If Pierre were apprised of such information, he would still need a principle of the identity of purely-qualitatively indiscernibles to be justified in deducing ‘London is *Londres*’, i.e., that it is a single city that is in question. More important, as I emphasized in “Recurrence,” independently of the details of Fine’s objection it should be taken as given that standard Millianism would not explain Cousteau’s justification in deducing that London is a pretty capital by hypothesizing that the deduction relies on his knowledge (“possession”) of information that entails that all pretty capitals are purely-qualitatively indiscernible. Fine’s overall argument clearly commits some error.

Fine’s meta-proof demonstrates that on hypothesis (ii), there is a manifestly legitimate object-theoretic deduction from *I* to the conclusion that all pretty capitals are purely-qualitatively indiscernible. While he believes there is some such object-theoretic deduction, Fine vigorously objects to the particular deduction I reconstructed (“Recurrence,” p. 421), and evidently even to the attempt

<sup>8</sup> The following suffices as a third and manifestly-validating premise: ‘If anything is pretty then any capital is pretty’. It is bad enough if standard Millianism commits Cousteau to something such as this as a third premise. Fine’s tacit assumption of (ii) makes *I* out to be a good deal worse than this.

<sup>9</sup> If *p* is a singular proposition that satisfies hypothesis (i)–(ii) and in which an individual recurs, then some variant of *p* satisfies all of (i)–(iii). Otherwise, Cousteau would need in addition to *p* a separate legitimizing proposition, *p*’, in order to recognize and capitalize upon the recurrence. In that case, it would not be knowledge of *p* that in itself legitimizes Cousteau’s deducing that London is a pretty capital, contradicting (i). The threat of infinite regress is avoided by taking *I* to be free of individual recurrence. Similarly, according to (i)–(ii) Cousteau cannot legitimately exploit any recurrence of London among {that London is pretty, that London is a capital, *I*}, in order to deduce that London is a pretty capital.



to construct a manifest-logical object-theoretic deduction on the basis of his *SR* meta-proof. He protests, “A valid argument was staring Salmon in the face and so why would he insist upon dealing with a problematic reconstruction of the argument rather than with the argument itself?” (third page). One reason to spell out the object-theoretic deduction that Fine’s meta-proof proves exists is to show that hypothesis (i) without (ii) is insufficient for Fine’s objection. More important, spelling out the deduction draws the curtain back to reveal something of the force of the information *I*, knowledge of which Fine alleges standard Millianism imputes to Cousteau as that which legitimizes his deduction that London is a pretty capital. The object-theoretic deduction places a constraint on its unspecified premise *I*, by setting a logical lower bound.<sup>10</sup> In “Recurrence” I argued (p. 424) that in effect Fine had thereby assumed that the manifestly-validating premise *I* entails ( $I_F$ ) that anything pretty has all the purely qualitative properties of any capital, or else ( $I'_F$ ) that any capital has all the purely qualitative properties of anything pretty. That *I* entails  $I_F$  or else  $I'_F$  is not a further premise of Fine’s argument; it is a logical requirement of the unspecified premise *I*, as characterized by (ii), if the object-theoretic deduction is to be proof-theoretically valid. Hypothesis (ii) entails that *I* satisfies the requirement; hypothesis (i) without (ii) does not.

Specifically, the deduction I constructed invokes the following deduction fragment, which Fine finds problematic:

1.	<i>I</i>	Premise
	...	
9.	$\exists x$ ( <i>x</i> is both a capital and non-P)	Deduced from previous lines
10.	<i>x</i> is both pretty and P	Deduced from previous lines
11a.	<i>y</i> is both a capital and non-P	9, EI/ <i>y</i>
11b.	<i>x</i> is both a capital and non-P	1, 10, 11a, Manifest logic

Fine writes, “Given *I*’s specific manifest-making role, it is, of course, unclear that the inference is justified and, whether justified or not, it certainly was not and should not be used as one of the steps in the argument.” On its most straightforward interpretation, Fine’s criticism focuses specifically on line 11a. He admonishes that “it should have been evident to [Salmon] that there was something wrong with the reconstruction,” since it “involves a step *not* present in the original argument.” This is followed by speculation concerning my alleged mistakes. Fine conjectures that I illegitimately took for granted that there is a manifest-logically legitimate natural-

<sup>10</sup> The meta-proof Fine originally offered in *SR* (p. 137n4) concerns the notion—presumably proof-theoretic—of a reasoner’s being justified in deducing (“inferring”) a conclusion from premises. In “Rejoinder” he recasts his meta-proof as one concerning instead the notion of manifest consequence. (He says, second page, n4, “I also talk explicitly of manifest consequence rather than justified inference.” He means this in contrast to his original meta-proof, which is the subject of my criticism in “Recurrence.”) The reformulation of his meta-proof as one that does not (or might not) specifically concern proof theory unnecessarily renders potentially curious an otherwise obviously appropriate focus on an object-theoretic deduction.

deduction-style object-theoretic deduction that corresponds to Fine's meta-proof and that employs existential instantiation (EI). Fine also points to the following meta-rule invoked in his meta-proof:

$$\exists_2 E_m : \text{If } \Gamma \cup \{\phi_\gamma, \psi_\gamma\} \models_m \chi \text{ and no individual constant or variable occurs free in } \chi, \\ \text{then } \Gamma \cup \{\ulcorner \exists \alpha \phi_\alpha \urcorner, \ulcorner \exists \beta \psi_\beta \urcorner\} \models_m \chi,$$

where  $\phi_\gamma$  and  $\psi_\gamma$  are the results of uniformly substituting free occurrences of  $\gamma$  for the free occurrences, respectively, of  $\alpha$  throughout  $\phi_\alpha$  and of  $\beta$  throughout  $\psi_\beta$ . In light of  $\exists_2 E_m$ , Fine reprimands, "it is far from clear what the corresponding rule of existential instantiation should be; and prior to investigation of the matter, nothing but confusion can (and did, in fact) result" from instantiating line 9.<sup>11</sup> Thereupon follow more idle speculation and another rebuke (third-fourth pages).

Rarely is such passion roused by the application of a quantifier-instantiation rule. At least part of what exercises Fine is his mistaken belief that I deployed the object-theoretic deduction in "Recurrence" in order to accuse him of invalid reasoning. In presenting his argument in *SR* (pp. 82, 137n4), Fine characterized *I* merely as information possession of which legitimizes the deduction that London is a pretty capital. He failed to mention, let alone to support, his crucial assumption that *I* is thereby a third and manifestly-validating premise.<sup>12</sup> I argued in "Recurrence" (pp. 422–423) that the deduction is fallacious if hypothesis (i) is assumed without

<sup>11</sup> Fine does not specifically object to it but line 10 is also obtained by standard EI.

Fine refereed an early draft of "Recurrence." In "Rejoinder" (second-third pages), he characterizes a criticism from the unpublished early draft. In the draft I had taken for granted that in *SR* Fine had attributed to standard Millianism the more natural hypothesis that the alleged legitimizing information *I* somehow correlates the distinct occurrences of London in Cousteau's separate beliefs. The unpublished draft had challenged Fine's apparent inference from ' $\{I, [F \& P]x, [G \& \sim P]x\} \vdash \perp$ ' to ' $\{I, \exists x[F \& P]x, \exists x[G \& \sim P]x\} \vdash \perp$ '. Contrary to Fine's characterization, the early draft had not in effect questioned the corresponding inference invoking ' $\models_m$ ' in lieu of ' $\vdash$ '. Fine pointed out in his referee's comments that he had taken the legitimizing information *I* to be a manifestly-validating premise. I was grateful to have Fine's comments and revised "Recurrence" accordingly. See notes 13, 16, and 17 below and "Recurrence," p. 424n22.

<sup>12</sup> Fine says in "Rejoinder" (third page, n5) that he explicitly assumed in *SR* that standard Millianism hypothesizes that *I* legitimizes Cousteau's deduction by being a third and manifestly-validating premise. Fine also strongly suggests (second page) that his assumption should have been clear from his having argued (*SR*, p. 81) that Cousteau's deduction cannot be legitimized by depicting it as taking a detour through semantic ascent. The assumption was nowhere stated or clearly implied in *SR*. Perhaps it is entailed by what Fine intended in saying of the standard Millian that

he must work with a conception of propositional knowledge that is closed under manifest rather than classical consequence. Given that a thinker knows the proposition that *x* Fs and also knows the proposition that *x* Gs, he does not necessarily know the proposition *x* both Fs and Gs, no matter how logically competent he may be (*SR*, pp. 80–81).

Neither belief nor knowledge is closed under either manifest or classical consequence. Given his peculiar circumstances, Pierre cannot justifiably deduce that London is a pretty capital from his two beliefs concerning London. It does not follow that one cannot do so even under normal circumstances. On the contrary, Cousteau presumably does exactly this. Manifest logic might be useful in determining what someone in a Pierre-type predicament is not justified in deducing—subject to significant limitations. (Suppose Pierre correctly translates the Italian '*Londra*' into French as '*Londres*' and comes to accept

(ii), as the argument was presented in *SR*. I also said that Fine's unstated assumption of (ii) "renders the otherwise fallacious deduction not only valid but manifestly so" (p. 424). I challenged as gratuitous Fine's tacit assumption that standard Millianism adopts hypothesis (i)–(ii), not his reasoning from that illegitimate assumption. The principal fallacy I attributed to Fine is fatal but informal, that of the straw man.<sup>13</sup>

Fine's desire to rebut an imagined charge of invalid reasoning is understandable. His response is overzealous, however, gratuitously disparaging perfectly proper proof-theoretic machinery. Fine's *SR* meta-proof is of the existence of a manifestly valid object-theoretic deduction. It is, nearly enough, a constructive proof. The object-theoretic deduction I provided is not my own invention. In a significant sense it is largely Fine's. I extracted it by working backward through Fine's meta-proof, "mining" the meta-proof with a modicum of gap-filling in accordance with logic. Given his position Fine should not disown the object-theoretic deduction; he should welcome it as fleshing out his objection.

Inasmuch as the deduction to 11*b* feels illegitimate, this is not also true of its component inference from 9 to 11*a*. Manifest logic as characterized above accommodates standard EI—even where it involves free singular-term recurrence that comes from a premise. Line 9 does not involve this. The only complication (and it is minor) arises from the fact that EI can introduce new, exploitable free singular-term

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Footnote 12 continued

'*Londra è una capitale*'.) It does not apply in this way to a normal speaker/thinker not in a Pierre-type predicament. Cf. "Recurrence," p. 426*n*24.

<sup>13</sup> In "Rejoinder" Fine apparently continues to maintain that standard Millianism must hypothesize (ii) to account for Cousteau's justification in deducing that London is a pretty capital. He writes (second page), "if the inference is to be justified, then it should be justified ... on the basis of the content of some premises, and if it is justified on the basis of the content of some premises, then it must be manifestly valid ... Salmon is surely right in thinking that the Millian's best—and indeed, his only—defense is to deny that *I* need play this manifest-making role. Perhaps Salmon means to say no more than this and is perfectly happy to admit that my argument is valid under the assumption" of hypothesis (ii). I admitted this in "Recurrence"; I also argued that the alleged near-*reductio* as presented in *SR* is invalid, and by contrast that the intended argument tacitly assumes that standard Millianism hypothesizes (ii), and is thereby valid but disproves a ludicrous straw-man theory. (See note 11.) "Rejoinder" proceeds on the erroneous assumption that I declared the intended argument invalid.

Whereas Fine's intended *reductio* of standard Millianism is logically valid, there is a significant logical problem with *SR* as a whole. According to his underlying reductionism, what Fine actually means by some of his statements ostensibly conflicting with tenets of standard Millianism are things that standard Millianism in fact embraces. A central thesis of *SR* might be encapsulated thus: According to standard Millianism the English sentence 'Cicero = Cicero' expresses the uncoordinated singular identity proposition about Cicero that he is him; whereas (in contrast to 'Cicero = Tully') 'Cicero = Cicero' in fact expresses the corresponding positively coordinated singular proposition. Yet by Fine's lights, standard Millianism holds that 'Cicero = Cicero' "expresses the positively coordinated identity singular proposition" about Cicero that he is him, in Fine's misleading sense of the phrase (on which it means nothing more than that it is a manifest theorem of English semantics that the sentence expresses the singular identity proposition in which Cicero occupies both the subject and object positions). Fine's reductionism apparently renders *SR* committed to both the claims that standard Millianism entails *p* (for a particular *p*), and that standard Millianism does not entail *p*. See "Recurrence," pp. 439–440.

recurrence—as when inferring ‘ $R(yy)$ ’ from ‘ $\exists xR(xx)$ ’.<sup>14</sup> Line 11a does not do this. Fine does not specify what confusions he thinks resulted from it, but the much maligned application of EI to line 9 is as kosher as Hebrew National, in both manifest logic (as characterized above) and classical. In particular, Fine’s meta-rule  $\exists_2E_m$  does not cast doubt on line 11a. Just the opposite;  $\exists_2E_m$  fully sanctions 11a.<sup>15</sup> For that matter, Fine’s apparent focus in his criticism questioning the manifest-logical legitimacy of standard EI is at best misplaced. The full object-theoretic deduction is of a closed purely general (individual-constant free) conclusion from a single premise which, by (iii), has no free singular-term recurrence. Where there is no free singular-term recurrence among the premises, classical and manifest consequence coincide. In such cases a classically legitimate deduction is *ipso facto* manifest-logically legitimate. Even if the deduction of 11b feels wrong, given hypothesis (ii) the full deduction, complete with its unjustly impugned line 11a, is logically unimpeachable. (See note 7 above.)

Something is clearly amiss in Fine’s “Rejoinder.” The evidence strongly suggests that Fine did not read the annotation for line 11 (= lines 11a–11b), and instead erroneously assumed that line 11b was obtained directly from 9, bypassing 11a, through an ostensibly invalid application of EI, hence with no use of line 1. Taking his “Rejoinder” as based on this egregious misreading of “Recurrence” renders Fine’s response more coherent while also explaining several anomalies. In

<sup>14</sup> Standard EI is manifest-logically legitimate iff: whenever (a)  $\phi_\gamma$  results from uniform substitution of free occurrences of the variable  $\gamma$  for the free occurrences of the variable  $\alpha$  throughout  $\phi_\alpha$ ; (b) there is a classically legitimate deduction of  $\chi$  from  $\Gamma \cup \{\phi_\gamma\}$  that does not exploit any free recurrences of a constant or a variable that come from the term’s free recurrence among the elements of  $\Gamma \cup \{\neg\exists\alpha\phi_\alpha\}$  (though it may exploit the free recurrence, if any, of  $\gamma$  in  $\phi_\gamma$ ); and (c)  $\gamma$  does not occur free in  $\neg\exists\alpha\phi_\alpha$ , in  $\chi$ , or in any element of  $\Gamma$  (and whatever further restrictions the apparatus requires of classical EI), then  $\Gamma \cup \{\neg\exists\alpha\phi_\alpha\} \models_m \chi$ . Consider  $\phi_\gamma$  as the result of applying EI to  $\neg\exists\alpha\phi_\alpha$  in accordance with standard restrictions in a purported manifest-logical deduction of  $\chi$  from  $\Gamma \cup \{\neg\exists\alpha\phi_\alpha\}$ . Assume (a)–(c). In that case there are  $\Gamma'$ ,  $\phi'_\alpha$ ,  $\phi'_\gamma$ , and  $\chi'$  such that: (1)  $\Gamma' \cup \{\phi'_\gamma\} \vdash \chi'$ , where (2)  $\Gamma$ ,  $\neg\exists\alpha\phi_\alpha$ , and  $\chi$  result from uniform substitution of free occurrences for the free-variable occurrences throughout  $\Gamma'$ ,  $\neg\exists\alpha\phi'_\alpha$ , and  $\chi'$ , respectively, and  $\phi'_\gamma$  results from uniform substitution of free occurrences of  $\gamma$  for the free occurrences of  $\alpha$  throughout  $\phi'_\alpha$ ; (3) there is no free singular-term recurrence among the elements of  $\Gamma' \cup \{\neg\exists\alpha\phi'_\alpha\}$  (though there may be free recurrence of  $\gamma$  in  $\phi'_\gamma$ ); and (4)  $\gamma$  does not occur free in  $\neg\exists\alpha\phi'_\alpha$ , in  $\chi'$ , or in any element of  $\Gamma'$  (etc.). It follows by classical EI (and soundness) that (5)  $\Gamma' \cup \{\neg\exists\alpha\phi'_\alpha\} \models \chi'$ . By (2), (3), and (5),  $\Gamma \cup \{\neg\exists\alpha\phi_\alpha\} \models_m \chi$ . (See note 7 above.)

Standard EI does not preserve truth in every model. It is truth-preserving only in a weaker sense: For any model and any assignment  $s$  to variables of values taken from the model’s universe, if the antecedent line  $\neg\exists\alpha\phi_\alpha$  is true in that model under that assignment, then the inferred line  $\phi_\gamma$  is true in that model under at least one assignment  $s'$  that agrees with  $s$  with regard to the free variables of  $\neg\exists\alpha\phi_\alpha$ . The so-called inference is more an “assumption without loss of generality,” even more an assumption with intentional non-specificity (and not a posit of a philosophically peculiar object). To accommodate this the deductive apparatus imposes severe restrictions on  $\gamma$ . By contrast, the classically valid argument ‘ $R(aa)$ ’  $\therefore \exists xR(xx)$ ’ is not manifestly valid. Fine accepts as manifestly valid the EG inference from ‘ $Fx$ ’ to ‘ $\exists xFx$ ’ (“Rejoinder,” first page). The converse move, though deductively legitimate only in the weaker sense (provided the safeguards are respected), is equally “manifest.”

<sup>15</sup> The following corollary of  $\exists_2E_m$  sanctions line 11a:

$\exists_2E_m$ : If  $\Gamma \cup \{\phi_\gamma\} \models_m \chi$  and no individual constant or variable occurs free in  $\chi$ , then  $\Gamma \cup \{\neg\exists\alpha\phi_\alpha\} \models_m \chi$ .

Let:  $\Gamma$  be {lines 1 and 10};  $\neg\exists\alpha\phi_\alpha$  be line 9;  $\phi_\gamma$  be line 11a; and  $\chi$  be ‘ $\perp$ ’. (There is no free singular-term recurrence among lines 1, 9, 10, and 11a.)

particular, it would explain his mistaken belief that I declared the deduction invalid, coupled with his citing his meta-rule  $\exists_2 E_m$  as if pointing toward potential vindication. Fine appears to believe that  $\exists_2 E_m$  licenses liberalizing standard EI in manifest logic to allow for existential instantiation to the same term twice within the same sub-deduction. I shall call this proposed liberalization ‘FI’. As Fine is well aware, FI is classically invalid. (See note 14 above.) Specifically, FI cannot be combined with reflexive existential generalization, i.e., the  $\exists$ -intro inference from  $\lceil \phi_{\beta\beta} \rceil$  to  $\lceil \exists \alpha \phi_{\alpha\alpha} \rceil$ . It also cannot be combined with reflexive  $\lambda$ -expansion—the  $\lambda$ -intro inference from  $\lceil \phi_{\beta\beta} \rceil$  to  $\lceil \lambda \alpha [\phi_{\alpha\alpha}] \beta \rceil$  (as from ‘ $Fx \ \& \ Gx$ ’ to ‘ $[F\&G]x$ ’). Nor can FI be combined with standard *reductio ad absurdum*, which recognizes the combination of  $\phi_\alpha$  and  $\lceil \sim \phi_\alpha \rceil$  as an absurdum. The rule of FI taken together with any one of these makes possible the construction of a deduction for the invalid argument ‘ $\exists x Fx. \ \exists x Gx \ \therefore \ \exists x (Fx \ \& \ Gx)$ ’. This would be fatal to manifest logic. An anonymous referee and ardent apologist for Fine has argued that since  $\{ ‘Fa \ \& \ Ga’ \} \not\vdash_m ‘\exists x (Fx \ \& \ Gx)’$ , manifest logic blocks the lethal deduction that pairs FI with reflexive EG by forgoing reflexive EG.<sup>16</sup>

In “Rejoinder” Fine rejects the claim that in effect he had assumed that *I* entails either  $I_F$  or  $I'_F$  (third page, *n*5). The aforementioned referee/apologist has expanded upon Fine’s rejection. The apologist agrees that it would be illegitimate for Fine’s argument to require the unspecified premise *I*, as characterized by (ii), to entail  $I_F$  or  $I'_F$  in the manner of the “Recurrence” deduction to obtain 11*b*, and that such an additional requirement (“assumption”) would clearly be preposterous in the context of Fine’s argument. The apologist contends that a deduction that is based on a more careful consideration of how the object-theoretic manifest-logical deduction that corresponds most closely to Fine’s meta-proof should proceed obtains line 11*b* instead by applying FI to line 9, with no detour through 11*a* and no assist from line 1, thereby avoiding the additional requirement on *I*.<sup>17</sup> Indeed according to

<sup>16</sup> See notes 11–13 above. In the unpublished draft that Fine refereed, I offered a deduction based on his argument as it was presented in *SR*, which specified (i) but not (ii). In “Rejoinder” (third page), Fine writes, “To my astonishment, I discovered upon reading the published paper that [Salmon] insisted upon presenting the same problematic reconstruction of the argument ... and then accused me of fallaciously arguing” to line 11*b*. The deduction in the unpublished draft and the deduction in “Recurrence” (p. 421) are significantly different. Most significant, in the former deduction line 11 is obtained through application of FI to line 9; in the “Recurrence” deduction, which took account of Fine’s unstated assumption of (ii), line 9 is instantiated to ‘*y*’ and line 11 depends on line 1. As a direct result, the former deduction is highly problematic, the latter entirely unproblematic; indeed, the former is classically invalid, the latter manifest-logically valid. Fine evidently did not in fact read the relevant portions of “Recurrence,” especially pp. 423–426 as well as the annotation for line 11. (I thank Daniel Kwon for pointing this out.)

<sup>17</sup> The apologist’s comment is ambiguous because the distinction was not clearly drawn between a proof-theoretic requirement on an unspecified premise for a particular deduction to be valid, and an additional premise to the effect that the unspecified premise satisfies the requirement. However, the apologist seemed to concede that Fine’s attempted *reductio* would indeed fail if the unspecified premise *I* had to be sufficient to validate the sub-deduction from it together with lines 10 and 11*a* either to line 11*b* or to ‘*y* is both pretty and *P*’ for the object-theoretic deduction best corresponding to Fine’s meta-proof to be manifest-logically valid, as *I* must do for the deduction provided in “Recurrence” to be proof-theoretically valid. (The apologist presents the deduction employing FI as the apologist’s own reconstruction, based on his/her more careful consideration of Fine’s meta-proof. See the preceding note.)

the apologist, my inference that Fine's deduction requires for its proof-theoretic validity that  $I$  entail  $I_F$  or  $I'_F$  is the very error Fine means when he asserts that my instantiation of line 9 resulted in nothing but confusion. Had I recognized the manifest-logical legitimacy of FI and applied it instead of EI to line 9, the apologist contends, I could not have been led astray, erroneously concluding that  $I$  must entail  $I_F$  or  $I'_F$  for the object-theoretic deduction to be manifest-logically valid.

Whereas this alternative interpretation renders Fine's response more coherent, so interpreted his "Rejoinder" is grounded in both a failure to read my criticism adequately and an independent error concerning manifest-logical deduction. Fine's meta-rule  $\exists_2 E_m$  does not sanction FI for manifest logic, nor does it support a blanket manifest-logical prohibition against reflexive EG, reflexive  $\lambda$ -expansion, or treating the union of  $\phi_x$  with  $\lceil \sim \phi_x \rceil$  as a logical absurdity. As characterized above, manifest logic *per se* does not license anything classically illegitimate. Instead it abstains from certain classically legitimate moves as epistemically unjustified, and then only in certain circumstances. In manifest-logical deduction, deduction lines that come from the premises are singled out for special treatment. In particular it is crucial to distinguish free singular-term recurrence that comes specifically from that term's recurrence among the premises, from such recurrence that comes by way of quantifier instantiation. In a manifest-logical deduction, the former represents unrecognized recurrence ("uncoordinated" co-occurrences, distinct guises), the latter represents recognized recurrence (coordinated co-occurrences, a single shared guise) as a matter of stipulation. The former type of recurrence may not be capitalized upon while the latter is fully exploitable. (See again note 7 above.) For example, the standard classical deduction for a syllogism in Barbara ('All men are mortal. Socrates is a man  $\therefore$  Socrates is mortal') exploits the latter type of recurrence, and is perfectly legitimate manifest-logically. Although  $\{ 'Fa \& Ga' \} \not\vdash_m ' \exists x(Fx \& Gx) '$ , reflexive EG on a recurring term that enters the deduction as a result of EI is (normally) manifest-logically legitimate, since the term's recurrence does not (or normally would not) come from that term's free recurrence among the premises. It is exactly by means of this form of EG that one would most naturally derive the manifestly valid syllogism 'All men are mortal. Some things are men  $\therefore$  Some men are mortal'. There are alternative ways of deducing the conclusion by instantiating the second premise, but all of them involve recognizing the recurrence of the instantial term; hence, none can be straightforwardly combined with FI.

The proposed rule of FI is logical poison, both classically and manifest-logically. It corresponds to the following grotesque line of thought: "At least one thing is F. Assume  $x$  is such a thing, any such thing. At least one thing is G. Assume  $x$  again is such a thing. Only disregard the fact that it is  $x$  again. Instead think of  $x$  as if it were two things." This cannot be likened to Pierre's situation. Pierre's inability to infer that London is a pretty capital is indicative of his failure to recognize London. By contrast, reasoning in accordance with FI would be indicative of significant cognitive dysfunction. It is not as if some occurrences of the FI instantial term represent co-occurrences of which the reasoner is unaware. Unlike Pierre, the reasoner who employs FI knows all the relevant stipulations, and resolves to ignore those that would otherwise destroy validity. There is some latitude in engineering a

deductive apparatus. One could even incorporate FI into classical logic provided corresponding safeguards are put into place as a compensating antidote. However, to do so would be logically perverse at best. If FI were adopted, any recurrence it generates would not be treated as representing identity or anything else. It would serve no useful purpose; it would only complicate and mislead. Likewise, as characterized above manifest logic *per se* does not provide a legitimate logical rationale for FI, and it is a confusion to think that  $\exists_2 E_m$  suggests that it does. That meta-rule concerns premises, not deduction lines that result by instantiation. If Fine is indeed working with a conception of manifest logic that incorporates FI, as the apologist says, he owes a precise account of how that alternative conception provides deductions for manifestly valid arguments like ‘All men are mortal. Some things are men  $\therefore$  Some men are mortal’ without doing the same for ‘Some things are men. Some things are beasts  $\therefore$  Some men are beasts’. Better still would be to abandon this toxic brand of manifest logic.

Fine’s apparent contention that the object-theoretic manifest-logical deduction corresponding to his meta-proof might incorporate FI is quicksand for his argument against standard Millianism. The apologist’s reply concerning whether  $I$  must entail  $I_F$  or  $I'_F$  for the object-theoretic deduction to be proof-theoretically valid is a head-first leap into the quicksand. At the reply’s center is a logical blunder—a further casualty of taking  $\exists_2 E_m$  to license FI. If the apologist’s preferred object-theoretic deduction invokes the logically lethal combination of FI and reflexive  $\lambda$ -expansion, it is thereby invalid both classically and manifest-logically. (Cf. “Recurrence,” pp. 421–422, specifically the deduction’s line 12. See also note 17 above.) However the pie is sliced, if an object-theoretic deduction based on Fine’s meta-proof is to be proof-theoretically valid, the unspecified manifestly-validating premise  $I$  must be sufficient to deliver either line 11*b* or ‘ $y$  is both pretty and  $P$ ’ from lines 10 and 11*a*. This requirement cannot be evaded by employing a proof-theoretically invalid liberalization of EI. The deduction I provided in “Recurrence” is as close to Fine’s meta-proof as valid deduction gets.

In any event, the issue of whether FI is manifest-logically legitimate (or for that matter, classical EI, reflexive EG, etc.) is ultimately a red herring. The deduction I provided is manifest-logically valid. Fine agrees, I take it, that hypothesis (i)–(ii) entails that  $I$  is spectacularly false. Given the hypothesis, it is not the deduction that should be challenged. What should be challenged, and jettisoned, is the hypothesis itself (along with FI). Fine’s argument is a straightforward case of “Garbage in, garbage out.” Hypothesis (i)–(ii) is based ultimately on a kind of skepticism regarding cognition and recognition—in particular regarding the normal ability to reason on the basis of recognition. Cousteau recognizes London when it is designated now in his native tongue and later in English, and draws inferences accordingly. It is this recognition capacity that Cousteau has and Pierre lacks, not knowledge of a third and manifestly-validating premise. Fine’s unstated assumption that standard Millianism instead hypothesizes (i)–(ii) is based on a serious misunderstanding. (See note 12 above.) Indeed, it conflicts sharply with existing standard Millian accounts of Pierre’s inability to deduce that London is a pretty capital justifiably from his beliefs that

London is pretty and that it is a capital. All reasoning depends on the capacity to recognize, at least the capacity to recognize propositions (e.g., the antecedent of a conditional premise for *modus ponens*). Standard Millianism is not a brand of recognition skepticism, nor of reason skepticism. The assumption that standard Millianism hypothesizes (i)–(ii) is also illegitimate in part because it has the consequence that *I*, knowledge of which Fine depicts standard Millianism as imputing to Cousteau, is—precisely as Fine demonstrates—quite absurd and, since it is misinformation, not something anyone can know. (*Cf.*, “Recurrence,” pp. 424–437.)

In fact, on the present characterization of manifest logic, hypothesis (ii) alone, with no additional assumptions about *I*, entails that *I* entails the following:

*I'*: Anything pretty and any capital are purely qualitatively indiscernible.<sup>18</sup>

(See note 8 above.) It should go without saying that standard Millianism would not consider attempting to explain Cousteau’s justification in deducing that London is a pretty capital by hypothesizing that he relies on knowledge (!) of information that entails this piece of surrealism. Any feeling that the deduction of 11*b* is illegitimate is due not to EI, but to the absurd nature of the supposedly legitimizing information *I*.

Fine’s argument disproves a skeptical, indeed preposterous, theory no one advocates. His argument succeeds fairly well as an unintended refutation of his unstated, gratuitous assumption that standard Millianism hypothesizes (i)–(ii). The argument disproves the skeptical hypothesis while leaving the intended target entirely unscathed. Since standard Millianism already assigns a significant, albeit non-semantic, role to the everyday phenomenon of recognizing, the failure of Fine’s alleged near-*reductio* threatens to render *SR*’s central notion of coordination either redundant or empty.

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<sup>18</sup> Here is a sketch of a proof: Assume (ii) and suppose that {‘London is both pretty and P’, ‘London is both a capital and Q’, *I*}  $\models_m$  ‘London is at once pretty, P, a capital, and Q’, where the predicate-variables ‘P’ and ‘Q’, neither of which occurs free in *I*, range over purely qualitative properties, there is at most one occurrence of a name of London in *I*, and by (iii), there is no free singular-term recurrence in *I*. Let *I<sub>z</sub>* be the result of substituting a free occurrence of the variable ‘z’ for the occurrence of a name of London, if any, in *I* (*I<sub>z</sub>* may be *I* itself), and let  $\Gamma$  be the alternative premise set {‘x is both pretty and P’, ‘y is both a capital and Q’, *I<sub>z</sub>*} in which there is no free singular-term recurrence. There are three cases to consider: Either (1)  $\Gamma \models$  ‘x is at once pretty, P, a capital, and Q’; or (2)  $\Gamma \models$  ‘y is at once pretty, P, a capital, and Q’; or (3)  $\Gamma \models$  ‘z is at once pretty, P, a capital, and Q’. In case (1) (by the deduction theorem), *I* entails *I<sub>F</sub>*. In case (2), *I* entails *I<sub>F</sub>*. In case (3), *I* entails (*I<sub>F</sub>*) that London has all the purely qualitative properties both of anything pretty and of any capital. Each of *I<sub>F</sub>*, *I<sub>F</sub>*, and *I<sub>F</sub>* separately entails *I'*. For example, to deduce *I<sub>F</sub>* from *I<sub>F</sub>*, assume *I<sub>F</sub>* and suppose that *x* is a capital and that *y* is both pretty and P. Assume for a *reductio* that unlike *y*, *x* is not P. In that case *x* is non-P. Then by *I<sub>F</sub>*, *y* is also non-P. Hence, *y* is not P. But *y* is P. Therefore, *x* is like *y* in being P.



## References

- Church, A. (1983). Entry on 'logistic system'. In D. D. Runes (Ed.), *The standard dictionary of philosophy* (pp. 198–199). New York: Philosophical Library.
- Fine, K. (2007). *Semantic relationism*. Oxford: Blackwell.
- Fine, K. (2014) Recurrence: A rejoinder. *Philosophical Studies*. doi:[10.1007/s11098-013-0189-4](https://doi.org/10.1007/s11098-013-0189-4).
- Kripke, S. (2007) A Puzzle about Belief. Reprinted in *On Sense and Direct Reference*, pp. 1002–1036 by M. Davidson, ed., 2007, Boston: McGraw-Hill.
- Salmon, N. (2012). Recurrence. *Philosophical Studies*, 159, 407–441.
- Weiss, M. (2014) A closer look at manifest consequence. *Journal of Philosophical Logic*. doi:[10.1007/s10992-013-9269-3](https://doi.org/10.1007/s10992-013-9269-3).